INTERROGATIVE SUGGESTIBILITY OF PEOPLE WITH A LEARNING DISABILITY- EFFECTS OF INSTRUCTIONS

& RESEARCH PORTFOLIO (VOLUME 1)

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THE ROLE OF THE CLINICAL PSYCHOLOGIST IN THE TREATMENT OF PSYCHOSIS

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(see Appendix 1.1 for submission notes)

THE ROLE OF THE CLINICAL PSYCHOLOGIST IN THE TREATMENT OF PSYCHOSIS

INTRODUCTION

The 1995 conference on Psychological Treatments for Schizophrenia, highlighted that many British clinical psychologists' are involved in researching psychosis. Consequently, this has led to a significant expansion in the number of publications in this area (Fowler et al, 1995).

Many different treatment interventions by clinical psychologists' can be employed. Some shown to be effective are listed below:

(A) Relapse prevention, via the monitoring and detection of early signs (Birchwood & Tarrier, 1994)

(B) Increasing knowledge regarding non-compliance with medication (Budd et al, 1996), improving compliance through motivational interviewing (Kemp et al, 1995), and through the provision of a rationale for taking medication (Kingdon & Turkington, 1994).

(C) Family therapy approaches continue to be enhanced (including the function of expressed emotion) (Hughes et al, 1996; Falloon et al, 1993).

(D) Individual and group based CBT for manic-depressive psychosis. A high functioning level between illness episodes promotes a promising foundation for

this treatment (Palmer & Williams, 1995).

(E) New approaches in psychiatric rehabilitation, including social skills enhancement (Matousek et al, 1992) and the application of EE concepts to non-family carers (Kuipers et al, 1995).

(F) Enhancing coping skills for positive symptoms (Tarrier, 1992).

(F) Cognitive interventions aimed at both hallucinations and delusions. The challenging of beliefs about voices (Fowler et al, 1995; Bentall et al, 1994; Chadwick & Birchwood, 1994).

The present study investigated whether clinical psychologists take a routine role in the treatment of psychosis and what factors influence this.

Research has highlighted that GP's are influenced by diagnosis when selecting a service to refer patients' (Burton & Ramsden, 1994). Psychiatric units and CPN's received most patients with a diagnosis of psychosis and major depression. The clinical psychology service was used least often with these patients, which the authors claim is surprising given the number of these patients amenable to therapy. Therefore, it is useful to assess the perceptions of other professionals regarding roles that clinical psychologists' have in treating psychosis.

The GP's in the above research were also influenced by risk factors and waiting times. The present research investigated where referrals for patients with psychosis originate, and if the factors mentioned above influence this.

It has been reported that GPs' rate psychologists poorly regarding accessibility (Chadd & Svanberg, 1994). The present research ascertained if other professionals hold this perception, and whether this influences the referral pattern of patients with psychosis. Occasions that clinical psychologists are utilised as a resource was also documented, in addition to reasons that prevent other professionals from consulting with clinical psychologists'.

Recent research documented a need for more information on the role of clinical psychologists' and services they provide (Osborne-Davis, 1996). The present research investigated if other professional groups require information regarding the roles clinical psychologists' can have in the treatment and management of psychosis. It was also noted if clinical psychologists' are perceived as being under involved with the treatment of this disorder, and which techniques are recognised, utilised, and thought to be appropriate.

AIMS

The main aim of this study was to gather information regarding:

(1) involvement of clinical psychologists in the treatment of psychosis, and reasons for this.

(2) to investigate if there are differences between clinical psychologists and other health professionals' perceptions of roles regarding the treatment of psychosis.

DISCUSSION OF RESULTS

Results are discussed in the context of the service goals of clinical psychology and CMHT's, contractual restrictions and clinical effectiveness, and role definition. In addition factors which influence inter-professional awareness, knowledge and positive working relationships are presented.

METHOD

Participants

Due to time limitations, participants were restricted to staff within the Greater Glasgow Community and Mental Health Services NHS Trust. Three professional groups were targeted from each of the four sectors. The professional groups were:

(A) 26 clinical psychologists (qualified staff)

(B) 12 consultant psychiatrists

(C) 44 community psychiatric nurses

Procedure and Measures

A questionnaire was designed to elicit the following information from clinical psychologists (appendix 1.2),

: the present and recent involvement that clinical psychologists have in the treatment of psychosis

: the clinical psychologists' role and function

: membership of a CMHT

: attitudes to treating these disorders and if involvement is low, the possible reasons for this

: perceived effectiveness of psychological treatments

A random selection of consultant psychiatrists' and community psychiatric nurses (CPN's) from each locality resource centre were sent a modified questionnaire (appendix 1.3). This was designed to elicit information regarding the awareness and attitudes of these professionals towards the clinical psychologist's role within the treatment of psychosis. Other items investigated the number and nature of referrals made to clinical psychology regarding psychotic patients (e.g. for psychometric testing). These professionals were also asked for reasons why they would/would not refer to clinical psychology.

All qualified clinical psychologists' within the adult mental health service were sent questionnaires. Locations were telephoned to ascertain which staff members were unavailable due to annual, sickness and maternity leave.

Questionnaire Construction

To aim to ensure a good response rate, the questionnaire was constructed to look relatively brief and had adequate space for answers. Attitude questions were interposed throughout the questionnaire to vary the response pattern. Envelopes were personally addressed a return envelope was included. A covering letter was included which indicated the aim of the study and confidentiality (colour coding was used to differentiate professions).

RESULTS

Of the 26 clinical psychologists' that received a questionnaire, 17 were returned (8 from 12 consultant psychiatrists' and 32 from 44 community psychiatric nurses responded). Before presenting the results, the contact that these other professions have with clinical psychology has to be ascertained.

Contact with other professionals

Question: Do you have a qualified clinical psychologist in your CMHT?

Table 1

	CONS	CPN's
Yes	**6**	**28**
No	**2**	**4**

The majority of consultant psychiatrists and CPN's have a clinical psychologist within their CMHT. However, 6 clinical psychologists' do not input into CMHT's and the mean number of half days spent by the remaining 11 clinical psychologists' is 2.

Involvement with specialist rehabilitation units within all 3 groups was extremely low and does not require documentation.

Involvement with patients with psychosis

Question: What percentage of your caseload within the past 6 months has consisted of patients with a psychotic illness?

Table 2

	C.PSY	CONS	CPNs
Mean % of caseload	**9%**	**56%**	**51%**

Of the 17 Clinical Psychologists' questioned, 7 have had no contact with this client group.

Question: Within the past 6 months have you had contact with any inpatients with a psychotic illness? (This question was administered only to clinical psychologists').

Table 3

	C.PSY
No	**6**
For psychometric testing only	**1**
Testing and specific involvement	**6**
Specific involvement only	**4**

The "specific involvement" is presented below (in order of frequency cited):

behaviour therapy

anxiety management

assessment

cognitive therapy

relapse prevention

sexual abuse work

grief therapy

management of hypochondriachal delusion

Sources of referrals

Table 4

	C.PSY	CONS	CPNs
Question: How were you referred these patients with psychosis?			
CMHT	**5**	**4**	**8**
GP	**-**	**8**	**9**
Consultant/registrar	**7**	**1**	**17**

Clinical psychologists do not receive referrals from GP's.

Question: Who can make referrals to the clinical psychology service?

Table 5

	CONS	CPNs
Occupational Therapy	**7**	**28**
Consultant	**8**	**31**
Nursing staff	**8**	**28**
CMHT	**7**	**29**
GP	**7**	**32**
Social Work	**7**	**22**
Self refer	**0**	**4**
Other	**1**	**1**

The vast majority of respondents correctly identified that all of the above can refer, although there is not recognition that self-referral is possible.

Influence of departmental and team policy

Question: Do activity level requirements influence your ability to treat patients with psychosis?

Table 6

	C.PSY
YES	6
NO	11

The six clinical psychologists' who stated that activity level requirements influence their ability to treat patients with psychosis stated the following reasons:

waiting list pressures
maintaining high activity levels does not allow time for this long-term work
many need an urgent referral, which would bottleneck the waiting list further
discharge rates would be low

Question: If you are a member of a CMHT, does the CMHT policy restrict the type of referrals you see?

Table 7

	C.PSY
N/A	6
No	7
Yes	4

Respondents stated that there is an almost automatic policy within their CMHT's for psychiatry to assess all forms of psychosis, which is then followed up by nursing staff.

Factors affecting caseloads

Question: Why are psychological techniques under used in the treatment of psychosis?

Table 8

	C.PSY
Would result in a long term and time consuming treatment	**10**
Waiting list pressures	**9**
Not enough research to justify use	**8**
Other (see below)	**7**

It should be noted that one clinical psychologist stated that they are not under used. The 'other' responses were:

other staff are unaware of psychologists skills
clinical psychology is under resourced in CMHT's
clinical psychology is under resourced in general
CBT for psychosis is a relatively new area
many psychologists' are not trained in this area / a restrictive training budget

Question: What factors influence the proportion of patients with psychotic illnesses in your caseload?

Clinical psychologists highlighted the following factors:

referral patterns of GPs and consultants
some consultant and nursing staff seem reluctant to refer

waiting list pressures
job descriptions
psychosis is seen as a medical problem and psychologists seen as not able to input

Consultant psychiatrists' and CPN's were also asked what factors influence clinical psychologists' involvement.

The responses were as follows:

their personal interest
their other case load
psychologists' are reluctant to become involved
degree of experience/knowledge of the field
large waiting list, short staffed, it's a time consuming treatment
clients cognitive ability
non-involvement in acute wards
their skills are better directed to the families of patients
psychologists' are traditionally seen for behaviour problems

The recognition, appropriateness, and clinical use of techniques

Analyses were conducted using Fishers Exact Probability Test, to discover if differences existed between the three professional groups (frequencies reported are documented in appendices 1.4-1.8). 35 of the 108 tests completed were significant. These results should be interpreted with caution, as 5 of these would be expected to emerge by chance at the $p < 0.05$ level

Table 9 shows a significant difference between CPN's and the other two professional groups regarding the recognition of the stated techniques. Significantly less CPN's recognise these techniques.

Table 9

Techniques	Chi-square	Level of sig.	Professional group
Modification of positive symptoms	**0.0137**	**P<0.05**	**CPNs**
Psychometric testing	**0.0044**	**P<0.01**	**CPNs**

Significant differences emerged regarding which techniques are appropriate for the treatment of psychosis. Table 10 highlights that CPN's view cognitive behavioural therapy, psychometric testing and supervising other staff as less appropriate for treating psychosis than clinical psychologists do. In addition, consultant psychiatrists rated assessment as less appropriate.

Table 10

Techniques	Chi-square	Level of sig.	Professional group
Assessment	**0.0169**	**P<0.05**	**CONS**
Cognitive behavioural therapy	**0.0180**	**P<0.05**	**CPNs**
Psychometric testing	**0.0051**	**P<0.01**	**CPNs**
Supervising other staff	**0.0255**	**P<0.05**	**CPNs**

Regarding the actual clinical use of techniques, the table of results is presented in appendix 1.9. Many of the techniques show a significant difference in the frequency of use.

Compared to clinical psychologists, CPN's use of the following techniques are significantly less:

modification of positive symptoms
psychometric testing
cognitive behavioural therapy
psychotherapy to address emotional consequences

Compared to clinical psychologists, consultant psychiatrists use of the following techniques are significantly less:

psychometric testing
cognitive behavioural therapy
relaxation

CPN's use assessment, counselling, early signs monitoring, medication management, skills training and medication compliance, and administration significantly more than clinical psychologists do.

Consultant psychiatrists' use expressed emotion and medication administration, significantly more than clinical psychologists do.

Self-perceived competence levels between clinical psychologists and the other two groups vary (appendix 1.8). CPN's do not feel competent to apply the following techniques:

psychotherapy to address emotional consequences such as loss
modification of positive symptoms
psychometric testing

CBT

behaviour therapy

Consultant psychiatrists do not feel competent to apply the technique of CBT. The administration, management and compliance with medication, is (obviously) an area that consultant psychiatrists and CPN's have competence. Also, early signs monitoring is an area that CPN's have self-reported competence.

The role of a clinical psychologist and factors that may influence referral patterns

From table 11, the majority of respondents highlight CBT, behaviour therapy, assessment and psychometric testing as the main roles of clinical psychologists.

Table 11

	CONS	CPNs
Assessment	**8**	**28**
Psychometric testing	**8**	**28**
Cognitive behavioural therapy	**8**	**31**
Supervise staff (non psychology)	**6**	**12**
Long stay patient involvement	**3**	**6**
Psychotherapy	**3**	**14**
Medication administration	**0**	**0**
Needs assessment	**1**	**7**
Behaviour therapy	**8**	**30**
Reflexology	**0**	**3**
Research	**7**	**21**
Hypnosis	**0**	**3**
Staff training	**8**	**21**
Consultation	**5**	**25**
Counselling	**2**	**20**
Relaxation	**1**	**16**
Other	**0**	**1**

Question: On what occasions (if any) would you consult a clinical psychologist regarding patients with psychosis?

Table 12

	CONS	CPNs
Never	**0**	**6**
Please specify	**8**	**26**

The responses are presented in order of frequency stated:

behaviour problems

anxiety management

CBT

family problems

relaxation

relapse prevention

psychometrics

CBT for delusions if available

bereavement

assessment

counselling

advice or supervision

where delusions are not too fixed but resistant to medication

Table 13 highlights factors that prevent referrals for psychosis to clinical psychology.

Table 13

	CONS	CPNs
Clinical psychologists are inaccessible	**1**	**11**
They have long waiting lists	**4**	**21**
They do not tend to accept this type of referral	**2**	**15**
I can deal with all the psychological needs of my patients with psychosis without involving a clinical psychologist	**0**	**7**
They are unapproachable	**0**	**7**
They do not treat high risk patients	**2**	**19**
They are unable to act in emergencies	**1**	**19**
I did not know that they could help with this type of referral	**0**	**11**
None of the above	**3**	**9**
Other reasons	**3**	**7**

The "other reasons" reported were:

no active interest in these cases
they never request these referrals, but could have as many as they wished
assumption that clinical psychologists' work psycho-dynamically
their service is under pressure
psychologists' role within psychosis is relatively new
would automatically use psychiatry
I don't have enough knowledge of what they do
they do not make their expressed skills available

Table 14 highlights that virtually all participants within the 3 professional groups stated that clinical psychologists are under involved in treating psychosis. Also, the majority stated that there is a need for information regarding the clinical psychologists role.

Table 14

Question	clinical psychologists Total N=17	consultant psychiatrists Total N=8	CPN's Total N = 32
Are psychologists under involved in the treatment of psychosis?	**16 yes**	**8 yes**	**28 yes**
Is there a need for more information regarding the clinical psychologists' role?	**16 yes**	**7 yes**	**30 yes**

No differences emerged between respondents with a clinical psychologist in their CMHT to those without. Having a clinical psychologist within a CMHT does not necessarily lead to a greater understanding of roles.

DISCUSSION

The clinical psychologists within this research have a limited role in the treatment and management of psychosis.

When these patients are referred to clinical psychology, it is via consultants or CMHT's. Previously mentioned research (Burton & Ramsden, 1994) was confirmed by the present research, as patients' with psychosis are not referred to clinical psychology via GP's. This research also confirms that the respondents as a reason for not referring, often cite the long waiting times within clinical psychology departments.

It seems that pressure on each individual clinical psychologist to demonstrate both clinical activity and effectiveness may restrict their involvement with psychosis as these cases are often perceived as long term. Factors such as lack of resources, training and referrer knowledge also contribute. In addition, CMHT policy tends to exclude their team psychologist from involvement with this type of referral.

Clinical psychologists are perceived by the other respondents as not having an interest in this type of referral in addition to the aforementioned factors such as long waiting lists.

This research highlights that nursing staff do not perceive cognitive behavioural therapy as appropriate for the treatment of psychosis. This may be a reason for their low referrals. Many techniques are not being offered to patients' because staff do not feel competent to administer them. The modification of positive symptoms, CBT, and psychotherapy to address the emotional consequences such as loss, could be integrated to patients' management plans via a clinical psychologist.

It is clear that consultant psychiatrists and CPN's would consult with clinical psychologists regarding many treatment issues, but the negative views regarding accessibility, long waiting lists, psychologists lack of interest etc. prevents referrals and consultations.

A service goal that CMHT's concentrate increasingly on, is people with long term psychotic difficulties, while GP's purchase a range of services for the larger group of people suffering from non-psychotic distress (Chadd & Svanberg, 1994). This has given

CMHT's a clearer focus (Osborne-Davis, 1996) but it is also possible that clinical psychologists may find themselves marginalised by these changes if CMHT leaders fail to perceive clinical psychologists as having much of a role with "serious mental illness."

It is clear that all the professional groups feel that clinical psychologists are under involved and that more information is required. This may be an ideal place to begin. Education regarding appropriate treatment and airing current research would increase professionals awareness of the skills that clinical psychologists have. This could be achieved through in service training days and seminars for GP's to attend. It is interesting to note that having a clinical psychologist within a CMHT does not necessarily lead to a greater understanding of their role.

There is a high recognition of techniques used to treat psychosis but this is not reflected in the actual clinical practise of clinical psychologists.

The wide range of responses from nursing staff regarding the roles of clinical psychologists and the written comments from this group, indicates that there is a great disparity of knowledge of clinical psychologists roles and skills. This may influence decisions to refer patients with psychosis. However, this is not the main reason for the lack of referrals.

Only 6 members of staff stated that they would never refer a patient with psychosis to clinical psychologists, although from the written data, it is clear that many staff do not refer because they feel that clinical psychologists do not have an interest in this area.

This research highlights the low involvement of clinical psychologists within the treatment and management of psychosis. It seems that integration within CMHT's, although increasing general visibility of the clinical psychologist and contact with other health care professionals, it does not necessarily lead to greater inter-professional awareness, understanding, knowledge and positive working relationships regarding the treatment of patients with psychosis.

This research also highlights that the role and function of clinical psychologists' regarding the treatment of psychosis needs to be explicitly defined and conveyed to other professions, in order to facilitate better working relationships, interpersonal awareness and knowledge. This would ultimately impact on the quality and range of services that can successfully be offered to clients.

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2. MAJOR PROJECT LITERATURE REVIEW

INTERROGATIVE SUGGESTIBILITY OF PEOPLE WITH LEARNING DISABILITIES

Prepared in accordance with the notes for contributors to: *Legal and Criminological Psychology* (Appendix 2.1)

Interrogative Suggestibility of People With Learning Disabilities

ABSTRACT

This paper reviews the literature regarding the ability of people with learning disabilities to be credible witnesses. The involvement of people with learning disabilities in police investigations is briefly mentioned as is the research pertaining to the accuracy of witness testimony, memory and specific vulnerabilities. The particular susceptibility of people with learning disabilities to interrogative suggestibility is presented. Attempts to induce resistance to interrogative suggestibility have been investigated with several populations. This research, and in particular, the effects of instructional manipulation on interrogative suggestibility is reviewed.

INTERROGATIVE SUGGESTIBILITY OF PEOPLE WITH LEARNING DISABILITIES

INTRODUCTION

"There is now a need to encourage more specific progress in introducing protection measures and improved access to justice for vulnerable adults, particularly people with learning disabilities" (Voice UK, 1998).

The above quote is from a recent paper, which focuses on developing means to enhance the prospect of people with learning disabilities, being credible witnesses. Voice UK is a working party comprising of clinical psychologists, psychiatrists and lawyers. The formation of this group highlights the growing recognition for the need of expertise in this area.

Doubts concerning the ability of people with a learning disability to provide credible evidence within the criminal justice system have been documented in previous research. Reasons for these doubts will be discussed with reference to factors that influence the accuracy and reliability of responses. The relevant literature will be reviewed and particular focus placed on the concept of interrogative suggestibility. The interrogative suggestibility of adults and children has received substantial investigation. This research is reviewed and research focussing on methods to reduce suggestible responding will also be presented. The effects of

instructional manipulation on interrogative suggestibility are also documented.

People With Learning Disabilities and police investigations

The Royal Commission on Criminal Justice commissioned a study into persons at risk during interviews in police custody (Gudjonsson et al., 1993). This study investigated a number of suspects detained at two London police stations in order to assess their mental state, intellectual functioning, reading ability, interrogative suggestibility, anxiety proneness and understanding of their legal rights. The results showed that 14 (8.6%) suspects screened had a full-scale IQ score below 70, and 68 (42%) had a full scale IQ in the borderline range between 70-79. This study supported Hodgin's (1992) study, in that people with an impairment of intelligence were over-represented among those seen at police stations and suspected of having committed an offence.

When people with learning disabilities are involved in police investigations, they are usually asked to describe or report what they have seen or heard, and may become involved as a victim, witness, or suspect. Whether the person is believed to be a credible witness or not may play a crucial role in the entire legal process.

Specialist advice from a clinical psychologist, for example, is often sought by judges and lawyers. This advise is to inform courts on the extent and type of difficulties experienced by learning disabled individuals. In particular, information concerning the individuals' comprehension of

the legal process, the reliability of their evidence, memory and how to manage these difficulties is requested (Voice UK, 1998).

Research has begun to elucidate many factors which influence the accuracy and reliability of responses made during a police interrogation. The interviewing tactics used, the context of the interrogation, trait characteristics of the defendant and situational psychological factors (e.g. anxiety) are all likely to influence the validity of responses made. Intellectual ability, memory, mental illness, suggestibility, acquiescence, compliance, and self-esteem are just a selection of a defendant's characteristics which have been shown to be important (Howells and Ward, 1994).

Memory Capabilities in People with A Learning Disability

Studies on memory capabilities of adults with learning disabilities have consistently found their memories to be deficient when compared to non-learning disabled adults of a similar chronological age. Detterman (1979) in his review describes the findings as indicating an "everything" deficit. The deficiencies appear to be within both short and long-term memory and stem from problems at the encoding, storage, and retrieval stages (Brown and Gesiselman, 1990).

The effectiveness of different techniques of questioning learning disabled children was investigated by Dent (1986). The variables investigated were free recall, and general and

specific questions. As predicted, the general questions produced recall that was optimal in terms of completeness and accuracy.

It has been found (Register & Khilstrom, 1988 & Baddeley, 1990) that having a poorer memory is associated with higher confabulation. Confabulation refers to replacing gaps in the memory with imaginary recollections (Gudjonsson, 1997). As a group, people with learning difficulties were found to confabulate more than their counterparts in the general population (Clare and Gudjonsson, 1993). Sigelman and her colleagues (Sigelman et al., 1980; Sigelman, Budd, Spanhel & Schoenrock, 1981) found that acquiescent responding in people with learning disabilities correlated negatively with overall intellectual ability.

The vulnerabilities of witnesses with learning disabilities

A practical paper on identifying witnesses with a learning difficulty, and on how to maximise their performance during police interviewing, has been produced by Bull and Cullen (1992) for the Scottish Crown Office. However, there has been little research investigating the psychological vulnerabilities of these witnesses.

Gudjonsson (1995) discussed the psychological vulnerabilities of people with a learning disability. Within the context of eyewitness testimony, "psychological vulnerabilities" refer to "psychological characteristics or mental states which render the witness prone, in certain circumstances, to providing information which is inaccurate, unreliable, or misleading".

Problems arise because this population may have difficulty remembering events, are easily led when questioned, and have difficulty comprehending questions and providing replies. The implications and consequences of their answers may not be appreciated, and they may be easily intimidated when questioned and cross-examined by people in authority.

A "psychological vulnerability" which may render a witness prone to providing inaccurate information is suggestibility. This will now be discussed in greater detail.

Interrogative Suggestibility

Gudjonsson and Clark (1986) define interrogative suggestibility as "the extent to which, within a closed social interaction, people come to accept messages communicated during formal questioning, as a result of which their behavioural response is affected" (p. 84).

This model integrates the leading questions and negative feedback aspects of suggestibility, which are discussed in detail by Gudjonsson, (1983a, 1984a). The model comprehends suggestibility as "arising out of the way the individual interacts with others within the social and physical environment". In addition, the basic premise of the model highlights that interrogative suggestibility is dependent upon the "coping strategies that people can generate and implement when faced with two important aspects of the interrogative situation - uncertainty and expectations".

Suggestibility refers to the tendency of the individual to respond in a particular way to suggestive questions. Therefore, whereas suggestion refers to the properties contained in a stimulus, suggestibility refers to the characteristics of the person who is being incited to respond. A full explanation of the concepts of suggestion and suggestibility is provided by Gheorghiu (1989a).

The Gudjonsson and Clark model led to the development of the Gudjonsson Suggestibility Scales (GSS). These are standardised psychological tests which measure two separate aspects of interrogative suggestibility (Gudjonsson, 1983a, 1984a, 1987b). Firstly, the extent to which participants "yield" to subtly leading questions, and secondly, how they respond to negative feedback instructions. The latter measures how much they "shift" their answers once interpersonal pressure has been applied. There have been several studies involving people with learning disabilities, however, the majority of research using the GSS has involved forensic and non-learning disabled populations (Gudjonsson, 1992).

Suggestibility Research Within Child and Adult Populations

The interrogative suggestibility of children and adults has received substantial investigation. A selection of this research is now presented.

Attempts to prosecute crimes against children in which the child involved is the only witness (e.g. abuse) have highlighted issues pertaining to their reliability as witnesses. This has

prompted a great deal of research in child suggestibility (see Bottoms & Goodman, 1996 for a multinational literature review).

One of many potential social pressures operating in suggestibility studies which "may lead subjects who are able to remember correctly what they have seen to report instead the misleading information", is because they wish "to be viewed favourably by the experimenter" (Zarazoga, 1987, p.56). This would result in a tendency to agree with the experimenter's suggestions.

Social psychologists have known for decades that a direct communication intended to persuade will be more effective in changing attitudes if the source is seen as credible (Hovland & Weiss, 1951).

Other possible social factors such as conformity and compliance may be influenced by the status differential between experimenter/questioner and subject/witness. For example, Smith and Ellsworth (1987) found that questioners perceived as having greater expertise produced higher levels of suggestibility in adult subjects, and no significant misinformation effect was observed when the questioner was thought to be naïve about the witnessed incident. Similar research by Dodd and Bradshaw (1980) found adult subjects to be less suggestible when the misleading information was presented by a supposedly "neutral bystander" to the event than when it originated from a biased source.

If we consider the status differential between child participant/witnesses and adult experimenter/questioners, it is possible that social influences play an even larger role in the suggestibility of children than that of adults. One series of experiments conducted by Ceci, Ross, and Toglia (1987b) directly tested this notion by having misleading information presented to pre-schoolers by either an adult or a 7-year-old child. Suggestibility was significantly reduced, but not eliminated, when the 7-year-old presented the misleading information.

Although it is naïve to generalise from child to learning disabled populations (Cardone and Dent, 1996), the status differential between people with a learning disability and interrogators may result in the similar social influences that are highlighted in the above studies.

Negative feedback and high expectations are two important factors conducive to suggestion. To repeat a question as a form of negative feedback is a very powerful suggestive manipulation and is particularly effective if the repetition occurs immediately after an answer has just been provided. Repeated questioning alone is interpreted by children as indicating that their initial answers are incorrect, and they thus exhibit a greater propensity toward changing their responses (Moston, 1987; Poole & White, 1991).

Interrogative suggestibility and people with a learning disability

There is limited research regarding the interrogative suggestibility of people with learning disabilities. However, the psychological vulnerabilities mentioned earlier in this text indicate that this population will be particularly prone to suggestive responding.

Studies have found learning disabled children to be particularly susceptible to suggestion (Pear & Wyatt, 1914; Zigler & Balla, 1981 and Sigelman et al., 1982). Their unprompted recall is as reliable, and prompted recall much less reliable, than recall from children of normal intelligence (Pear & Wyatt, 1914).

Tully and Cahill (1984); Clare and Gudjonsson (1993) and Perlman et al. (1994) illustrate the types of problems which adult witnesses with a learning disability have with reporting events by free recall, and the extent to which they can be influenced by leading questions. In a single case investigation, Gudjonsson & Gunn (1982) found that a learning disabled participant was only suggestible about facts of which she was unsure. The studies mentioned above indicate that the testimony of people with learning disability can be reliable.

It has been found that, compared with people of average intellectual ability, those whose cognitive functioning is below average have poorer memories and are more susceptible to both leading questions and "negative feedback" (Gudjonsson, 1984,1986,1987). The suggestibility of individuals attending special day facilities for people with learning disabilities has been examined (Tully & Cahill, 1984). This study compared the total memory and total

suggestibility scores on the GSS1 of two "mentally handicapped" groups. As expected, both memory and suggestibility were related to overall cognitive functioning - the more intellectually disadvantaged group performed worse on both measures. This study was limited because only total suggestibility scores were given and thus it is not possible to know whether the high scores of the groups with learning disabilities reflect tendencies to "yield", to "shift", or both.

In another study, Clare & Gudjonsson (1993) found that, compared with their average ability counterparts, the group of people with mild learning disabilities were more suggestible, confabulated more, and were more acquiescent. However the difference in Total Suggestibility between the two groups arose from the greater susceptibility to leading questions (Yield) of the people with mild learning disabilities. There was no difference in their responses to "negative feedback" (Shift). The data from this study supports previous investigations (Sigelman et al., 1980 & 1981; Tully & Cahill, 1984) indicating that people with mild learning disabilities are more vulnerable to suggestibility than their average ability counterparts during interviews. It is possible that the lower societal status of people with learning disabilities may result in being doubtful of one's capabilities, and subsequently there may be a greater likelihood to provide accounts which they think will please the questioner.

Contamination of Subsequent Recall

Leichtman and Ceci (1995) were amongst the first to note the effects of suggestions on children's free recall, which is generally assumed to produce an uncontaminated account (Poole and Lindsay, 1995; Warren and Lane, 1995). They demonstrated that an event which is inaccurately reported in free recall would continue to be inaccurately reported when probed with questions. In other words, a prior erroneous report increases the likelihood of making a subsequent inaccurate report. The children in this study tended to embellish their statements with more and more confabulated details after a series of interviews.

A recent study found that people with learning disabilities were likely to incorporate information contained in interrogative questions into their subsequent free recall (Bowden, 1998).

Attempts have been made to increase resistance to suggestibility. A selection of the literature will now be presented.

Inducing Resistance to Suggestibility

Warning adult participants that misinformation has been or will be presented has derived consistent positive results. Greene, Flynn, and Loftus (1982) warned that either before or after receiving post-event information, some of the post-event information might be

inaccurate. Warnings which immediately preceded the post-event information resulted in significantly increased resistance to suggestibility.

Christiaansen and Ochalek (1983) provided a specific warning that a few of the details in the post-event information were inaccurate. Warnings given just prior to the recall task resulted in accuracy equivalent to that of participants who did not receive any misinformation, and warnings given immediately after presentation of post-event information were also effective, although slightly less so. These studies indicate that resistance to suggestibility in adults can be increased via (certain types of) warnings (given at certain times).

Warren et al, (1991); Howie & Dowd, (1996) and Ceci et al, (1987b) demonstrated that children's susceptibility to leading questioning or misleading post-event information can also be reduced. Children were warned of possible tricky questions and asked to report only "what you really remember". This reduced suggestibility when leading questions were asked. Children as young as 7 years of age possessed sufficient skills to utilise the warning (Warren et al, 1991). However, this may not work with younger children (Memon & Vartoukian, 1996), who are most susceptible to suggestive questioning effects.

Other factors can be manipulated to reduce suggestibility. For example, the type of information utilised is important in recall and suggestibility tasks. Recall is generally better for event information than for details concerning persons or objects (Milne, Bull,Koehnken &

Memon, 1995). Suggestible responses increase if script-consistent information is used in misleading questions (Milne et al, 1995).

The current paper has highlighted many dangers which result from suggestible questions. Avoiding leading questions and asking only open-ended questions has been widely recommended, but is not always possible. Children and people with learning disabilities, due to their limited cognitive and verbal capacities, do sometimes provide only minimal information in free reports, therefore additional prompts, cues and specific questions are often necessary and useful to elicit greater detail (Saywitz & Snyder, 1996; Marsen et al, 1995). Specific questions need not however be misleading and suggestive if the specific questions do not convey implicit assumptions that information can be provided (Cardone & Dent, 1996).

If the limited abilities of particular witnesses forces the interviewer to rely on prompts, cues and specific questions, giving the witness appropriate instructions seems highly important. This will now be discussed.

The effects of instructional manipulation on interrogative suggestibility

A study to investigate the "expectation" component of the theoretical model of interrogative suggestibility was devised by Gudjonsson and Hilton (1989). The authors proposed that the expectation component of their theoretical model could be manipulated to either increase or reduce subsequent suggestibility. The participants within this study were medical students and

different sets of instructions were used to "manipulate the expectations" of each subject about their performance on the GSS. Subjects who were told that they should be able to answer most of the questions about a passage previously read to them were expected to "yield" more to subtly leading questions than subjects given instructions containing lower expectations. As hypothesised, a significant difference in interrogative suggestibility was found between the groups, indicating that manipulation of the subjects' "cognitive set" affected their subsequent suggestibility.

The above study highlights, that by informing subjects that they are expected to be able to give definite answers to most of the questions asked, when their memory for the event is limited, clearly increases subsequent suggestibility to misleading questions. Conversely, warning subjects that they are not expected to be able to recall all the specific details about an incident reduces their suggestibility concerning the incident.

A second study with Icelandic University students investigated the effects of instructional manipulation and anxiety manipulation on interrogative suggestibility (Hansdottir, et al 1990). The results of this study supported the theoretical model of Gudjonsson & Clark (1986) and were consistent with the findings of Gudjonsson & Hilton (1989). The high expectation instructions given prior to interrogation were: "The story is short and simple and you should not have any difficulty remembering the whole story. The story is easily remembered." The low expectation instructions given prior to interrogation were: "You may have some difficulty remembering the story but that is quite normal, no one remembers it perfectly. Just relax and

do your best." High expectation instructions led to significantly more suggestibility than low expectation instructions.

Unfortunately, the two aforementioned studies only investigated the yield component of interrogative suggestibility. Thus we do not know if recall was effected.

The information presented in this literature review indicates that people with learning disabilities are often perceived as providing unreliable responses. In particular, this population appears to be vulnerable to suggestibility. It therefore follows that if suggestibility could be reduced by introducing protection measures, there may be improved access to the criminal justice system.

The study following this literature review will investigate if an instructional manipulation within the administration process of the GSS reduces interrogative suggestibility in people with learning disabilities. In addition, the effect on recall will be analysed. Finally, the study will investigate if information supplied in the leading questions contaminates subsequent recall.

Currently, suggestibility is assessed via the GSS, which may exclude people with learning disabilities from legal proceedings. If the hypothesis of this research is confirmed, people with learning disabilities may not continue to be perceived as unreliable witnesses, and there will be implications for future methods of interrogative interviewing within this population.

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3. MAJOR RESEARCH PROJECT PROPOSAL

Interrogative Suggestibility Of People With A Learning Disability

Effects Of Instructions

Prepared in accordance with guidelines in the D.Clin.Psych. Handbook, based on the appplication for a mini-project grant in Health Services Research

Interrogative Suggestibility Of People With A Learning Disability

Effects Of Instructions

SUMMARY

Doubts concerning the ability of people with a learning disability to provide credible evidence within the criminal justice system have been documented in previous research. Courts do not have a great deal of experience in dealing with vulnerable witnesses, and it is common for judges and lawyers to seek specialist help, for example from Clinical Psychologists, to advise the court on the extent and type of difficulties.

Many factors have been shown to influence the validity of statements made during an interrogation. One of these factors, interrogative suggestibility, has been shown to be of particular importance. This has resulted in theoretical models being documented, and the development of standardised psychological tests e.g. The Gudjonsson Suggestibility Scales, which provide a measure of interrogative suggestibility.

The purpose of this study is to investigate whether or not an instructional manipulation given during the administration process of the Gudjonsson Suggestibility Scales affects interrogative suggestibility in people with a learning disability. The instructional manipulation will provide information about participants expected performance, and offers the option of stating that they "cannot remember" the full content of a narrative or the answers to some questions.

A matched pair design will be utilised, and measures of intellectual and memory functioning will be assessed. All participants will be people with a learning disability who attend local resource centres.

It is hypothesised that standard expectation instructions will lead to significantly more suggestibility than low expectation instructions, and that there will be a positive correlation between intellectual and memory functioning with recall scores. Finally, the effect of instructional manipulation on general recall, and whether incorrect information suggested by leading questions is incorporated into participants subsequent recall, will also be investigated.

Interrogative Suggestibility Of People With A Learning Disability

Effects Of Instructions

INTRODUCTION

Doubts concerning the ability of people with a learning disability to provide credible evidence within the criminal justice system have been documented in previous research. These studies illustrate the types of problems which these witnesses have with reporting events by free recall, and the extent to which they can be influenced by leading questions (Tully and Cahill, 1984; Clare and Gudjonsson, 1993; and Perlman et al 1994).

Many factors have been shown to influence the validity of statements made during an interrogation (Howells and Ward, 1994). One of these factors, interrogative suggestibility, has been shown to be of particular importance (Clare and Gudjonsson, 1993) and has resulted in a theoretical model being documented (Gudjonsson and Clark, 1986). Interrogative suggestibility is defined as " the extent to which, within a closed social interaction, people come to accept messages communicated during formal questioning, as a result of which their behavioural response is affected".

The Gudjonsson Suggestibility Scales (GSS) were developed "in order to measure the vulnerabilities or proneness of people to give erroneous accounts when interviewed" (Gudjonsson, 1997). The GSS have been used in numerous studies with non-learning disabled and forensic populations to investigate interrogative suggestibility (Gudjonsson,

1992). Clare and Gudjonsson (1993) at The Institute of Psychiatry, used the GSS to assess suggestibility, confabulation, and acquiescence in people with a learning disability.

People with a learning disability have been shown to have memory deficits (Detterman, 1979), are prone to acquiescent responding (Sigelman et al., 1981), and are more suggestible (Clare and Gudjonsson, 1993) when compared to non-learning disabled individuals.

The Gudjonsson and Clark model states that interrogative suggestibility is dependent upon the way in which a participant appraises the situation, and the coping strategies which they can generate and apply when dealing with the uncertainty and expectations of the interrogative situation. The model argues that the three most important antecedents to suggestible responses are uncertainty, interpersonal trust, and certain expectations which people hold within the interrogative situation. When entering an interrogative situation, we have general expectations, which lead us to think, perceive, and interpret in certain ways. These expectations may affect the way in which we behave or respond in the interrogative situation (Haward, 1963).

The expectation component of the model implies that suggestibility may be able to be manipulated by instructions given prior to interrogation. For example, participants who are informed that they should be able to answer all questions without making errors within an interrogation, may be reluctant to admit when they are unsure of an answer. This "high expectation" may predispose participants to yield more to suggestive questions than if a

neutral or low expectation scenario were to arise.

Research utilising university students has investigated the effects of instructional manipulation and anxiety manipulation on interrogative suggestibility (Hansdottir, et. al, 1990). The results of this study supported the theoretical model of Gudjonsson & Clark (1986), and were consistent with the findings of Gudjonsson & Hilton (1989). The high expectation instructions given prior to interrogation were: "The story is short and simple and you should not have any difficulty remembering the whole story. The story is easily remembered." The low expectation instructions given prior to interrogation were: "You may have some difficulty remembering the story but that is quite normal. No one remembers it perfectly. Just relax and do your best". High expectation instructions led to significantly more suggestibility than low expectation instructions (general recall scores were not analysed). Instructional manipulation and interrogative suggestibility has not previously been investigated in people with a learning disability.

The previously mentioned memory deficits of people with a learning disability may contribute to a negative self-evaluation, this may also lead to the perception that non-learning disabled individuals are more knowledgeable. These factors may influence an interrogative situation.

The proposed research will investigate the "expectation" component of the theoretical model of interrogative suggestibility in people with a learning disability. This will assess whether or not an instructional manipulation given during the administration process of the GSS, affects

interrogative suggestibility and the amount of recall generated. The instructional manipulation will offer participants the option of stating that they "cannot remember" the full content of a narrative, or the answers to some questions. The accuracy of responses will be analysed and recommendations for future interrogative procedures will be made.

The influence of mode of assessment on interrogative suggestibility has recently been investigated in people with a learning disability (Bowden, 1998). This research, in addition to the standard administration of the GSS, asked participants to provide a second delayed recall of the information provided. This was to identify whether or not information provided in the leading questions becomes incorporated in further accounts. The current research will also incorporate this procedure.

AIMS AND HYPOTHESES

The aim of this study is to investigate whether or not instructional manipulation of the Gudjonsson Suggestibility Scales reduces the apparent interrogative suggestibility of people with a learning disability.

It is hypothesised that:

(a) Standard instructions will lead to significantly more suggestibility than low expectation instructions.

(b) There will be a positive correlation between performance on the Wechsler Adult

Intelligence Scale- Revised and recall scores.

(c) There will be a positive correlation between performance on the Rivermead Behavioural Memory Scale and recall scores.

The following information will also be investigated:

(d) The effect of instructional manipulation on the quantity of general recall.

(e) Whether incorrect information suggested by leading questions is incorporated into a participant's subsequent recall.

PLAN OF INVESTIGATION

Participants

To maximise consistency, it is hoped that all participants can be recruited from one large ATC (Adult Training Centre) within SouthEast Glasgow. All participants will be adults (both sexes) with a learning disability, and will be required to have comprehensive verbal communication skills, and possess the ability to provide consent.

Statistical analysis requires 24 participants (12 in each experimental group). To allow for dropout rates, a total of 30 participants (15 in each group) will be recruited.

Measures

Wechsler Adult Intelligence Scale - Revised (Wechsler, 1986)

This is a standardised measure of intellectual functioning, which produces scores for individual components of intellectual functioning and an overall I.Q. score. This test has well-established validity and reliability.

Rivermead Behavioural Memory Test (RBMT) (Wilson, Cockburn, & Baddeley, 1985)

This is a standardised test, which is based on memory tasks involved in normal daily life rather than clinical or experimental materials. Items for inclusion in this test were selected on the basis of observations of memory-impaired people. This test has been shown to have good ecological validity and high inter-rater and test-retest reliability (Wilson, 1993). It has also been shown to be an objective measure of functional ability (Schartz & MacMillan 1989) and more ecologically valid than the Weschler Memory Scale-Revised (Kotler-Cope, 1990 cited in Wilson's 1993 paper).

The Gudjonsson Suggestibility Scales (GSS)

These are standardised psychological tests, which measure interrogative suggestibility

(Gudjonsson, 1983a, 1984a, and 1987b). These scales were developed "in order to measure the vulnerabilities or proneness of people to give erroneous accounts when interviewed" (Gudjonsson, 1997).

The GSS-1 (Gudjonsson, 1984a) and the GSS-2 (Gudjonsson, 1987b) contain different short stories, a recall procedure (both immediate and delayed recall are recorded), 20 questions that are asked twice about the content of the story, and a negative feedback instruction administered at the completion of the first interrogation. Reliability and validity of these scales has been established in numerous studies (Gudjonsson, 1992).

In accordance with the standard administration procedure of the GSS, after initially hearing the story, participants will be asked to provide an immediate recall of the story. After a 50 minute time-lapse, a delayed recall is requested. The 20 specific questions are then asked, 15 of these being "leading" questions. The extent to which participants "yield" to the 15 subtly leading questions, and the extent to which participants "shift" their responses once negative feedback is provided, are recorded. Negative feedback is provided irrespective of the answers given. The participant is told "You have made a number of errors. It is therefore necessary to go through the questions once more, and this time try to be more accurate". The Yield and Shift scores are added together to give a Total Suggestibility Score.

In addition to the standard administration of the GSS, the participants will then be asked to provide a second delayed recall of the story. This will identify whether false responses to

leading questions become incorporated within further accounts. This procedure will be carried out in order to corroborate the results of recent research (Bowden, 1998).

Design and Procedure

Participant Recruitment

The ATC manager(s) will be contacted before discussing the project with resource centre key workers. Key workers will be asked to identify possible participants from their current client base. The key workers will use their personal judgement regarding the ability of their clients to participate (i.e. possessing comprehensive verbal communication skills and the ability to provide consent).

Clients will then be approached by their key worker to ask them to consider participating within a memory study. A participant information sheet, written in non-technical language, will be provided to help explain the procedure. The researcher will then meet with the clients who have agreed to participate, and any questions will be answered. If, after this meeting, the client still wishes to participate, one of the two consent forms will be signed and witnessed by the clients key worker. The participants GPs' will be contacted to inform them of their patient's inclusion within the study.

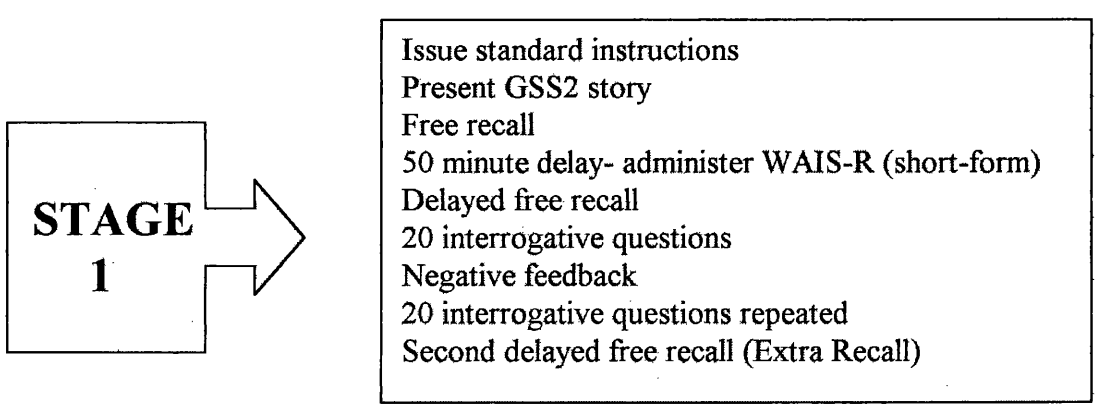
Experimental Methodology

The methodology is divided into two stages: -

Stage 1

The GSS2 was allocated randomly to Stage 1. In Stage 1 all participants will individually complete this test. Between the immediate and delayed recalls, the standard administration requires a period of 50 minutes to elapse. During this time the Wechsler Adult Intelligence Scale-Revised (Short Form) (Wechsler, 1986) will be administered. The standard administration of the GSS2 will then occur, followed by a second delayed recall. Figure 1 below illustrates the procedure for Stage 1.

Figure 1



Stage 2

Matched pairs will be identified utilising the Total Suggestibility scores derived from Stage 1. Age and gender differences will not be matched as the age and sex of adults has not been found to contribute to suggestibility (Gudjonsson 1992). One participant, from each matched pair will be randomly assigned to the "Standard Instruction" group (group A), and the other to the "Low Expectation Instruction" group (group B). The instructions issued to group B were derived from Hansdottir et al., (1990). All matched pairs will then complete the GSS1.

The participants within group B will be provided with alternative instructions during their completion of the GSS1. A score sheet has been devised which includes full instructions. The group B instructions will offer the participants the option of stating that they cannot remember the full content of the narrative or the answers to some questions. The instructions are "...You may have some difficulty remembering the story but that is quite normal, no-one remembers it perfectly. Just relax and do your best."

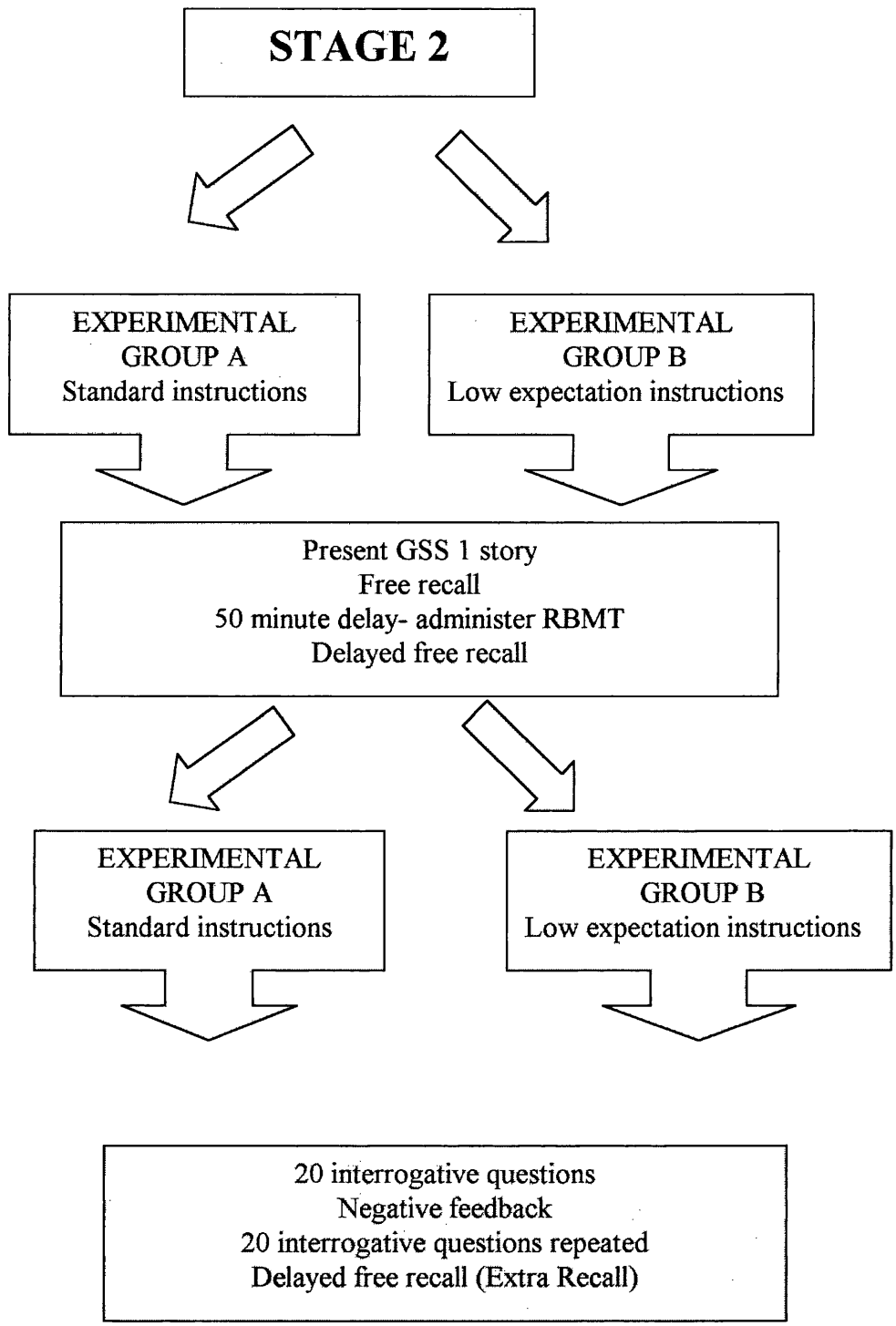
Once again, between the immediate and delayed recalls, the standard administration requires a period of 50 minutes to elapse. During this time the Rivermead Behavioural Memory Test (RBMT) will be administered.

The standard administration of the GSS1 will then continue. Group B will receive alternative instructions before being asked the interrogative questions. The instructions are

"... You may have some difficulty answering some questions but that is nothing to worry about, just do your best. If you can't remember, say I can't remember". This will be followed by a second delayed recall.

Figure 2 overleaf illustrates the procedure for stage 2.

Figure 2


STAGE 2
EXPERIMENTAL GROUP A Standard instructions
EXPERIMENTAL GROUP B Low expectation instructions
Present GSS 1 story
Free recall
50 minute delay- administer RBMT
Delayed free recall
EXPERIMENTAL GROUP A Standard instructions
EXPERIMENTAL GROUP B Low expectation instructions
20 interrogative questions
Negative feedback
20 interrogative questions repeated
Delayed free recall (Extra Recall)

Settings and equipment

Assessments will be carried out in managers offices within the ATC. Responses to the GSS Scales will be recorded with a mini-cassette recorder, which will be placed in full view of the participants and transcribed to text immediately. In addition, the verbatim responses will be recorded on score sheets.

DATA ANALYSIS

The data collected will be:

1. Scores on the GSS2 (Free recall, delayed recall, yield, shift, and total suggestibility).
2. Scores on the Wechsler Adult Intelligence Scale- Revised.
3. A second delayed recall (GSS2).
4. Scores on the GSS1 (Free recall, delayed recall, yield, shift, and total suggestibility).
5. Scores on the RMBT
6. A second delayed recall (GSS1).

Data will be analysed using the SPSS/PC statistical package at the Department of Psychological Medicine. The power for the study will be based on the following study, which most closely resembles the proposed methodology. Hansdottir et al (1990) investigated the effects of instructional manipulation and anxiety manipulation on interrogative suggestibility using the GSS.

The table below illustrates the Mean and Standard Deviation scores for "Yield" suggestibility for each experimental group.

High Expectation				**Low Expectation**				
	N	Mean	SD	N	Mean	SD	t	p<
Anxiety Treatment	10	4.00	2.05	10	3.40	1.65	0.72	NS
Neutral Treatment	11	3.82	1.89	9	2.00	1.00	2.6	0.05
t= 0.21 (NS)				t= 2.21 (p<0.05)				

Applying the above results and sample sizes and using the UCLA power calculator, a total sample size of 24 with a power of 0.8784 was produced (12 participants within each of the 2 experimental groups). To allow for dropout rates, a total of 30 participants (15 in each group) will be recruited.

The experimental hypotheses will be investigated for statistical significance, and differences between the two experimental conditions groups will be analysed using the appropriate parametric or non-parametric tests (this will investigate if there is a significant difference between the suggestibility scores of the 2 groups).

The degree of association between scores on three variables (suggestibility, intelligence, and memory) will be investigated using correlation procedures. If using parametric tests, the Pearson Product Moment correlation will be applied. Alternatively, if using non-parametric tests the Wilcoxon Signed Ranks correaltion will be applied.

PRACTICAL APPLICATIONS

As previously mentioned, courts do not have a great deal of experience in dealing with vulnerable witnesses, and it is common for judges and lawyers to seek specialist help from e.g. clinical psychologists' to advise the court on the extent and type of disability in a vulnerable witness. In order to encourage progress in introducing protection measures and improved access to justice for vulnerable adults, further research is required. The current research may have implications for the method by which interrogative suggestibility of people with a learning disability is assessed for court proceedings, and may enhance the prospect of this population being credible witnesses.

TIMESCALES

Data collection will begin in December 1998 and aims to be completed by April 1999. Participants will be seen on two separate days. During both sessions, participants will be involved for approximately one hour.

ETHICAL APPROVAL

Approval will initially be sought from the Research Ethical Committee of the Greater Glasgow Trust. After approval, the proposal will be submitted to the Information and

Research Department of the Glasgow City Council Social Work Directorate.

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4. MAJOR RESEARCH PROJECT PAPER

INTERROGATIVE SUGGESTIBILITY OF PEOPLE WITH LEARNING DISABILITIES - EFFECTS OF INSTRUCTIONS

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Prepared in accordance with the notes for contributors to: *Legal and Criminological Psychology* (appendix 4.1)

Interrogative Suggestibility of people with learning disabilities - Effects of Instructions

ABSTRACT

Aims- The study investigated whether or not instructional manipulation of the Gudjonsson Suggestibility Scales (GSS) reduced suggestible responses. The effects on recall of the GSS story were also investigated. Finally, an additional task was introduced to determine if incorrect information suggested by leading questions was incorporated into participants' subsequent recall.

Method

Participants were 24 people with a learning disability who attended community based Adult Training Centres. Participants completed the GSS 2, and in addition to the standard completion of this test, were asked to provide an extra recall. 12 pairs were matched on suggestibility scores and assigned to 2 Groups. These groups then completed the GSS 1 with one group receiving alternative instructions (low expectation instructions) which indicated that they were not expected to remember everything. Again all participants provided a second delayed recall. Formal measures of intellectual and memory functioning were also obtained.

Results

The main experimental hypothesis was supported. Significant differences were found between the groups for Yield 1 and Total Suggestibility scores. Standard Instructions led to significantly more suggestibility than low expectation instructions. No differences were found between the two groups for recall scores. The inclusion of the extra recall task found that more than half of the participants included in their recall, information that was suggested in interrogative questions. False alternative questions were particularly powerful in inducing this effect. A significant correlation was found between recall of the GSS and scores on the WAIS-R. No correlation was found between recall of the GSS and scores on the Rivermead Behavioural Memory Test (RBMT).

Conclusions

Suggestibility was reduced via instructional manipulation. Participants incorporated information contained within the suggestive questions in their subsequent recall. They were particularly susceptible to include content from false alternative questions. The above findings have implications for the interrogation of people with a learning disability.

INTRODUCTION

Many factors have been shown to influence the validity of statements made during an interrogation (Howells & Ward, 1994). One of these factors is interrogative suggestibility. This has resulted in theoretical models being developed, and the production of standardised psychological tests.

Gudjonsson and Clark (1986) define interrogative suggestibility as "the extent to which, within a closed social interaction, people come to accept messages communicated during formal questioning, as a result of which their behavioural response is affected" (p. 84).

The Gudjonsson Suggestibility Scales (GSS) are standardised psychological tests that measure two separate aspects of interrogative suggestibility (Gudjonsson, 1983a, 1984a, 1987b). Firstly, the extent to which participants' "Yield" to subtly leading questions and secondly, how they respond to negative feedback instructions. The latter measures how much they "Shift" their answers once interpersonal pressure has been applied.

People with learning disabilities have been shown to be particularly suggestible in comparison to the general population (Clare & Gudjonsson, 1993).

Attempts to induce resistance to suggestibility have been investigated within the adult and child literature. However, there has been little research conducted with people with learning disabilities.

The "expectation " component of the model of interrogative suggestibility implies that suggestibility may be able to be manipulated by instructions given prior to interrogation. Previous research with university students has shown the significant effects of interrogative manipulation on instructional suggestibility (Hansdottir et al, 1990; Gudjonsson & Hilton, 1989).

The present study investigated the "expectation" component of the theoretical model of interrogative suggestibility. In particular, the study investigated if an instructional manipulation within the administration process of the GSS reduced interrogative suggestibility in people with a learning disability. The effect on recall of the GSS story was also analysed.

Finally, recent research investigated if people with a learning disability incorporate information contained in suggestive questions into their subsequent recall (Bowden, 1998). The current study also investigated this.

HYPOTHESES

The current study aims to investigate whether or not instructional manipulation of the Gudjonsson Suggestibility Scales reduces the apparent interrogative suggestibility of people with a learning disability.

It is hypothesised that:

(a) Standard instructions will lead to significantly more suggestibility than low

expectation instructions.

(b) There will be a positive correlation between performance on the Wechsler Adult Intelligence Scale- Revised and recall scores.

(c) There will be a positive correlation between performance on the Rivermead Behavioural Memory Scale and recall scores.

The following information will also be investigated:

(d) The effect of instructional manipulation on the quantity of general recall.

(e) Whether incorrect information suggested by leading questions is incorporated into participants' subsequent recall.

METHODOLOGY

Participants

Participants were people with a learning disability attending two large Adult Training Centres. 26 participants completed Stage 1, however, one participant withdrew from the study during Stage 2, and another became unwell. Data from the remaining 24 participants (13 males and 11 females) were analysed.

The age range was 19-51 years old (mean 32.88, SD 7.33). Their IQ scores derived from the WAIS-R ranged from 52-76 (mean 63.33, SD 5.80).

Participant Information

Key workers were asked to identify possible participants from their client base. The key workers used their personal judgement regarding the ability of clients to participate (i.e. possessing comprehensive verbal communication skills and the ability to provide consent).

Clients were then approached by their key worker and were asked to consider participating in a memory study. A participant information sheet, written in non-technical language, was provided to help explain the procedure (see Appendix 4.2). Clients who agreed to participate then signed one of two consent forms (see Appendix 4.3) and this was witnessed by their key worker. The participants GP's were also contacted to inform of their patient's inclusion within the study. Two clients identified by key workers declined to participate and the author omitted one client due to language difficulties.

Measures

Wechsler Adult Intelligence Scale - Revised (Wechsler, 1986)

This is a standardised measure of intellectual functioning which produces scores for individual components of intellectual functioning and an overall I.Q. score. This test has well-established validity and reliability. The WAIS-R has also been shown to possess good test-retest reliability and stability in a sample of learning disabled individuals (Watkins & Campbell, 1992).

The standard administration of the GSS1 and GSS2 requires a time delay of 50 minutes to provide the opportunity of obtaining measures of delayed recall. Due to this time constraint, a short form of the WAIS-R was administered. This comprised the following subtests: Information, Vocabulary, Comprehension, Similarities, Picture Completion, Picture Arrangement, Block design, and Object Assembly. These particular subtests were administered, as this combination has been included in previous suggestibility research with people with learning disabilities (Bowden, 1998, Gudjonsson, 1993). These subtests were pro-rated to provide Verbal, Performance and Full Scale IQ Scores.

Rivermead Behavioural Memory Test (RBMT) (Wilson, Cockburn, & Baddeley, 1985)

This is a standardised test which is based on memory tasks involved in normal daily life rather than clinical or experimental materials. It was developed to provide measures that could be directly related to the practical effects of impaired memory. Items for inclusion in this test were selected on the basis of observations of memory-impaired people. This test has been shown to have good ecological validity and high inter-rater and test-retest reliability (Wilson, 1993). It has also been shown to be an objective measure of functional ability (Schartz & MacMillan 1989) with greater validity than the Weschler Memory Scale-Revised (Kotler-Cope, 1990 cited in Wilson's 1993 paper). Norms exist for people aged 5-96 years of age and from different populations. Norms do not exist for the learning disabled population.

The test has four parallel forms. Form A was administered in the current study. All subtests within the RBMT were administered except for test 6, which assesses the immediate and delayed recall of a story. This would have been confusing for participants as the suggestibility scales contain a story to be recalled.

Cut-off points have been determined in the RBMT, which place scores into categories. It was not the aim of this study to analyse the categories, only the correlation between RBMT scores and recall of the GSS2 was investigated. Thus only the screening scores for each participant were noted. Screening scores range from 0 (min)- 12 (max), however, as previously mentioned, one sub-test was omitted as it involved the recall of a story and may have impinged participants recall on the GSS questionnaires. For the current study, a range of 0-11 was possible for the RBMT screening score.

The Gudjonsson Suggestibility Scales (GSS)

These are standardised psychological tests, which measure interrogative suggestibility (Gudjonsson, 1983a, 1984a, and 1987b). These scales were developed "in order to measure the vulnerabilities or proneness of people to give erroneous accounts when interviewed" (Gudjonsson, 1997). The test-retest reliability of the Scales has been investigated by correlating the scores obtained by subjects who completed both the GSS-1 and GSS-2. All correlation's for memory and suggestibility were found to be highly significant across four population groups (ranging from 0.93 - 0.77) (Gudjonsson, 1997). A comprehensive review of the validation studies of the Scales is given by Gudjonsson (1992a).

In addition, a detailed early evaluation and critique of the conceptual basis, test construction, and validity of the GSS-1 was conducted by Grisso (1986). Since this review the Scales have been further validated in a number of studies (see Gudjonsson, 1997 for a review). The inter-scorer reliability of the Scales has been investigated in learning disabled populations. The level of agreement is high and is documented in Table 1. Norms for normal and learning disabled populations are highlighted later (Tables 2-2.1).

The GSS-1 (Gudjonsson, 1984a) and the GSS-2 (Gudjonsson, 1987b) contain different short stories, a recall procedure (both immediate and delayed recall are recorded), 20 questions that are asked twice about the content of the story, and a negative feedback instruction administered at the completion of the first interrogation. Reliability and validity of these scales has been established in numerous studies (Gudjonsson, 1992). These scales are also accepted in court as expert evidence (see Gudjonsson, 1992).

In accordance with the standard administration procedure of the GSS, after initially hearing the story, participants were asked to provide an immediate recall of the story. Fifty minutes later a delayed recall was requested. The 20 specific questions are then asked, 15 of these being leading questions. The extent to which participants "Yield" to the 15 subtly leading questions, and the extent to which participants "Shift" their responses once negative feedback is provided, was recorded. Negative feedback was provided irrespective of the answers given. The participant was told, "You have made a number of errors. It is therefore necessary to go through the questions once more, and this time try to be more accurate." The "Yield" and "Shift" scores were added together to

give a Total Suggestibility Score.

In addition to the standard administration of the GSS, the present study required the participants to provide a second delayed recall of the story. This was to identify whether information contained in leading questions became incorporated within further accounts. This procedure was carried out in order to corroborate the results of recent research (Bowden, 1998).

Procedure and Experimental Design

Throughout the study, the author via individual interviews, assessed all participants. The methodology was divided into two stages.

Stage 1

The GSS 1 and GSS 2 are parallel forms of the same test. Via the toss of a coin, the GSS2 was selected to be used in Stage 1. All 24 participants completed this assessment. In addition to the aforementioned standard instructions, an Extra Recall Task was included in the design. During the 50-minute time delay between the Immediate and Delayed Recalls, the WAIS-R (Short form) was administered. Figure 1 below illustrates the procedure for Stage 1.

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insert Figure 1 about here

Data collection for Stage 1

Responses to the GSS2 were recorded with a mini-cassette recorder, which was placed in full view of the participants. In addition, the verbatim responses were recorded on the Stage 1 Score Sheet (Appendix 4.4). The score sheet was a modified version of a record form devised to aid data collection for the GSS1 and GSS2 (Gudjonnson, 1997). Three modified versions of this form were produced for the current study (Appendices 4.4 - 4.6). This dual recording procedure ensured that any ambiguities of responses could be analysed further. However, the author was able to record all the verbatim responses at the time.

The Stage 1 Score Sheet was scored by following the guidelines within the GSS manual (Gudjonnson, 1997). The additional Extra Recall Task was also scored in this way. To determine if any of the interrogative questions led participants to incorporate non-story information in their Extra Recall. Led Recall was documented. Conforming to a previous study (Bowden, 1998), Led Recall was recorded any idea that was within the questions, but not in the story. For example, one participant recalled that the family had a skiing cottage, a skiing cottage was not mentioned in the GSS story but was referred to within the interrogative questions.

Stage 2

Matched Groups

Matched-pairs were identified from the Total Suggestibility scores derived from Stage 1. Age and Gender differences were not matched as the age and sex of adults has not been found to contribute to suggestibility (Gudjonsson, 1992). One participant from each pair was randomly assigned to the 'Standard Instruction' group (Group A), and the other to the 'Low Expectation Instruction' group (Group B).

After being allocated to either Group A or Group B, all participants were assessed using the GSS1. Group A received the standard instructions when completing the GSS 1. Group B received alternative instructions during their completion of the GSS1 (Low Expectation Instructions). These instructions were derived from Hansdottir et al (1990). Before hearing the story, Group B received standard instructions and also "You may have some difficulty remembering the story but that is quite normal, no-one remembers it perfectly. Just relax and do your best".

During the 50 minutes time delay, all 24 participants completed the RBMT. The standard administration of the GSS1 then continued. Before being asked the interrogative questions, Group B were informed "You may have some difficulty answering some questions but that is nothing to worry about, just do your best. If you can't remember, say I can't remember".

Figure 2 illustrates the procedure for stage 2.

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insert Figure 2 about here

Data Collection for Stage 2

Data collection for this stage was identical to Stage 1. The Stage 2 score sheets for Group A and Group B were used to record the responses (Appendix 4.5 - 4.6).

RESULTS

Inter-scorer reliability

A sample of results was compared for inter-scorer reliability. The sample included -

1. Four stage 1 score sheets (GSS 2)
2. Four stage 2 score sheets (GSS 1- Group A)
3. Four stage 2 score sheets (GSS 1- Group B)

The degree of agreement between 2 assessors (the author and a post-graduate psychologist) who independently scored the raw data was analysed using the Pearson Product Moment Correlation. Even after correction for 12 comparison correlations, the correlations were found to be significant at the $p<.001$ level (significance level .05 was reduced to .01 level). The results are presented in Table 1. The data from previous studies are also provided for comparative purposes.

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insert Table 1 about here

The correlations for the GSS 1 ranged from 0.996 (Yield 2) to 0.918 (Extra Recall), ($p<.001$). The correlations for the GSS 2 ranged from 0.998 (Yield 2) to 0.894 (Extra Recall), ($p<.001$). In general, there was a very high scoring agreement between the raters, which is consistent with the comparative studies cited within Table 1. The lowest intra-class correlation coefficients were found for the Confabulation scores, although these are still high.

Several of the correlations for the current study were higher that the cited studies in 1993 and 1994. A reason for this may be that the detailed scoring criteria provided in the GSS Manual (Gudjonnson, 1997) was unavailable at that time.

Stage 1 Results

From this stage a Total Suggestibility score for each participant was derived to produce a matched sample (Group A and Group B). To ascertain if these matched samples differed in terms of measured IQ and memory, the mean scores were compared via T Tests. No significant differences were found between the mean scores for Group A (IQ = 61.33, Memory = 2.25) and Group B (IQ = 65.33, Memory = 3.25).

Data regarding age, intellectual functioning and performance on the GSS 2 was also collected. Table 2 compares the current data with previous learning disability research.

Insert Table 2 about here

The current study confirms previous research. People with a learning disability have poor memories (immediate recall = 5.7) and high levels of suggestibility (total suggestibility = 12.1) when assessed with the GSS and compared to the general population (immediate recall = 19.7, total suggestibility = 7.5).

Insert Table 2.1 about here

The current population has a lower mean total suggestibility score (12.1) when compared with previous research (mean = 16.8, Bowden, 1998; mean = 14.6, Gudjonsson & Clare, 1995). This may be related to the sample recruitment sites of the studies. The current

population were all attending a community ATC and residing in supported accommodation or with their families. However, populations from the previous research were hospital in-patients (Bowden, 1998) and attendees of "residential and day centre services" (Gudjonnson & Clare, 1995). It may be possible that attending ATCs that promote social and personal development programmes and community integration, affects suggestibility.

Intelligence and Recall

The second hypothesis of the current study stated that there would be a significant correlation between intellectual functioning and recall scores on the GSS 2. The results in Table 3 confirm this hypothesis. Performance on the WAIS-R, correlates positively with recall scores on the GSS 2.

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insert Table 3 about here

Memory functioning and Recall

The third hypothesis of the current study stated that there would be a significant correlation between memory functioning and recall of the GSS 2. Table 4 shows that there is no correlation between performance on the RMBT and the GSS 2 recall scores.

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insert Table 4 about here

Stage 2 Results

The GSS 1 scores for Group A (Standard Instructions) and Group B (Low Expectation Instructions) were compared. There was a distribution of extreme scores, which was confirmed by conducting scatter-plots. The best measure of central tendency when the distribution includes extreme scores is the median. This is because it is influenced less than the mean by the extreme scores. The groups were therefore compared using non-parametric statistics (the Wilcoxon Signed-Ranks Test).

Memory

Table 3 presents the results of a comparison of memory scores for Group A and Group B.

No significant differences were found between the two groups for recall of the GSS 1 story at any stage of the recall process.

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insert Table 5 about here

These results indicate that when people with a learning disability are informed that they may have some difficulty remembering the story, and that the interviewer has a low expectation of their performance, this does not mean that the participants will recall less information.

The mean scores seem to suggest that Group B recalled slightly more information than Group A. The low expectation instructions may reduce anxiety.

Suggestibility

It was hypothesised that Standard Instructions would lead to significantly more suggestibility than Low Expectation Instructions. The results presented in Table 6 confirm this prediction.

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insert Table 6 about here

Significant differences were found between the two groups for Yield 1 and Total Suggestibility.

Yield 1

This refers to the number of leading questions the participant yields to on GSS prior to negative feedback. Group B yielded to significantly fewer leading questions than Group A.

Total Suggestibility

This represents the sum of Yield 1 and Shift and gives an indication of the participants overall level of suggestibility. Group B scores were significantly less than Group A for Total Suggestibility.

There were no significant differences between the two groups for the following information:

1. Shift- the number of times where there has been a distinct change in the participants answers following negative feedback.
2. Yield 2- the number of leading questions to which the participant yields after the negative feedback has been administered.

Led Recall

In order to identify whether or not false information from suggestive questions would become incorporated into further accounts of the GSS 2 and GSS 1, the participants were asked to provide a second delayed recall (Extra Recall).

A total of 15 of the 24 participants included at least one piece of 'led' information in their Extra Recall.

Led Recall - Question Analyses

Different types of suggestive questions are contained within the GSS. These are referred to as "leading questions", "affirmative questions" and "false alternative questions". All three groups of suggestive questions introduced material that had not been mentioned in the two stories.

To identify if a particular type of suggestive question has effects on subsequent recall, the Extra Recall produced by participants was analysed. The particular questions that induced Led Recall are highlighted in Tables 7 & 8.

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insert Table 7 about here

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insert Table 8 about here

Led Recall GSS 2 (Table 7)

Within the Extra Recall of the GSS 2, 13 participants were influenced by suggestive questions, 11 of these were false alternative questions. This was especially evident when asked- "Did the couple have a dog or a cat?"- the original story made no mention of any animals.

Led Recall GSS 1 (Table 8)

Within the Extra Recall of the GSS 1,13 participants within Group A and B, were influenced by suggestive questions, all 13 of these were false alternative questions. This was especially evident when asked- "Were the assailants armed with knives or guns?" and "Were the assailants black or white?"- again the original story did not mention weapons or any particular ethnic races.

It is evident from Tables 7 & 8 that information in forced-choice questions is regularly incorporated in subsequent recall.

DISCUSSION

The present findings support 2 previous studies (Hansdottir et al 1990; Gudjonnson & Hilton, 1989) in that instructional manipulation significantly affects interrogative suggestibility within an experimental context. The current study found significant differences between the two groups for Yield 1 and Total Suggestibility.

Participants in the previous research were university students and only the Yield factor was investigated. Participants in the current study were people with a learning disability, which indicates that the findings from previous research are transferable to this population.

It may be expected that if you allow people the option of stating they cannot remember information, that subsequent recall may reduce. This was not apparent in the current study. The group receiving low expectation instructions did not produce significantly less recall information.

The results of the current study were consistent with previous research, in that, intelligence, measured by standard assessment tools, was positively correlated with recall of the GSS. No correlation was found between memory functioning measured by the RBMT and recall of the GSS. This indicates that the more practical skills measured by the RBMT do not correlate with the verbal memory skills required for the GSS. Memory, as assessed by the Weschler Memory scales has previously been shown to have a negative correlation with suggestibility (Gudjonsson & Clare, 1995).

Fifteen of the 24 participants included at least one piece of 'led' information from the misleading questions into their subsequent recall. This was especially likely after misleading questions that were asked in a forced-choice format. So although the instructional manipulation induced resistance to suggestibility, it did not inoculate participants to providing 'led' information in a subsequent recall. Clark & Schober (1992) postulate that to respond correctly to these types of questions, in which all guesses are incorrect, participants must overcome strong demand characteristics and reject the alternatives offered. The current study suggests that all misleading questions do not have the same likelihood of being incorporated in subsequent recall.

The present findings support the theoretical model of Gudjonnson & Clarke (1986). The main premise of this model is that interrogative suggestibility is dependent upon participants' cognitive appraisal of the situation, the coping strategies generated and utilised when dealing with the uncertainty, and expectations of the interrogative situation. The current study investigated the expectation component of this theoretical model.

The theoretical model has been specifically applied to police interrogation situations. As previously mentioned, the three most important antecedents to a suggestible response are "a sense of uncertainty, interpersonal trust and certain expectations that hold during interrogation"- The expectations of the current sample were manipulated by the instructions given. Group A received the higher expectation instructions, which may have indicated that they were expected to know the answers; thus they may have been reluctant to declare their uncertainty. Group B received instructions which placed a lower expectation on them, these instructions stated that everyone has memory problems and

permission was given to say, " I can't remember". Group B may have felt more relaxed and less reluctant to state any uncertainties.

Although set within an experimental context, the results of the current study may provide a theoretical basis which can transfer to real police investigation procedures. The vulnerabilities of witnesses with learning disabilities have already been documented (see Shiels, 1999, unpublished manuscript). The current study suggests that if police interrogators voice a lower expectation of the interviewees' performance, then less suggestible responses will be made, as guessing may/will be discouraged.

The high levels of stress presumably associated with the interrogative situation, may be reduced through these instructions. The results from the current study cannot analyse factors such as stress and arousal, as they were not measured.

The free recall of people with learning disabilities is often limited compared to a normal population. It is therefore necessary to use direct questioning to increase recall. As direct questioning has to occur, it is important to use strategies that will not decrease accuracy. The current study has already shown that instructional manipulation can reduce suggestibility. However, the results also provide interesting information concerning the types of questions that will influence subsequent recall.

It has been found in previous research that open questions were less prone to guessing than were closed questions, due to the greater difficulty involved in generating a guess when not provided with alternatives (Leippe et al, 1991). The current research did not investigate the relationship between type of question and subsequent suggestibility.

However the type of question that was incorporated in subsequent recall was investigated.

This information provides guidelines for the interrogation process of people with learning disabilities, in that, forced-choice questions should not be incorporated within any stage of the questioning process. It is also important to consider this when deciding if testimony should be admitted, and for cross-examination procedures.

Even with low expectations placed upon them, Group B still incorporated this type of information into their subsequent recall. Forced-choice questions hold a powerful effect and are difficult to resist.

The validity of the GSS as a measure of the reliability of testimony has been questioned (Cardone & Dent, 1996). This is because testimony is generally based on visually based information while the GSS is based solely on verbal information. In addition, the current study highlights that this standard measure of suggestibility may underestimate the ability of people with learning disabilities to provide witness testimony and exclude them from the criminal justice system.

The validity of the GSS can also be questioned when the following information is considered. The adult literature indicates that studies of neutral events may underestimate the accuracy of participants' memory for criminal events. Memories for 'real' crime situations and events of high impact (i.e. criminal events of consequence or direct personal relevance) tend to be well remembered, even after long delays (Yuille & Tollestrup, 1992).

Recent research (Ochsner, 1999) found the testimony of children who viewed a 'real' theft to provide more accurate information in recall and on forced choice recognition tasks, compared to children who viewed non criminal (neutral) events.

Research by Ellis & Woodridge (1985) demonstrated that recall for pictures was far superior to recall for words in people with learning disabilities. The authors proposed that differences in the development of verbal skills in people with learning disabilities were mainly responsible for the differences in short-term memory for pictorial and verbal stimuli. People with learning disabilities may therefore rely heavily on the primitive imagery system (Ellis et al, 1986). All of the above information suggests that verbal tests may underestimate the abilities of people with learning disabilities.

Research that more closely simulates the conditions in real world investigations has indicated that when children are repeatedly provided with misleading suggestions (Ceci & Bruck, 1995), and when the suggestions come from credible sources such as a parent (Poole & Lindsay, 1995), they more readily accept misleading suggestions. This may have implications for staff who work with people with learning disabilities. Staff in ATC's and residencies may be the first people to be informed when people with learning disabilities have witnessed a crime or been victimised. The response of staff members may contaminate subsequent reporting.

The current research once again highlights the high suggestibility of people with learning disabilities. However, suggestive influences can be limited to a significant degree by instructional manipulation.

Several factors should be considered when interpreting the results of the current research. In this study, the GSS stories were read to participants by the author rather than presented via a tape-recording. It may be possible that speech intonations during the questioning phase were different across the conditions. This may have influenced responses.

The author was a stranger to the participants in Stage 1 of the study, which would tend to be more representative of a real interrogative situation. However, the same author conducted the Stage 2 assessments and may have been viewed in a different way. It was noted that several participants appeared more "relaxed" during Stage 2, as the setting, author and tasks were now more familiar. This may have influenced the responses, as being told that you are allowed to say, "I can't remember" by a more familiar person may reduce stress and be a more powerful instruction. It may also be possible that the low expectation instructions were perceived as "friendly" which may have enhanced rapport and thus increased attention to the task.

From the information derived from Stage 1, participants were matched in pairs. These matched pairs were only based on Total Suggestibility. Thus intellectual functioning, general memory, recall scores and confabulation were not considered. Future research in this area should aim to investigate larger populations to enable more accurate matched-pairs to be devised.

This study has potential applications to the practice of interviewing learning disabled people in legal settings. Suggestive influences can be limited to some extent. Even if misleading questions are asked, which even experienced interviewers cannot completely

avoid in lengthy interviews, a warning instruction at the outset may inoculate people with learning disabilities to resist some suggestions.

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Figure 1 - Stage 1 Procedure

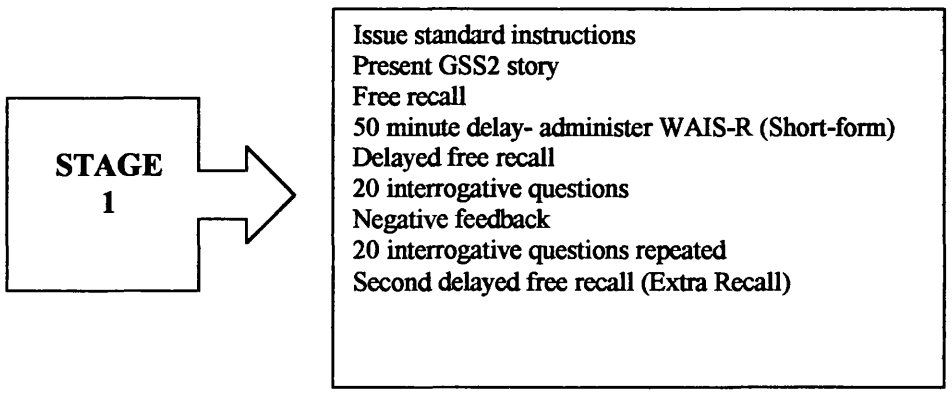

Figure 2- Stage 2 Procedure

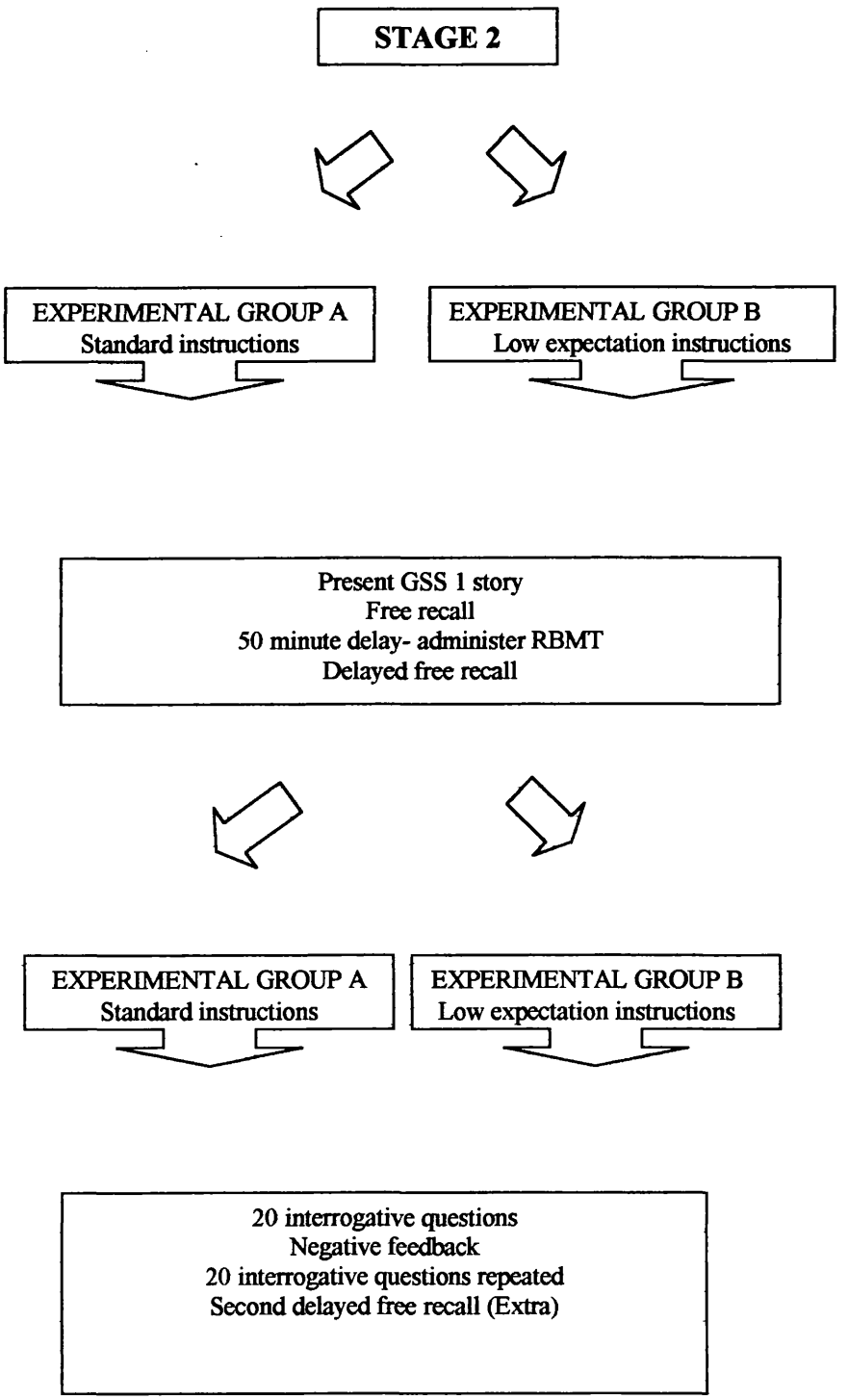

Table 1 Inter-scorer reliability of the GSS1 and GSS2

GSS 1			GSS 2		
	Current study	Richardson & Smith '93	Current study	Clare et al '94	Bowden '98
MEMORY					
Immediate recall	.970		.968	.969	.986
Delayed recall	.986		.980	.951	.997
Extra recall	.992		.990		.993
SUGGESTIBILITY					
Yield 1	.991	.983	.993	.996	.986
Yield 2	.996	.994	.998	.993	.978
Shift	.983	.949	.986	.989	.983
Total	.980	.992	.978	.993	.972
CONFABULATION					
Immediate recall	.920		.918	.803	.951
Delayed Recall	.922		.920	.724	.982
Extra recall	.918		.894		.637

Table 2- STAGE 1: GSS 2 Scores For People With A Learning Disability

	Current study (n= 24)			Bowden, 1998 (n = 26)			Gudjonsson & Clare, 1995 (n = 68)		
RECRUITMENT SIT	Adult Training Centre			Hospital Inpatient			Various		
	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
Age	32.88	7.33	19-51	45.5	14.4	24-76	31	9.4	17-64
IQ	63.33	5.80	52-76	60.4	8.0	47-75	66.8	5.2	57-75
SUGGESTIBILITY									
Immediate recall	5.7	3.5	.5-12.5	4.6	3.7	0-13.5	8.1	4.9	0-24
Delayed recall	4.2	3.0	.5-15.5	3.4	3.6	0-10.5	6.0	4.9	0-23.5
Yield 1	8.7	3.9	1-15	11.8	2.7	7-15	9.8	3.5	0-15
Yield 2	8.2	3.9	1-15	11.7	3.4	6-15	9.4	3.5	0-15
Shift	3.5	2.6	0-11	5.0	3.2	0-13	4.8	3.0	0-13
Total Suggestibility	12.1	5.5	1-24	16.8	3.2	12-27	14.6	4.6	0-24
							The following results relate to 145 people, 68 of whom have learning disabilities		
CONFABULATION									
Immediate recall									
Distortions	0.88	0.85	0-2	1.96	2.11	0-7	1.15	1.18	0-6
Fabrications	0.79	0.93	0-3	1.54	2.98	0-12	0.40	0.70	0-4
Confabulations	1.67	1.46	0-5	3.50	4.24	0-16	1.56	1.32	0-6
Delayed recall									
Distortions	0.58	0.78	0-3	1.27	1.54	0-5	1.26	1.08	0-4
Fabrications	0.83	0.82	0-3	1.85	3.71	0-18	0.50	0.74	0-3
Confabulations	1.46	1.18	0-4	3.12	4.73	0-23	1.75	1.27	0-4

Table 2.1 GSS 2 Scores For The General Population (n=83) (Gudjonsson, 1997)

	Mean	SD	Range
Age	30	8.8	16-69
Immediate recall	19.7	6.1	8-35
Delayed recall	18.4	6.0	4-31
Yield 1	4.5	3.6	0-13
Yield 2	5.5	4.0	0-14
Shift	3.0	3.0	0-17
Total Suggestibility	7.5	5.3	0-22

Table 3 Spearmans Rank Correlation- between Memory Recall of the GSS 2 and Intellectual Functioning

GSS 2 (Stage 1) (n = 24)	WAIS-R
Memory Recall	
Immediate	0.618 **
Delayed	0.516 **
Extra	0.632**

** . Correlation is significant at the .01 level (one-tailed)

Table 4 Spearmans Rank Correlation - between Memory Recall of the GSS 2 and RBMT

GSS 2 (Stage 1) (n = 24)	RBMT
Memory Recall	
Immediate	-.042
Delayed	-.029
Extra	-.145

** .Correlation is significant at the .01 level (one-tailed)

Table 5 MEMORY SCORES for GROUP A and GROUP B

Group A (n=12) **Standard Instructions**						**Group B (n=12)** **Low expectation instructions**					**Wilcoxon Matched-Pairs Signed Ranks Test**	
Test Sub-scale	Mean	SD	Range	Median	Inter-quartile range	Mean	SD	Range	Median	Inter-quartile range	z-score	2-tailed , P =
Memory												
Immediate Recall	4.71	3.83	1-14.5	3.75	1.75-6.75	6.42	4.85	1-13.5	5.00	2-12.25	-.747	.455
Delayed Recall	4.08	4.06	0-15	3.25	1.13-5.75	4.33	3.66	1-11.50	3.50	1.13-8.13	-.196	.844
Extra Recall	6.13	4.87	1.5-18	4.50	2.13-9.25	7.25	5.17	1-14.50	6.00	2.38-13.25	-.315	.753

TABLE 6

COMPARISON OF SUGGESTIBILITY SCORES BETWEEN GROUP A v. GROUP B (Standard instructions v. Low expectation instructions)

Group A (n=12) **Standard Instructions**						**Group B (n=12)** **Low expectations**					**Wilcoxon Matched-Pairs Signed Ranks Test**	
Test Sub-scale	Mean	SD	Range	Median	Inter-quartile range	Mean	SD	Range	Median	Inter-quartile range	z-score	2-tailed , P =
SUGGESTIBILITY												
Yield 1	9.83	3.21	4-14	10.0	7.5-12.5	6.00	2.73	3-12	5.50	4.0-7.0	**-2.635**	**.008**
Yield 2	9.33	3.03	3-14	10.0	8.25-10.75	6.92	2.71	3-12	7.00	4.25-9.-0	-1.697	.090
Shift	3.92	2.94	1-12	3.5	2-4.75	3.08	2.15	1-9	2.5	2-4	-.784	.433
Total Suggestibility	13.75	5.34	5-26	13.5	11.25-16.75	7.92	3.50	2-14	8.5	4.5-10.0	**-3.074**	**.002**

Table 7 Led recall (GSS2)

	Questions	No of participants-recalling this information in their extra recall	False alternatives-breakdown
1	*Were the couple called Anna & John?*		
2	Did the couple have a dog or a cat?	8	5 dogs/ 2 cats/ 1dog & cat
3	Did the boy's bicycle get damaged when it fell on The ground?		
4	Was the husband a bank director?		
5	*Did the couple live in a small bungalow?*		
6	Did the boy on the bicycle pass a stop sign or Traffic lights?		
7	Was the boy frightened of the big van coming up the hill?	1	
8	Did the boy have some minor bruises as a result of The accident?	1	
9	*Was the boy's name William?*		
10	Did the boy drop the books he had been carrying Whilst riding the bicycle?		
11	Was Anna worried that the boy might be injured?	1	
12	Did John grab the boy's arm or shoulder?	1	Arm
13	*Did the couple recognise the boy?*		
14	Did the boy commonly ride the bicycle to school?		
15	Was the boy taken home by Anna or John?	1	John
16	Was the boy allowed to stay away from the school on The day of the accident?		
17	*Did the couple's children sometimes stay with Their grandparents?*		
18	Was the boy frightened of riding the bicycle again?		
19	Was the weather wet or dry when the accident happened?	1	Wet
20	Did the couple have a skiing cottage in the mountains?	3	

Table 8 Led Recall (GSS 1)

		Group A		Group B	
	Questions	N	False alternative	N	False alternative
1	*Did the woman have a husband called Simon?*				
2	Did the woman have one or two children?				
3	Did the woman's glasses break in the struggle?				
4	Was the woman's name Anna Wilkinson?				
5	*Was the woman interviewed by a detective sergeant?*				
6	Were the assailants black or white?	1	1 black	2	2 black
7	Was the woman taken to the central police station?				
8	Did the woman's handbag get damaged in the struggle?				
9	*Was the woman on holiday in Spain?*				
10	Were the assailants convicted six weeks after their arrest?				
11	Did the woman's husband support her during the police interview?				
12	Did the woman hit one of the assailants with her fist or handbag?			1	Handbag
13	*Was the woman from South Croydon?*				
14	Did one of the assailants shout at the woman?				
15	Were the assailants tall or short?				
16	Did the woman's screams frighten the assailants?				
17	*Was the police officer's name Delgado?*				
18	Did the police give the woman a lift back to her hotel?				
19	Were the assailants armed with knives or guns?	7	6 guns/ 1 knife	4	3 guns/ 1 gun knife
20	Did the woman's clothes get torn in the struggle?				

CLINICAL CASE RESEARCH STUDY I (abstract)

RECOVERING FROM POST-TRAUMATIC STRESS DISORDER WHEN SCARRED AND VENGEFUL

Target Journal: Journal of Traumatic Stress (A copy of the authors notes and further relevant information can be found in Appendix 5.1)

ABSTRACT

The psychological ramifications following the violent physical assault of an adult male are reported in this case. The resultant facial scar and engagement in frequent revenge fantasy played an important role in exacerbating psychological symptoms. Assessment and treatment procedures are discussed within the context of existing research. A cognitive-behavioural approach was taken for the treatment of post traumatic stress disorder (PTSD) and concurrent symptoms. Treatment was successful in reducing intrusive imagery, symptoms of anxiety and depression. Feelings of anger and irritability remained high, which may be linked to revenge fantasy still being used as a coping mechanism. It is therefore important to explore the impact of facial scarring and revenge fantasy when treating PTSD.

Keywords: Cognitive-behavioural, Facial scarring, Revenge fantasy, Post-Traumatic Stress Disorder

CLINICAL CASE RESEARCH STUDY II (abstract)

WHAT IS REQUIRED TO DISCRIMINATE BETWEEN ATTENTION-DEFICIT HYPERACTIVITY DISORDER AND ASPERGER'S SYNDROME?

A CASE STUDY

Target Journal: Journal of The American Academy of Adolescent Psychiatry. (A copy of the authors notes and further relevant information can be found in Appendix 6.1)

ABSTRACT

The current case study highlights why mis-diagnoses of Attention Deficit Hyperactivity Disorder (ADHD) may be common in children with Pervasive Developmental Disorders. Assessment of an 8-year-old boy diagnosed as exhibiting ADHD led to a dual diagnosis of Asperger's Syndrome and Attention Deficit Hyperactivity Disorder not otherwise specified. The multiple assessment measures required to arrive at a diagnosis are documented and the importance of multiple informants emphasised.

Keywords: Asperger's Syndrome; Attention Deficit Hyperactivity Disorder; Pervasive Developmental Disorder

CLINICALCASE RESEARCH STUDY III (abstract)

THE FORMATION AND EVALUATION OF A PILOT SEX EDUCATION GROUP FOR PEOPLE WITH LEARNING DISABILITIES: AN INDIVIDUAL'S EXPERIENCE

Target Journal: British Journal of Learning Disabilities. (A copy authors notes and further relevant information can be found in Appendix 7.1)

ABSTRACT

This paper documents the formation of a sex education group for people with a learning disability. The impact on sexual knowledge and perceptions of an individual is investigated. The comments and data from an individual are useful, as group totals may not provide sufficient information to deliver effective programmes of sex education.

The evaluation process is documented via pre and post intervention questionnaires. Re-testing occurred after eight weeks, and the programme was found to be efficacious in raising knowledge, and there was a slight shift in attitudes in a more positive and flexible direction. Group results are provided, but the main focus of this paper concern the comments and data provided by one group member, and her experience of group participation. It is suggested that future groups investigate individuals' performances in addition to group totals. Design flaws within the evaluation are documented.

Appendices 1-4

APPENDIX 1.1

SUBMISSION NOTES FOR **CLINICAL PSYCHOLOGY FORUM**

Clinical Psychology Forum

Clinical Psychology Forum is designed to serve as a discussion forum for any issues of relevance to clinical psychologists. The editorial collective welcomes brief articles, reports of events, correspondence, book reviews and announcements.

Notes for contributors

Articles of 1000-2000 words are welcomed. Shorter articles can be published sooner. Send two copies of your contribution, typed and double spaced. Contributors are asked to keep tables to a minimum, to ensure that all references are complete and accurate, and to give a word count. News of Branches and Special Groups is especially welcome.

Language: contributors are asked to use language which is psychologically descriptive rather than medical and to avoid using devaluing terminology; i.e. avoid clustering terminology like "the elderly" or medical jargon like "person with schizophrenia". If you find yourself using quotation marks around words of dubious meaning, please use a different word.

Articles submitted to **Forum** will be sent to members of the Editorial Collective for refereeing. They will then communicate directly with the authors.

APPENDIX 1.2

QUESTIONNAIRE ISSUED TO CLINICAL PSYCHOLOGISTS

(1) How many ½ days per week do you spend in a CMHT (please indicate)?

0 1 2 3 4 5 6 7 8 9 10

(2) How many ½ days per week do you spend in a specialist rehabilitation unit/ward (please indicate)?

0 1 2 3 4 5 6 7 8 9 10

(3) Within the past 6 months have you had contact with any inpatients with a psychotic illness?

No ☐

Yes (for psychometric testing) ☐

Yes (specify specific involvement) _____

(4) What factors influence the proportion of patients with psychotic illnesses in your caseload?

Please specify

_____

(5) Do activity level requirements influence your ability to treat patients with psychosis?

No ☐

Yes (please explain) _____

_____

The responses to questions 6 - 10 below are contained within the following matrix. Please tick the appropriate column when responding (i.e. when answering question 6, tick the column marked Q6).

(Q6) Which of the following techniques do you recognise?

(Q7) Which of the following techniques are appropriate treatments for psychosis?

(Q8) Which of the following techniques have you used in the treatment of psychosis?

(Q9) Highlight the techniques that you have witnessed being applied for the treatment of psychosis.

(Q10) Highlight the treatments for psychosis that you would feel competent to apply.

	Q6	Q7	Q8	Q9	Q10
Education					
Problem solving					
Enhance families social network					
Psychotherapy to address emotional consequences such as loss					
Modification of positive symptoms					
Expressed emotion (EE) modification within families					
EE modification to non family members					
Assessment					
Psychometric testing					
Cognitive behavioural therapy					
Behavioural therapy					
Administer medication					
Supervising other staff					
Family therapy					
Consultation					
Counselling					
Psychotherapy					
Relaxation					
Research					
Relapse prevention					
Early signs monitoring					
Motivational interviewing					
Medication management					
Skills training					
Medication compliance					
Coping strategy enhancement					
Reflexology					
None of the above					
All of the above					

(11) If you are a member of a CMHT, does the CMHT policy affect the type of referrals you see?

Not applicable ☐

No ☐

Yes (please explain) _____

(12) What percentage of your caseload within the past 6 months has consisted of patients with a psychotic illness (approximately if unsure)?

0% 10 20 30 40 50 60 70 80 90 100%

(13) How were you referred these patients (more than one response if appropriate)?

CMHT	☐	Consultant/registrar	☐
GP	☐	Nursing staff	☐
Social Work	☐	Occupational therapy	☐
Self referral	☐	Other (please specify)	

_____

(14) Do you think psychologists are under involved in the treatment of psychosis?

Yes ☐

No ☐

APPENDIX 1.3

QUESTIONNAIRE ISSUED TO CONSULTANT PSYCHIATRISTS AND COMMUNITY PSYCHIATRIC NURSES

(1) How many ½ days per week do you spend in a CMHT (please indicate)?

0 1 2 3 4 5 6 7 8 9 10

(2) How many ½ days per week do you spend in a specialist rehabilitation unit/ward (please indicate)? 0 1 2 3 4 5 6 7 8 9 10

(3) Do you have a qualified Clinical Psychologist in your CMHT?

Yes ☐

No ☐

(4) What do you consider to be the role of a clinical psychologist (more than one response if appropriate)?

Assessment	☐	Reflexology	☐
Psychometric testing	☐	Research	☐
Cognitive behavioural therapy	☐	Hypnosis	☐
Supervise staff (non psychology)	☐	Staff training	☐
Long stay patient involvement	☐	Relaxation	☐
Behaviour therapy	☐	Counselling	☐
Psychotherapy	☐	Consultation	☐
Medication administration	☐		
Needs Assessment	☐	Other _____	
		_____	

(5) Who can make referrals to the clinical psychology service?

Occupational therapy	☐	CMHT	☐
Consultant	☐	GP	☐
Nursing staff	☐	Social Work	☐
Other (please specify) _____		Self refer	☐

The responses to questions 6 - 10 below are contained within the following matrix. Please tick the appropriate column when responding (i.e. when answering question 6, tick the column marked Q6).

(Q6) Which of the following techniques do you recognise?

(Q7) Which of the following techniques are appropriate treatments for psychosis?

(Q8) Which of the following techniques have you used in the treatment of psychosis?

(Q9) Highlight the techniques that you have witnessed being applied for the treatment of psychosis.

(Q10) Highlight the treatments for psychosis that you would feel competent to apply.

	Q6	Q7	Q8	Q9	Q10
Education					
Problem solving					
Enhance families social network					
Psychotherapy to address emotional consequences such as loss					
Modification of positive symptoms					
Expressed emotion (EE) modification within families					
EE modification to non family members					
Assessment					
Psychometric testing					
Cognitive behavioural therapy					
Behavioural therapy					
Administer medication					
Supervising other staff					
Family therapy					
Consultation					
Counselling					
Psychotherapy					
Relaxation					
Research					
Relapse prevention					
Early signs monitoring					
Motivational interviewing					
Medication management					
Skills training					
Medication compliance					
Coping strategy enhancement					
Reflexology					
None of the above					
All of the above					

(11) What percentage of your caseload within the past 6 months has consisted of patients with a psychotic illness (approximately if unsure).

0% 10 20 30 40 50 60 70 80 90 100%

(12) How were you referred these patients (more than one response if appropriate)?

CMHT	☐	Consultant/registrar	☐
GP	☐	Nursing staff	☐
Social Work	☐	Occupational therapy	☐
Self referral	☐	Other (please specify)_____	

(13) Do you think psychologists are under involved in the treatment of psychosis?

Yes ☐
No ☐

(14) What factors influence psychologists level of involvement within the treatment of psychosis (please specify)

_____

_____

(15) Is there a need for more information regarding the role clinical psychologists can play in the treatment and management of psychosis?

Yes ☐
No ☐

(16) On what occasions (if any) would you consult a clinical psychologist regarding patients with psychosis?

Never ☐

Please specify _____

_____

(17) What prevents you referring a patient with psychosis to clinical psychology or consulting with a clinical psychologist on treatment issues (more than one response if appropriate)?

I can deal with all the psychological needs of my patients with psychosis without involving a clinical psychologist ☐

Clinical psychologists are inaccessible ☐

They have long waiting lists ☐

They do not tend to accept this type of referral ☐

They are unapproachable ☐

They do not treat high risk patients ☐

They are unable to act in emergencies ☐

None of the above ☐

Other reasons _____

_____

APPENDIX 1.4

Question: Which of the following techniques do you recognise?

	C.PSY	CONS.	CPN's
Education	17	8	29
Problem solving	17	8	31
Enhance families social network	16	7	27
Psychotherapy to address emotional consequences such as loss	16	8	22
Modification of positive symptoms	17	8	23
Expressed emotion (EE) modification within families	17	7	27
EE modification to non family members	12	6	19
Assessment	17	8	30
Psychometric testing	17	8	21
Cognitive behavioural therapy	17	8	30
Behavioural therapy	17	8	31
Administer medication	14	8	31
Supervising other staff	17	7	27
Family therapy	17	7	30
Consultation	17	7	26
Counselling	15	8	30
Psychotherapy	14	7	18
Relaxation	16	7	30
Research	17	7	29
Relapse prevention	17	8	29
Early signs monitoring	16	7	27
Motivational interviewing	14	6	18
Medication management	15	7	25
Skills training	16	8	28
Medication compliance	16	7	27
Coping strategy enhancement	16	7	22
Reflexology	9	5	18
None of the above	17	8	31
All of the above	8	3	7

APPENDIX 1.5

Question: Which of the following techniques are appropriate for the treatment of psychosis?

	C.PSY	CONS.	CPN's
Education	16	7	26
Problem solving	16	6	25
Enhance families social network	14	5	28
Psychotherapy to address emotional consequences such as loss	10	2	8
Modification of positive symptoms	15	7	24
Expressed emotion (EE) modification within families	16	7	24
EE modification to non family members	12	6	20
Assessment	15	3	31
Psychometric testing	12	3	8
Cognitive behavioural therapy	17	6	20
Behavioural therapy	16	5	24
Administer medication	16	7	31
Supervising other staff	15	4	17
Family therapy	16	4	24
Consultation	10	4	22
Counselling	1	0	5
Psychotherapy	15	2	26
Relaxation	15	5	24
Research	16	7	31
Relapse prevention	16	7	37
Early signs monitoring	16	7	31
Motivational interviewing	7	2	11
Medication management	16	7	25
Skills training	16	7	27
Medication compliance	16	7	31
Coping strategy enhancement	16	6	26
Reflexology	0	0	8
None of the above	0	0	0
All of the above	0	0	4

APPENDIX 1.6

Question: Which of the following techniques have you used in the treatment of psychosis?

	C.PSY	CONS.	CPN's
Education	13	6	27
Problem solving	12	6	25
Enhance families social network	8	4	25
Psychotherapy to address emotional consequences such as loss	6	4	2
Modification of positive symptoms	7	3	2
Expressed emotion (EE) modification within families	7	7	12
EE modification to non family members	3	3	5
Assessment	11	4	29
Psychometric testing	7	0	1
Cognitive behavioural therapy	14	0	6
Behavioural therapy	10	2	14
Administer medication	0	8	32
Supervising other staff	10	6	22
Family therapy	6	6	16
Consultation	7	6	16
Counselling	4	5	22
Psychotherapy	0	1	0
Relaxation	9	0	22
Research	4	4	15
Relapse prevention	11	3	28
Early signs monitoring	8	4	27
Motivational interviewing	2	0	9
Medication management	2	6	30
Skills training	7	3	24
Medication compliance	5	5	28
Coping strategy enhancement	10	4	19
Reflexology	0	0	2
None of the above	2	0	0
All of the above	0	0	0

APPENDIX 1.7

Question: Highlight the techniques that you have witnessed being applied for the treatment of psychosis.

	C.PSY	CONS.	CPN's
Education	9	6	24
Problem solving	9	6	24
Enhance families social network	8	3	18
Psychotherapy to address emotional consequences such as loss	7	6	5
Modification of positive symptoms	5	3	10
Expressed emotion (EE) modification within families	8	6	10
EE modification to non family members	6	3	5
Assessment	6	5	23
Psychometric testing	7	3	3
Cognitive behavioural therapy	12	4	14
Behavioural therapy	9	5	17
Administer medication	8	8	27
Supervising other staff	8	6	17
Family therapy	8	7	15
Consultation	6	7	14
Counselling	5	6	15
Psychotherapy	3	4	4
Relaxation	8	4	23
Research	6	4	14
Relapse prevention	6	4	24
Early signs monitoring	9	3	24
Motivational interviewing	4	1	7
Medication management	7	7	21
Skills training	8	5	19
Medication compliance	11	7	22
Coping strategy enhancement	8	2	15
Reflexology	0	0	4
None of the above	3	0	0
All of the above	0	0	1

APPENDIX 1.8

Question: Highlight the treatments for psychosis that you would feel competent to apply.

	C.PSY	CONS.	CPN's
Education	13	6	27
Problem solving	15	6	27
Enhance families social network	11	3	20
Psychotherapy to address emotional consequences such as loss	10	6	4
Modification of positive symptoms	8	2	4
Expressed emotion (EE) modification within families	9	5	11
EE modification to non family members	4	2	3
Assessment	11	5	27
Psychometric testing	9	1	0
Cognitive behavioural therapy	15	1	6
Behavioural therapy	13	7	10
Administer medication	1	8	30
Supervising other staff	15	8	24
Family therapy	17	4	9
Consultation	11	6	15
Counselling	10	7	21
Psychotherapy	3	4	2
Relaxation	12	2	23
Research	7	5	16
Relapse prevention	13	3	26
Early signs monitoring	10	3	29
Motivational interviewing	6	0	11
Medication management	3	8	26
Skills training	10	2	24
Medication compliance	7	7	30
Coping strategy enhancement	12	3	17
Reflexology	1	0	3
None of the above	0	0	1
All of the above	0	0	2

APPENDIX 1.9

Levels of statistical significance

Question: Which of the following techniques have you used in the treatment of psychosis?

Techniques	CHI-square	Level of sig.	Professional group
Psychotherapy to address emotional consequences such as loss	0.0150	P<0.05	CPN's LESS
Modification of positive symptoms	0.0051	P<0.01	CPN's LESS
Expressed emotion	0.0421	P<0.05	Cons MORE
Assessment	0.0486	P<0.05	CPN's MORE
Psychometric testing	0.0014	P<0.01	CPN's LESS
Psychometric testing	0.0405	P<0.05	Cons LESS
Cognitive behavioural therapy	0.0002	P<0.01	Cons LESS
Cognitive behavioural therapy	0.0000	P<0.01	CPN's LESS
Administer medication	0.0000	P<0.01	Cons MORE
Administer medication	0.0000	P<0.01	CPN's MORE
Counselling	0.0059	P<0.01	CPN's MORE
Relaxation	0.0119	P<0.05	Cons LESS
Early signs monitoring	0.0091	P<0.01	CPN's MORE
Medication management	0.0002	P<0.01	CPN's MORE
Skills training	0.0298	P<0.05	CPN's MORE
Medication compliance	0.0001	P<0.01	CPN's MORE

<u>Interpreting the above table</u>

Example: The first technique is used significantly less by community psychiatric nurses compared to clinical psychologists

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(*g*) References cited in the text must appear in the list at the end of the article. The list should be typed double spaced in the following format:

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(*f*) References to legal cases in the text should give the name of the case (underlined) and the year of the decision, thus: Conan v. Tweedy (1967). Cases should be included in the reference list, alphabetically by name, where the reference should be given according to legal convention. USA cases should be listed in the reference list in accordance with the guidelines given in Appendix 3-B of the APA *Publication Manual*. For English cases the usual form will be Name v. Name [date] Vol. No. Report Page report starts. Commonly used abbreviations of Law Reports may be used, e.g. 'All E.R.' for All England Law Reports; 'W.L.R.' for Weekly Law Reports. For example, Coote v. Stone [1971] 1 W.L.R. 279.

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APPENDIX 4.2

MEMORY STUDY

PARTICIPANT INFORMATION SHEET

I would be grateful if you would take part in a memory study.

This piece of paper will tell you what will happen if you want to take part.

You should not take part if you do not want to.

If you say no, this will not affect anything that happens at your centre.

Why have I been asked to take part in this study?

I will be asking a lot of people at your centre to take part.

What is the study about?

This study looks at how good you are at remembering things and answering questions about them. Sometimes if someone has had something bad happen to them, or seen something bad, they have to go to court and tell their story. Some people think that people with a learning disability are not very good at remembering things. Some people may not be allowed to tell their story because people think they have a poor memory. This study looks at how good you are at remembering things. It is not a test.

If I want to take part, what will happen?

Everything will happen in your centre.

You will meet with me (Cindy) on two different days.

You will hear a story and then tell me what you remember about it. You will then be asked to do some puzzles which will look at how you think about things. After that you will be asked to tell me again what you remember about the story and I will ask some questions about it. You will be doing this for about one hour.

On another day, you will hear a different story and then tell me what you remember about it. You will then be asked to do some more puzzles which will look at how you remember things. After that you will be asked to tell me again what you remember about the story and I will ask you some questions about it. You will be doing this for about one hour.

All of your answers will be recorded on a tape recorder.

What about my answers! Who hears the tape?

The tape is listened to be me and one other psychologist. No one else will hear your answers. After listening to the tape, your answers will be written down. The tape is then destroyed. Your answers are confidential.

After the study is finished, you will be able to find out how you got on if you want to.

If you want people that you work with to know how you got on, we can tell them.

Who will know that I am taking part?

Your key worker and the centre manager will know. If you want your parent/carer to know, we can tell them.

I want to ask more questions. Who do I ask?

You can ask me (Cindy).

You could also ask you key worker questions and they can contact me.

If during the study, you don't want to take part anymore, you can stop. You can stop at any time.

Cindy Shiels

Clinical Psychologist (In Training)

Department of Psychological Medicine

Academic Centre

Trust Headquarters

Gartnavel Royal Hospital

Great Western Road

Glasgow

APPENDIX 4.3

MEMORY STUDY

CONSENT FORM 1

I have read and understood the Information Leaflet and I have been given a copy for myself. I know that I can ask Cindy or my key worker questions about the study.

I know that the tape with my answers on it will be destroyed and that my answers are confidential.

I know that I can stop doing the study at anytime. I know that I do not have to do the study if I don't want to and this will not affect anything that happens at the centre.

I agree to take part in this study

Name ..... Signature .....

Witnessed by:

Name ..... Signature .....

Designation ..... Date .....

MEMORY STUDY

CONSENT FORM 2

The Information Leaflet has been read and explained to me and I understand it. I have been given a copy of the leaflet for myself. I know that I can ask Cindy or my key worker questions about the study.

I know that the tapes with my answers on it will be destroyed and that my answers are confidential.

I know that I can stop doing the study at anytime. I know that I do not have to do the study if I don't want to and this will not affect anything that happens at the centre.

I agree to take part in this study

Name .....Signature .....

Witnessed by:

Name .....Signature .....

Designation ..... Date .....

APPENDIX 4.4

STAGE ONE

SCORE SHEET FOR GSS 2

Participant Number: _____ Age: _____ Sex: _____

Start time: _____

Switch on recorder □ (tick)

INSTRUCTIONS TO BE READ: " I want you to listen to a short story. Listen carefully because when I am finished I want you to tell me everything you remember".

(Read GSS 2 clearly and at a reasonably slow pace)

" Now tell me everything you remember about the story".

Transcription of Immediate Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

Weschler Adult Intelligence Scale-Revised.

Verbal IQ equivalent _____
Performance IQ equivalent _____
Full Scale IQ equivalent _____

Note time: _____(must be approx 50 mins)

STAGE ONE - SCORE SHEET FOR GSS 2 (CONT.)

Transcription of Delayed Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

" I am going to ask you some questions about the story. Try to be as accurate as you can".

*(Read the 20 questions clearly and firmly. Allow sufficient time to answer. When the 20 questions have been answered the participant is given **'negative'** feedback. State the following words clearly and firmly)*

"You have made a number of errors. It is therefore necessary to go through the questions once more, and this time try to be more accurate".

(Repeat the 20 questions which provide scores for Yield 1, Yield 2, Shift and Total Suggestibility).

Transcription of Extra Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

NOTE LED RECALL - .....

STAGE ONE SCORE SHEET FOR GSS 2 (CONT.)

RECALL SCORES- GSS 2

Text	Score for **Immediate** Recall Task	Sore for **Delayed** Recall Task	Score for **Extra Recall** Task
Anna and John	0 0.5 1	0 0.5 1	0 0.5 1
Were a happily married couple	0 0.5 1	0 0.5 1	0 0.5 1
In their thirties,	0 0.5 1	0 0.5 1	0 0.5 1
They had three children,	0 0.5 1	0 0.5 1	0 0.5 1
Two boys	0 0.5 1	0 0.5 1	0 0.5 1
And a girl.	0 0.5 1	0 0.5 1	0 0.5 1
They lived in a small bungalow	0 0.5 1	0 0.5 1	0 0.5 1
Which had a swimming pool	0 0.5 1	0 0.5 1	0 0.5 1
In the garden.	0 0.5 1	0 0.5 1	0 0.5 1
John worked in a bank	0 0.5 1	0 0.5 1	0 0.5 1
And Anna worked in a bookshop	0 0.5 1	0 0.5 1	0 0.5 1
With her sister	0 0.5 1	0 0.5 1	0 0.5 1
Maria.	0 0.5 1	0 0.5 1	0 0.5 1
One Tuesday	0 0.5 1	0 0.5 1	0 0.5 1
Morning	0 0.5 1	0 0.5 1	0 0.5 1
In July	0 0.5 1	0 0.5 1	0 0.5 1
The couple were leaving the house	0 0.5 1	0 0.5 1	0 0.5 1
To go to work	0 0.5 1	0 0.5 1	0 0.5 1
When they saw a small boy	0 0.5 1	0 0.5 1	0 0.5 1
Going down a steep slope	0 0.5 1	0 0.5 1	0 0.5 1
On a bicycle	0 0.5 1	0 0.5 1	0 0.5 1
And calling for help.	0 0.5 1	0 0.5 1	0 0.5 1
Anna and John ran after the boy	0 0.5 1	0 0.5 1	0 0.5 1
And John caught hold of the bicycle	0 0.5 1	0 0.5 1	0 0.5 1
And brought it to a halt.	0 0.5 1	0 0.5 1	0 0.5 1
The boy appeared very frightened	0 0.5 1	0 0.5 1	0 0.5 1
But unhurt	0 0.5 1	0 0.5 1	0 0.5 1
And said that the brakes on his bicycle had broken.	0 0.5 1	0 0.5 1	0 0.5 1
Anna and John recognised the boy,	0 0.5 1	0 0.5 1	0 0.5 1
Whose name was William.	0 0.5 1	0 0.5 1	0 0.5 1
He was the youngest	0 0.5 1	0 0.5 1	0 0.5 1
Son of their neighbours	0 0.5 1	0 0.5 1	0 0.5 1
Who worked for a well-known	0 0.5 1	0 0.5 1	0 0.5 1
Travel agency	0 0.5 1	0 0.5 1	0 0.5 1
In a nearby town.	0 0.5 1	0 0.5 1	0 0.5 1
Sometimes in the winter months	0 0.5 1	0 0.5 1	0 0.5 1
The two couples had gone skiing together	0 0.5 1	0 0.5 1	0 0.5 1
But the children of both families	0 0.5 1	0 0.5 1	0 0.5 1
Had preferred to stay with their grandparents	0 0.5 1	0 0.5 1	0 0.5 1
Who live in the country.	0 0.5 1	0 0.5 1	0 0.5 1
Memory Recall Score			
Distortions			
Fabrications			
Total Confabulations			

STAGE ONE SCORE SHEET FOR GSS 2 (CONT.)

Questions GSS2

	Questions	Yielded To 1	Answers Yield 1	Yielded to 2	Answers Yield 2	Shift (S)
1	*Were the couple called Anna & John?*					
2	Did the couple have a dog or a cat?					
3	Did the boy's bicycle get damaged when it fell on the ground?					
4	Was the husband a bank director?					
5	*Did the couple live in a small bungalow?*					
6	Did the boy on the bicycle pass a stop sign or traffic lights?					
7	Was the boy frightened of the big van coming up the hill?					
8	Did the boy have some minor bruises as a result of the accident?					
9	*Was the boy's name William?*					
10	Did the boy drop the books he had been carrying whilst riding the bicycle?					
11	Was Anna worried that the boy might be injured?					
12	Did John grab the boy's arm or shoulder?					
13	*Did the couple recognise the boy?*					
14	Did the boy commonly ride the bicycle to school?					
15	Was the boy taken home by Anna or John?					
16	Was the boy allowed to stay away from the school on the day of the accident?					
17	*Did the couple's children sometimes stay with their grandparents?*					
18	Was the boy frightened of riding the bicycle again?					
19	Was the weather wet or dry when the accident happened?					
20	Did the couple have a skiing cottage in the mountains?					

SCORES

Yield 1	=	(max.15)
Yield 2	=	(max.15)
Shift	=	(max.20)
Total Suggestibility*	=	(max.35)

*The total of Yield 1 + Shift

STAGE TWO (GROUP A)

SCORE SHEET FOR GSS 1

Participant Number: _____ Age: _____ Sex: _____

Start time: _____

Switch on recorder □ (tick)

INSTRUCTIONS TO BE READ : " I want you to listen to a short story. Listen carefully because when I am finished I want you to tell me everything you remember".

(Read GSS 1 clearly and at a reasonably slow pace)

" Now tell me everything you remember about the story".

Transcription of Immediate Recall. (Use tape recording for any ambiguities)

Distortions:

Fabrications:

Rivermead Behavioural Memory Test

Profile Score _____

Screening Score _____

Note time: _____(must be approx 50 mins)

Transcription of Delayed Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

" I am going to ask you some questions about the story. Try to be as accurate as you can."

*(Read the 20 questions clearly and firmly. Allow sufficient time to answer. When the 20 questions have been answered the participant is given **'negative'** feedback. State the following words clearly and firmly)*

"You have made a number of errors. It is therefore necessary to go through the questions once more, and this time try to be more accurate".

(Repeat the 20 questions which provide scores for Yield 1, Yield 2, Shift and Total Suggestibility).

Transcription of Extra Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

NOTE LED RECALL - .....

STAGE TWO (GROUP A) SCORE SHEET FOR GSS 1 (CONT.)

RECALL SCORES- GSS 1

Text	Score for Immediate Recall Task	Sore for Delayed Recall Task	Score for Extra Recall Task
Anna Thomson	0 0.5 1	0 0.5 1	0 0.5 1
Of south	0 0.5 1	0 0.5 1	0 0.5 1
Croydon	0 0.5 1	0 0.5 1	0 0.5 1
Was on holiday	0 0.5 1	0 0.5 1	0 0.5 1
In Spain	0 0.5 1	0 0.5 1	0 0.5 1
When she was held up	0 0.5 1	0 0.5 1	0 0.5 1
Outside her hotel	0 0.5 1	0 0.5 1	0 0.5 1
And robbed of her handbag	0 0.5 1	0 0.5 1	0 0.5 1
which contained £50 worth	0 0.5 1	0 0.5 1	0 0.5 1
Of traveller cheques	0 0.5 1	0 0.5 1	0 0.5 1
And her passport.	0 0.5 1	0 0.5 1	0 0.5 1
She screamed for help	0 0.5 1	0 0.5 1	0 0.5 1
And attempted to put up a fight	0 0.5 1	0 0.5 1	0 0.5 1
By kicking one of the assailants	0 0.5 1	0 0.5 1	0 0.5 1
In the shins.	0 0.5 1	0 0.5 1	0 0.5 1
A police car shortly arrived	0 0.5 1	0 0.5 1	0 0.5 1
And the woman was taken to the nearest police station	0 0.5 1	0 0.5 1	0 0.5 1
Where she was interviewed by Detective	0 0.5 1	0 0.5 1	0 0.5 1
Sergeant	0 0.5 1	0 0.5 1	0 0.5 1
Delgado	0 0.5 1	0 0.5 1	0 0.5 1
The woman reported that she had been attacked by three men	0 0.5 1	0 0.5 1	0 0.5 1
One of whom she described as oriental looking.	0 0.5 1	0 0.5 1	0 0.5 1
The men were said to be slim	0 0.5 1	0 0.5 1	0 0.5 1
And in their early twenties.	0 0.5 1	0 0.5 1	0 0.5 1
The police officer was touched by the woman's story	0 0.5 1	0 0.5 1	0 0.5 1
And advised her to contact the British Embassy.	0 0.5 1	0 0.5 1	0 0.5 1
Six days later	0 0.5 1	0 0.5 1	0 0.5 1
The police recovered the woman's handbag	0 0.5 1	0 0.5 1	0 0.5 1
But the contents were never found.	0 0.5 1	0 0.5 1	0 0.5 1
Three men were subsequently charged	0 0.5 1	0 0.5 1	0 0.5 1
Two of whom were convicted	0 0.5 1	0 0.5 1	0 0.5 1
And given prison sentences.	0 0.5 1	0 0.5 1	0 0.5 1
Only one	0 0.5 1	0 0.5 1	0 0.5 1
Had previous convictions	0 0.5 1	0 0.5 1	0 0.5 1
For similar offences.	0 0.5 1	0 0.5 1	0 0.5 1
The woman returned to Britain	0 0.5 1	0 0.5 1	0 0.5 1
With her husband	0 0.5 1	0 0.5 1	0 0.5 1
Simon	0 0.5 1	0 0.5 1	0 0.5 1
And two friends	0 0.5 1	0 0.5 1	0 0.5 1
But remained frightened of being out on her own	0 0.5 1	0 0.5 1	0 0.5 1
Memory Recall Score	0 0.5 1	0 0.5 1	0 0.5 1
Distortions	0 0.5 1	0 0.5 1	0 0.5 1
Fabrications	0 0.5 1	0 0.5 1	0 0.5 1
Total Confabulations	0 0.5 1	0 0.5 1	0 0.5 1

STAGE TWO (GROUP A) SCORE SHEET FOR GSS 1 (CONT.)

QUESTIONS- GSS 1

	Questions	Yielded To 1	Answers Yield 1	Yielded to 2	Answers Yield 2	Shift (S)
1	*Did the woman have a husband called Simon?*					
2	Did the woman have one or two children?					
3	Did the woman's glasses break in the struggle?					
4	Was the woman's name Anna Wilkinson?					
5	*Was the woman interviewed by a detective sergeant?*					
6	Were the assailants black or white?					
7	Was the woman taken to the central police station?					
8	Did the woman's handbag get damaged in the struggle?					
9	*Was the woman on holiday in Spain?*					
10	Were the assailants convicted six weeks after their arrest?					
11	Did the woman's husband support her during the police interview?					
12	Did the woman hit one of the assailants with her fist or handbag?					
13	*Was the woman from South Croydon?*					
14	Did one of the assailants shout at the woman?					
15	Were the assailants tall or short?					
16	Did the woman's screams frighten the assailants?					
17	*Was the police officer's name Delgado?*					
18	Did the police give the woman a lift back to her hotel?					
19	Were the assailants armed with knives or guns?					
20	Did the woman's clothes get torn in the struggle?					

SCORES

Yield 1	=	(max.15)
Yield 2	=	(max.15)
Shift	=	(max.20)
Total Suggestibility*	=	(max.35)

*The total of Yield 1 + Shift

APPENDIX 4.6

STAGE TWO (GROUP B)

SCORE SHEET FOR GSS 1

Participant Number: _____ Age: _____ Sex: _____

Start time: _____

Switch on recorder □ (tick)

INSTRUCTIONS TO BE READ: " I want you to listen to a short story. Listen carefully because when I am finished I want you to tell me everything you remember. **You may have some difficulty remembering the story but that is quite normal, no-one remembers it perfectly. Just relax and do your best".**

(Read GSS 1 clearly and at a reasonably slow pace)

" Now tell me everything you remember about the story".

Transcription of Immediate Recall. (Use tape recording for any ambiguities)

Distortions:

Fabrications:

Rivermead Behavioural Memory Test

Screening Score _____

Note time: _____(must be approx 50 mins)

STAGE TWO (GROUP B) SCORE SHEET FOR GSS 1 (CONT.)

Transcription of Delayed Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

" I am going to ask you some questions about the story. **You may have difficulty answering some questions but that is nothing to worry about, just do your best. If you can't remember, say I can't remember".**

*(Read the 20 questions in appendix * out clearly and firmly. Allow sufficient time to answer. When the 20 questions have been answered the participant is given **'negative'** feedback. State the following words clearly and firmly)*

"You have made a number of errors. It is therefore necessary to go through the questions once more, and this time try to be more accurate".

(Repeat the 20 questions which provide scores for Yield 1, Yield 2, Shift and Total Suggestibility).

Transcription of Extra Recall (Use tape recording for any ambiguities)

Distortions:

Fabrications:

NOTE LED RECALL.....

STAGE TWO (GROUP B) SCORE SHEET FOR GSS 1 (CONT.)

RECALL SCORES- GSS 1

Text	Score for Immediate Recall Task	Sore for Delayed Recall Task	Score for Extra Recall Task
Anna Thomson	0 0.5 1	0 0.5 1	0 0.5 1
Of south	0 0.5 1	0 0.5 1	0 0.5 1
Croydon	0 0.5 1	0 0.5 1	0 0.5 1
Was on holiday	0 0.5 1	0 0.5 1	0 0.5 1
In Spain	0 0.5 1	0 0.5 1	0 0.5 1
When she was held up	0 0.5 1	0 0.5 1	0 0.5 1
Outside her hotel	0 0.5 1	0 0.5 1	0 0.5 1
And robbed of her handbag	0 0.5 1	0 0.5 1	0 0.5 1
which contained £50 worth	0 0.5 1	0 0.5 1	0 0.5 1
Of traveller cheques	0 0.5 1	0 0.5 1	0 0.5 1
And her passport.	0 0.5 1	0 0.5 1	0 0.5 1
She screamed for help	0 0.5 1	0 0.5 1	0 0.5 1
And attempted to put up a fight	0 0.5 1	0 0.5 1	0 0.5 1
By kicking one of the assailants	0 0.5 1	0 0.5 1	0 0.5 1
In the shins.	0 0.5 1	0 0.5 1	0 0.5 1
A police car shortly arrived	0 0.5 1	0 0.5 1	0 0.5 1
And the woman was taken to the nearest police station	0 0.5 1	0 0.5 1	0 0.5 1
Where she was interviewed by Detective	0 0.5 1	0 0.5 1	0 0.5 1
Sergeant	0 0.5 1	0 0.5 1	0 0.5 1
Delgado	0 0.5 1	0 0.5 1	0 0.5 1
The woman reported that she had been attacked by three men	0 0.5 1	0 0.5 1	0 0.5 1
One of whom she described as oriental looking.	0 0.5 1	0 0.5 1	0 0.5 1
The men were said to be slim	0 0.5 1	0 0.5 1	0 0.5 1
And in their early twenties.	0 0.5 1	0 0.5 1	0 0.5 1
The police officer was touched by the woman's story	0 0.5 1	0 0.5 1	0 0.5 1
And advised her to contact the British Embassy.	0 0.5 1	0 0.5 1	0 0.5 1
Six days later	0 0.5 1	0 0.5 1	0 0.5 1
The police recovered the woman's handbag	0 0.5 1	0 0.5 1	0 0.5 1
But the contents were never found.	0 0.5 1	0 0.5 1	0 0.5 1
Three men were subsequently charged	0 0.5 1	0 0.5 1	0 0.5 1
Two of whom were convicted	0 0.5 1	0 0.5 1	0 0.5 1
And given prison sentences.	0 0.5 1	0 0.5 1	0 0.5 1
Only one	0 0.5 1	0 0.5 1	0 0.5 1
Had previous convictions	0 0.5 1	0 0.5 1	0 0.5 1
For similar offences.	0 0.5 1	0 0.5 1	0 0.5 1
The woman returned to Britain	0 0.5 1	0 0.5 1	0 0.5 1
With her husband	0 0.5 1	0 0.5 1	0 0.5 1
Simon	0 0.5 1	0 0.5 1	0 0.5 1
And two friends	0 0.5 1	0 0.5 1	0 0.5 1
But remained frightened of being out on her own	0 0.5 1	0 0.5 1	0 0.5 1
Memory Recall Score	0 0.5 1	0 0.5 1	0 0.5 1
Distortions	0 0.5 1	0 0.5 1	0 0.5 1
Fabrications	0 0.5 1	0 0.5 1	0 0.5 1
Total Confabulations	0 0.5 1	0 0.5 1	0 0.5 1

STAGE TWO (GROUP B) SCORE SHEET FOR GSS 1 (CONT.)

QUESTIONS- GSS 1

	Questions	Yielded To 1	Answers Yield 1	Yielded to 2	Answers Yield 2	Shift (S)
1	*Did the woman have a husband called Simon?*					
2	Did the woman have one or two children?					
3	Did the woman's glasses break in the struggle?					
4	Was the woman's name Anna Wilkinson?					
5	*Was the woman interviewed by a detective sergeant?*					
6	Were the assailants black or white?					
7	Was the woman taken to the central police station?					
8	Did the woman's handbag get damaged in the struggle?					
9	*Was the woman on holiday in Spain?*					
10	Were the assailants convicted six weeks after their arrest?					
11	Did the woman's husband support her during the police interview?					
12	Did the woman hit one of the assailants with her fist or handbag?					
13	*Was the woman from South Croydon?*					
14	Did one of the assailants shout at the woman?					
15	Were the assailants tall or short?					
16	Did the woman's screams frighten the assailants?					
17	*Was the police officer's name Delgado?*					
18	Did the police give the woman a lift back to her hotel?					
19	Were the assailants armed with knives or guns?					
20	Did the woman's clothes get torn in the struggle?					

SCORES

Yield 1	=	(max.15)
Yield 2	=	(max.15)
Shift	=	(max.20)
Total Suggestibility*	=	(max.35)

*The total of Yield 1 + Shift