

**An investigation into the factors associated with
the quality of the therapeutic relationship between
staff and people with severe and enduring mental
health problems**

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WORD COUNT

Thesis Section	Text	Abstracts, tables, figures, references	Total
Thesis abstract	494		
Paper one (Literature review)	9431	5755	15,186
Paper two (Empirical paper)	9699	3054	12,753
Paper three (critical review)	5041	983	6024
Appendices			16,836
Total	24,665	9792	51,293

ABSTRACT

This thesis investigates the factors associated with the quality of the therapeutic relationship between staff and people with severe and enduring mental health problems. It is presented as three papers: a literature review, a report of the empirical research study and a critical reflection of the research process.

In the first paper, the author provides a narrative review of studies that have investigated the factors associated with the quality of the therapeutic relationship between psychiatric staff and people with severe and enduring mental health problems. A total of 28 research studies met the inclusion criteria and were included in the final review. The studies varied considerably in terms of their design and methodology, as well as the different instruments used to measure the quality of the therapeutic relationship. The findings were then organised in terms of measures of the therapeutic relationship and factors that may be associated with relationship quality. These findings were then further broken down into patient factors that may affect the therapeutic relationship and staff factors from both inpatient and outpatient settings. The key findings were that patient factors included demographics, psychopathology, insight, functioning and behaviour. Staff factors included demographics, education and training and working environment. However, it is not clear if each factor contributed independently, in combination or if indeed third factor variables were involved. There little doubt that the quality of the therapeutic relationship is an important component in the wider therapeutic process. What still requires further investigation is the individual ingredients that are necessary to ensure the patient and staff member are able to build and maintain a constructive therapeutic relationship that meets both their needs.

The empirical research paper examined the extent to which attributions, personal and environmental factors were associated to the quality of the therapeutic relationship. It was hypothesised that the quality of the therapeutic relationship would be associated with attributions of control. We assessed the quality of the staff patient relationship using the Working Alliance Inventory; Attributions of Control were measured using the Five Minute Speech Sample. Patient symptoms, functioning and behaviour were also investigated, as were service engagement, ward environment and staff stress. We found that staff who rated the therapeutic relationship as more favorable made fewer ratings of attributions of control, although this did not affect patient ratings of the relationship. Service engagement and ward atmosphere were associated with the quality of the therapeutic relationship; patient behaviour and staff stress were not. Patient symptoms, functioning and staff burnout revealed mixed findings. Our findings highlight the potentially important role of attributions of control on the quality of staff and patient therapeutic relationships.

The final paper provides a critical reflection of the research process. It begins by outlining the rationale for the development of the literature review and the empirical paper, and continues to discuss some of the methodological considerations of the research paper. Implications for therapeutic practice are then suggested, followed by wider service related issues. Finally recommendations are made for future research.

DECLARATION

No portion of this work referred to in this thesis has been submitted in support of an application for another degree or qualification at this or any other university or other institute of learning.

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**Factors associated with the quality of the
therapeutic relationship between
psychiatric staff and people with severe
and enduring mental health problems – A
narrative review of the literature**

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PREFACE

The work for this paper was carried out between May 2012 and January 2013. The main literature search was completed at the beginning of May 2012 and further searches were undertaken in January 2013. Dr Katherine Berry provided overall supervision for the thesis, which included reading drafts of the manuscript and providing support and feedback. Dr Anja Wittkowski was involved in reading drafts of the manuscript and providing support and feedback. The author intends to publish the review paper in 'Clinical Psychology Review' and the paper has been prepared in accordance with their requirements (see appendix A for author guidelines). Tables and figures have been left in the main text to aid readability. The authors will be: Paula Butroid, Dr Katherine Berry and Dr Anja Wittkowski.

ABSTRACT

Aims: To evaluate studies investigating associates of the quality of the therapeutic relationship between psychiatric staff and people with severe and enduring mental health problems.

Method: A literature search was conducted to identify studies utilising a validated measure of the therapeutic relationship. Psychinfo, Medline, Publine and Embase databases were searched. Articles meeting the inclusion criteria were extracted and a full search of each individual reference list performed to ensure all relevant papers were identified. Data were then synthesised in a narrative format.

Results: Twenty-eight studies were included in the review. Several associates of the relationship quality were identified. Patient factors included demographics, psychopathology, insight, functioning and behaviour. Staff factors included demographics, education, training and working environment.

Conclusions: Several factors were identified as associates of the quality of the therapeutic relationship. However, it is not clear if each factor contributed independently, in combination or if indeed third factor variables were involved. There is little doubt that the quality of the therapeutic relationship is an important component in the wider therapeutic process. What still remains unclear is the individual ingredients that are necessary to ensure the patient and staff member are able to build and maintain a constructive therapeutic relationship that meets both their needs.

Key words: Therapeutic relationship/alliance, working alliance, predictors, validated measures, correlates.

INTRODUCTION

There has been a wealth of research conducted over many years assessing the role of the therapeutic relationship and its importance in the wider therapeutic process. The concept of the therapeutic relationship originated from early psychoanalytic theories. As far back as the early 1900s, Freud argued that: “The first aim of the treatment consists of attaching [the patient] to the treatment and the person of the physician” (Freud, 1913, cited in Bale, Catty, Watt, Greenwood & Burns, 2006, p. 256).

The relationship between staff and patients has been alluded to under many guises: the therapeutic relationship, helping relationship, working alliance, helping alliance and therapeutic alliance. For the purpose of this review, we have referred to the general construct under discussion as the therapeutic relationship. The therapeutic relationship has been difficult to conceptualise. However, there seems to be a general consensus that the therapeutic relationship can be broadly defined as the collaborative and affective bond between the therapist and patient and that this is an essential element of the therapeutic process (Martin, Garske & Davies, 2000; McCabe & Priebe, 2004).

Interest in the therapeutic relationship has grown considerably over the past few decades primarily because there is a consistent finding that the quality of the therapeutic relationship is linked with outcome (Horvath, 2001; Johansson & Eklund, 2004; Martin et al., 2000). This remains a robust finding in various settings with different mental health problems and indeed different theoretical orientations (Horvath & Symonds, 1991).

Research has now begun to focus on the question of why the therapeutic relationship is so important in the overall therapeutic process with a particular focus on specific

relationships, treatment environments and different diagnoses. Researchers have and continue to develop measures specifically designed to assess the quality of the therapeutic relationship based on existing knowledge of the concept. The scales that are now available to researchers measure the therapeutic relationship from the patients' perspective, the staff members' perspective and from an independent observers' perspective.

There have been a number of reviews focusing on measurements of the quality of the staff and patient relationship (Elvins & Green, 2008; McCabe & Priebe, 2004; Martin et al., 2000). McCabe and Priebe's (2004) work focused on measurements of the therapeutic relationship, specifically their reliability and validity. They concluded that all the measures had acceptable psychometric properties when utilised in mainstream psychiatric treatment. However, there seems little evidence to suggest that the measures that were reviewed are transferable to the field of severe and enduring mental health issues. In their meta-analytic review Martin et al. (2000) investigated the association between the therapeutic relationship and outcome. They posit that regardless of the instrument used its connection with outcome is robust. Although the review's findings seem unequivocal, Martin et al. are unable to determine any tangible explanations as to why this may be the case, concluding that, "the relationship may be therapeutic in and of itself".

Elvins and Green's (2008) review set out to conceptualise the underpinnings of current alliance constructs with a view to closing the gaps left by previous research. The review clearly shows the diversity of concepts and measures available to investigate the therapeutic relationship. Elvins and Green suggest that the scales may measure conceptually different yet overlapping constructs, indicating that further research is required to investigate the underlying process behind the relationship formation.

Investigations into the therapeutic relationship between staff and patients with severe and enduring mental health problems have become more prolific in recent years due to the spiralling cost of inpatient and community care for this patient group. The majority of studies thus far have looked for links between the therapeutic relationship and outcome indicators. Studies have also explored if patient and staff characteristics and demographics may influence the quality of the therapeutic relationship.

To our knowledge there have been no reviews to date that specifically look at factors that may be related to the therapeutic relationship within this patient group. Therefore, this review intends to take a narrative approach focusing on the available literature in the domain of severe and enduring mental health problems and possible correlates of the quality of the staff and patient relationship.

According to the 2009 National Institute for Clinical Excellence Guidelines (p. 24):

‘The development of a constructive therapeutic relationship is crucial to assessing accurately the nature of a person’s problems and provides the foundation of any subsequent plan of management. Managing the process of engagement requires professionals to have sensitivity to the perspective of the individual and to understand that the condition can have a profound effect on the person’s judgment, their capacity to understand their situation and their capacity to consent to specific interventions.

The process of engaging successfully with individuals with schizophrenia may at times require considerable persistence and flexibility from professionals. Establishment of trust is crucial and reliability and constancy on the part of professionals is an important component of this’.

It does, therefore, seem pertinent to investigate what, if any, factors may correlate with the relationship between staff and patients, particularly within the field of severe and enduring mental health problems.

AIMS OF THE REVIEW

The aims of the current review are to take a narrative approach in which to examine the quality of the therapeutic relationship within the field of severe and enduring mental health problems, from the staff and patients' perspective and to ascertain if any factors within the existing literature can be identified as key associates of the relationship quality. This review therefore contributes to the existing literature by specifically synthesizing research investigating the quality of the therapeutic relationship and the key findings from all of the available reported correlates that may determine the quality of the relationship. The review adds to the literature by broadening our knowledge of the predictors of the quality of the therapeutic relationship specifically within the field of severe and enduring mental health problems.

The review will begin by describing the strategy used to identify relevant studies and then present an overview of the study characteristics. The main body of the review will outline and critically appraise the key findings. This will be followed by a discussion of the methodological limitations of existing research and the future research and clinical implications.

METHOD

Selection of Studies

Articles used in this review were identified through a systematic literature search of English language abstracts published between 1990 and 2013 using the following databases: PSYCHINFO, MEDLINE, PUBMED and EMBASE. The timeframe was chosen due to the introduction of the Care Plan Approach (CPA) in 1990 for all adults with complex mental health needs (Department of Health, 1990); the CPA approach was introduced to provide a more integrated approach to care and greater involvement and inclusion between the patient and their carers. The following search terms were used: Severe and enduring (or inpatient or outpatient) and therapeutic relationship (or alliance or staff and patient relationship) and correlates (or attitudes). All electronic searches were conducted from December 2009 to January 2013. Articles thought to meet inclusion criteria were extracted and a full search of each individual reference list was carried out to ensure all relevant papers were identified.

Methods of the review

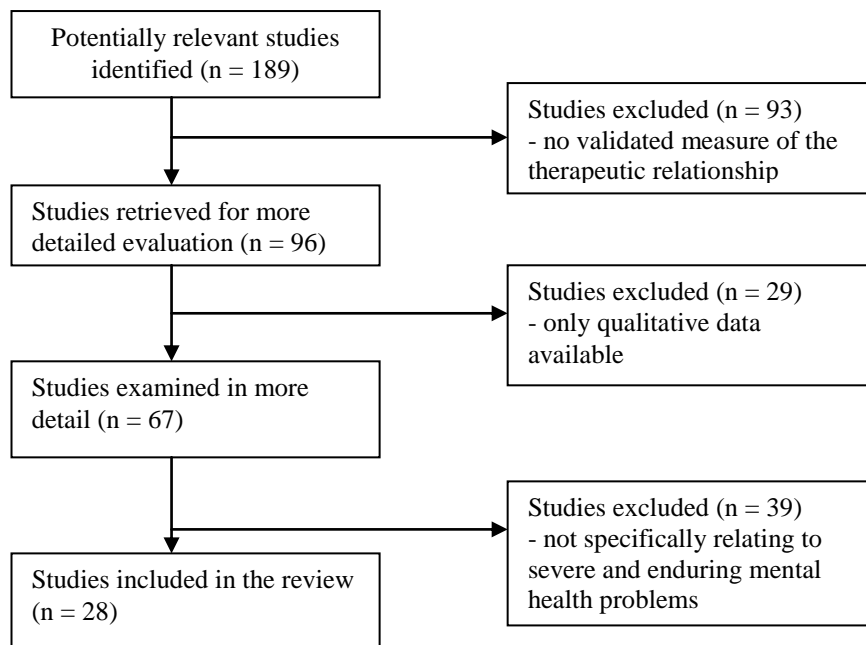
Inclusion criteria for the review were studies measuring the quality of the staff and patient relationship, studies that had measures of associations of the therapeutic relationship including cross-sectional and prospective designs from the patient, staff or observer perspectives. Studies were excluded from the review if no validated measure had been used to assess the quality of the relationship and also if only qualitative data had been utilised.

Search results

Descriptive characteristics of studies

The search identified a total of 28 studies (see Figure 1 for summary of search process) meeting the inclusion criteria (see Table 1 for summary of the main descriptive characteristics and key findings of the studies). A total of 2382 patients and 1233 staff members were sampled across the studies. Further breaking down to 1368 patients and 641 staff from inpatient settings and 1014 patients and 592 staff from outpatient settings.

Figure 1. Search process of the literature



The studies sampled patients from community, inpatient and residential settings and the majority of participants had a diagnosis of schizophrenia. The sample of staff groups varied considerably but the majority came from the nursing profession. Sixteen of the studies utilised a cross-sectional design and 12 studies used prospective designs. Of the 16 studies that utilised a cross-sectional design, 12 investigated participants from an inpatient environment with the remaining four studies investigating outpatient settings. From the 12

studies that used a prospective design eight studies investigated an outpatient setting and four utilised patients from an inpatient setting.

Table 1: Descriptive characteristics and key findings of the studies

Author/s	Country	Sample	Measures	Strengths/Weaknesses	Key Findings
Moore, Ball and Kuipers (1992)	U.K.	61 in patients with psychosis or neurotic disorder and 35 staff in a residential hostel.	Social Behavioural Scale (SBS), Camberwell Family Interview (CFI), General Health Questionnaire (GHQ), interviews.	Large sample size. Cross sectional design.	The workplace stressors (i.e. staff shortage, poorly defined roles) were unrelated to high EE. The quality of the relationship was found to be affected by the warmth and sociability of the patient.
Charlesworth, Sacks, Templer and Thackrey (1993)	U.S.A.	84 inpatients with schizophrenia or schizoaffective disorder in hostels	Behaviour Rating Scale (BRS), Patient Rejection Scale (PRS), CFI.	Large sample size. Prospective design.	Rejection of the patient by the carer was significantly correlated with negative behaviour by the resident.
Snyder, Wallace, Moe and Liberman (1994)	U.S.A.	30 inpatients with schizophrenia and 15 care operators in a residential care home.	CFI, Five-Minute Speech Sample (FMSS), Quality of Life Scale (QOL), Family Environment Scale (FES), Brief Psychiatric Rating Scale (BPRS).	Small sample size. Cross sectional design.	The more critical and emotional the climate the poorer the quality of residents' lives and the greater the increase in aggression/hostility by clients.
Beauford, Dale, McNeil and Binder (1997)	U.S.A.	328 inpatients on a locked psychiatric ward – no specific diagnosis stated.	BPRS, 6 point rating scale to measure the quality of the initial therapeutic relationship, The overt aggression scale.	Large sample size. Only measured therapeutic alliance from retrospective chart reviews. Cross sectional design.	An association was found between therapeutic alliance and treatment outcomes, also a correlation between the quality of the initial therapeutic alliance and the risk of violent behaviour.
Hersco-Levy, Ermilov, Glitsinsky, Lichtenstein and Blander (1999)	Israel	30 inpatients with treatment resistant schizophrenia and 29 staff	BPRS, Positive & Negative Syndrome Scale (PANSS), PRS, Nurses Observation Scale for Inpatient Evaluation. (NOSIE).	Small sample size. Cross sectional design	Disorganised behaviour and impaired cognitive dysfunction were more likely to be associated with high levels of rejection amongst staff.

Author/s	Country	Sample	Measures	Strengths/Weaknesses	Key Findings
Svensson and Hansson (1999a)	Sweden	26 inpatients with schizophrenia.	Psychotherapy status report, Patient Collaboration Scale, Hopkins Symptoms Check-list – 90 (HSCL-90), Global Assessment of Functioning (GAF). 6 point Likert Scale (Frank & Gunderson, 1990)	Small sample size. Prospective design.	Few correlations were found between patient characteristics and initial alliance. Therapist ratings showed a positive relationship between initial alliance and a favourable outcome of treatment at discharge.
Svensson and Hansson (1999b)	Sweden	26 inpatients with schizophrenia and 26 staff.	Strauss-Carpenter Scale (SCS), DSM-III-R, Interview, Psychotherapy Status Report. 6 point Likert Scale (Frank & Gunderson, 1990)	Small sample size. Prospective design. Different measures of therapeutic alliance used for staff and patients.	Personal insight was found to correlate positively with the therapeutic relationship, being involved in “my treatment” was also correlated positively with the therapeutic relationship.
Tattan and Tarrier (2000)	U.K.	158 inpatients with a severe psychotic illness and 120 case managers.	FMSS, Operationalised Checklist for Psychotic Illness (OCCPI), Comprehensive Psychiatric Rating Scale (CPRS), Scale of Assessment of Negative Symptoms (SANS).	Large sample size. Prospective design.	High EE were significantly associated with individual case managers and not to symptom and illness factors. High EE was not associated with outcome. The absence of a positive relationship was significantly associated with poorer outcomes.
Barrowclough, Haddock, Lowens, Connor, Pidliswyj, and Tracey (2001)	U.K.	33 patients with psychosis and 20 staff on a low security inpatient unit.	CFI, PANSS, Social Functioning Scale (SFS), SBS, 5-point likeart scale to assess incoming feeling.	Small sample size. Relatively new unit (relationships only medium term 18 months). Cross sectional design.	Patients seemed to be sensitive to staff feelings for them. Staff tended to view the behaviours of patients they felt less positively disposed to as more controllable.

Author/s	Country	Sample	Measures	Strengths/Weaknesses	Key Findings
Van Humbeeck, Audenhove, Pieters, De Hert, Storms, Vertommen et al. (2002)	Belgium	56 outpatients with schizophrenia and 56 staff in supported living.	PANNS, GAF, Mechlin Activity Scale (MAS), CFI.	Large sample size. Cross sectional design.	High EE was associated with client's age and poorer social functioning. No relationship was found between high EE and residents' symptoms except for excitement.
Olusina, Ohaeri and Olatawura (2003)	Nigeria	101 interactions observed on an inpatient ward for patients with schizophrenia or acute psychosis.	Quality of Interactions Schedule (QUIS), Patient Care Assessment Questionnaire (PACQ), Staff Care Assessment Questionnaire, (SACQ) BPRS, WHO's Quality of Life Assessment.	Large sample size. Only sampled one ward. Only weekend interactions observed. Cross sectional design.	Staff who reported higher levels of personal accomplishment exhibited significantly more staff-resident interactions, and staff who perceived more involvement in decisions relating to their work showed significantly fewer negative staff-resident interactions.
Johanson and Eklund (2004)	Sweden	61 patients after discharge from inpatient setting with various psychiatric diagnoses.	Community Orientated Programmes Environment Scale (COPEs), Revised Helping Alliance Questionnaire (Haq-II), GAF.	Medium sample but becomes small particularly when subgroups analysed. No distinction in diagnoses. Cross sectional design.	Several ward atmosphere factors correlated with the helping alliance suggesting that support, programme clarity and spontaneity were important ingredients.
Levy, Shefler, Loewenthal, Umansky, Bar and Hersco-Levy (2005)	Israel	56 inpatients with schizophrenia.	BPRS, PANSS, GAF, Independent Living Skills Survey (ILSS), PRS.	Medium sample size. Cross sectional design.	Increased rejection was expressed towards patients who were more symptomatic.
Coture, Roberts, Penn, Cather, Otto and Goff (2006)	U.S.A.	30 outpatients with schizophrenia or schizoaffective disorder.	PANSS, SFS, Working Alliance Inventory (WAI).	Small sample size. Prospective design.	Client interpersonal factors were found to be significant predictors of the therapist rated-alliance in the treatment of schizophrenia.

Author/s	Country	Sample	Measures	Strengths/Weaknesses	Key Findings
Dennis and Leach (2007)	U.K.	10 staff from a inpatient unit for men with learning disabilities and mental health problems.	FMSS, Maslow Burnout Inventory (MBI).	Small sample size. Raters not actually trained to rate EE. Very specialised service (learning disability). Cross sectional design.	EE was found to be higher in male staff. No staff met all the components for high burnout
Forsyth (2007).	U.K.	26 mental health workers on an acute inpatient ward.	Vignettes on Borderline Personality Disorder and Major Depressive Disorder. Empathy scale (adapted from Burns & Nolen-Hoeksema, 1992).	Small sample size. Cross sectional design. Very specific vignettes in terms of diagnosis and failure to complete a task.	Workers were angrier with patients when causes were perceived to be due to controllable factors.
Prince (2007)	U.S.A.	307 inpatients with schizophrenia or schizoaffective disorder.	BPRS, Global Assessment Scale (GAS), Centre for Epidemiological Studies-Depression Scale (CES-D). 6 Point Likert Scale (Frank & Gunderson, 1990)	Large sample size. Cross sectional design. Longitudinal data used (over 10 years old at time of study).	Multiple hospitalisations are associated with lower levels of functioning, elevated psychopathology. Illness awareness and the therapeutic alliance are related to the number of psychiatric admissions.
Berry, Barrowclough, & Wearden (2008)	U.K.	96 inpatients with psychosis.	Psychosis Attachment Measure (PAM), PANNS, Inventory of Interpersonal Problems-32 (IIP-32), SBS, WAI.	Large sample size. Prospective design.	Adult attachment style may be an important correlate of symptoms, interpersonal problems and difficulties in the therapeutic relationship over and above the severity of illness.
Berry, Shah, Cook, Geater, Barrowclough, and Wearden (2008)	U.K.	20 staff on inpatient units for schizophrenia or schizoaffective disorder.	Staff Attachment Style Questionnaire, Patient Interpersonal Problems (PIP), FMSS.	Small sample size (was a pilot study). Prospective design.	Lower staff anxiety and avoidance were associated with positive therapeutic relationships.

Author/s	Country	Sample	Measures	Strengths/Weaknesses	Key Findings
Johnson, Penn, Bauer, Meyer and Evans (2008)	U.S.A.	58 outpatients with schizophrenia and treatment resistant auditory hallucinations.	PANNS, Beck Cognitive Insight Scale (BCIS), SFS, WAI-G (Group Working Alliance Inventory-Client Rated), Psychosocial treatment compliance scale (PTCS).	Medium sample size. Prospective design.	Levels of insight and social functioning were strong predictors of the therapeutic alliance.
Rossberg, Melle, Opjordsmoen and Friis (2008)	Norway	129 inpatients with psychosis and 359 staff on an acute psychiatric unit.	Ward Atmosphere Scale (WAS), General Satisfaction Index (GSI), Working Environment Scale-10 (WES-10).	Large sample size. Only sampled one ward. Repeated cross sectional design.	Working conditions of staff were related to both patient satisfaction and the patients' perceptions of the treatment environment.
Bordeau, Theroux and Lecomte (2009)	Canada	150 outpatients with early psychosis.	BPRS, Insight Scale (IS), Client Assessment of Strengths Interests and Goals (CASIG).	Large sample size. Cross sectional design.	Friends, leisure, medication side effects and quality of life were found to be associated with a good therapeutic relationship.
Evans-Jones, Peters and Barker (2009)	U.K.	24 outpatients with psychosis and 24 therapists	Scale for the Assessment of Positive Symptoms (SAPS), Psychotic Symptoms Rating Scales (PSYRATS), Subjective Experience of Negative Symptoms (SENS), BCIS, WAI, Counsellor Rating form (CRF), Relationship Inventory – Empathy Scale (RI).	Small sample size. Cross sectional design. Highly selected group of patients, therapist identified patients as suitable for participation.	Therapists can develop a good therapeutic relationship early in therapy with clients regardless of psychotic symptoms, lack of cognitive insight and belief flexibility or length of illness of the client.

Author/s	Country	Sample	Measures	Strengths/Weaknesses	Key Findings
Wittorf, Jakobi, Bechdorf, Muller, Sartory, Wagner, et al. (2009)	Germany	100 patients with schizophrenia.	PANNS, Scale to Assess Unawareness of Mental Disease (SUMD), Bern Session Questionnaires - (BSQ – PSQ, TSQ).	Large sample size. Over 50% of eligible participants refused to take part in the study. Prospective design.	Symptoms and insight were found to have a positive influence on the therapeutic alliance.
Barrowclough, Dale, Meier, Beardmore and Emsley (2010)	U.K.	116 patients with psychosis and substance misuse and 116 trial therapists.	PANNS, GAF, Calgary Depression Scale (CDS), WAI.	Large sample size. Not all potential participants completed the alliance measures. Cross sectional design.	Patients' attitude to treatment was found to be correlated with poorer alliance. Symptom severity and substance use were not found to be related to alliance.
Picken, Berry, Tarrier and Barrowclough (2010)	U.K.	110 outpatients with schizophrenia and substance misuse and 81 care co-ordinators	Posttraumatic Stress Diagnostic Scale (PDS), Informant Trauma Questionnaire, WAI, PAM.	Large sample size, although number of individuals with a full data set was small. Prospective design.	No associations were found between trauma history and the working alliance.
Berry, Gregg, Vasconcelos e Sa, Haddock and Barrowclough (2012)	U.K.	176 outpatients with schizophrenia and substance misuse and 176 care co-ordinators.	FMSS, PANNS, GAF.	Large sample size. Prospective study.	Staff with positive relationships were less likely to attribute problems as being within the patient's control.
Lecomte, Laferrriere-Simard and Leclerc (2012)	Canada	36 outpatients with psychosis and 19 group therapists	WAI, BPRS, Self-Esteem Rating Scale, Insight Scale, Social Provisions Scale, CASIG.	Small sample size. Prospective design. Sample became smaller as not all participants filled in the measures over the 3 time points.	Client's alliance predicted total symptoms and self-esteem at post-therapy. Both clients' and therapists' alliance predicted attendance and participation.

MEASURES USED

Quality of the Staff Patient Relationship

The most frequently used measure of quality of the staff patient relationship was the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) this measure was utilised in eight studies, followed by the Camberwell Family Interview (CFI; Vaughan & Leff, 1976), used in five studies. The Five Minute Speech Sample (FMSS; Magna, Goldstien, Karno, Milkowitz, Jenkins & Falloon, 1986) was also used in five studies and the Patient Rejection Scale (PRS; Kreisman, Simmons & Joy, 1979) was utilised in four studies to measure the quality of the therapeutic relationship.

Working Alliance Inventory

The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) is a self-report measure consisting of three subscales: therapeutic bond, task agreement and goal agreement. It is made up of statements that are rated on a seven point Likert scale (one = 'never' and seven = 'always'). Therapist and client ratings can be obtained (Barrowclough et al., 2010). The inventory has been modified to include ratings of group relationships (Johnson et al., 2008). The WAI has consistent reliability and validity across a range of diagnoses (Horvath & Greenberg, 1989) and has been found to have good psychometric properties when used in research with individuals with psychosis and their care workers (Berry et al., 2008b).

Camberwell Family Interview

The Camberwell Family Interview (CFI; Vaughn & Leff, 1976) is a semi-structured interview that is designed to elicit participants' descriptions of daily events and interactions

with individuals that have severe and enduring mental illness (Snyder, 1994). The respondent's spontaneous expressions of feelings together with these descriptions are used to count the number of critical comments and to rate respondents on scales that measure criticism, hostility, emotional over involvement, positive remarks and warmth. The CFI has been adapted for use with non-relative informants (Moore et al., 1992) and is one of the most frequently used assessment tools for measuring expressed emotion (EE) and staff-patient relationships (Van Humbeck et al., 2002).

Five Minute Speech Sample

The Five Minute Speech Sample (FMSS; Magna et al., 1986) elicits a response from the patient's key relative/care-worker. The specific instructions given to the individual are: "I'd like to hear your thoughts about (patient's name) in your own words and without my interrupting you with any questions or comments. When I ask you to begin, I'd like you to speak for 5 minutes, telling me what kind of a person (patient's name) is and how the two of you get along together. After you have begun to speak, I prefer not to answer any questions" (Magna et al., 1986). The resulting speech sample is aimed at identifying the respondent's attitudes and feelings about the patient as well as perceptions regarding the quality of their relationship, all speech samples are audio taped and overall category ratings (overall relationship, critical comments and emotional over involvement) are made directly from the tape recordings by a trained rater (Tatton & Tarrier, 2000). The FMSS is an established and validated brief assessment tool for reliably measuring EE (Dennis & Leach, 2007).

Patient Rejection Scale

The Patient Rejection Scale (PRS; Kreisman, Simmons & Joy, 1979) is a self-report scale completed by relatives/care workers that measures the hostility and criticism components of EE without directly measuring EE (Hersco-Levy et al., 1999). All items on the scale are summed (1= low rejection, 2= sometimes, 3= high rejection answer) to obtain a total rejection score. The PRS' ability to predict schizophrenic relapse has been demonstrated in a number of studies (Levy et al., 2005).

Other scales that were used to measure the quality of the therapeutic relationship include the Helping Alliance Questionnaire (HAQ-II, Lubarskey, Barber, Siqueland, Johnson, Najavits, & Frank et al., 1996), which is a 19-item self-report scale and is available in both patient and therapist versions. Beuford et al. (1997) utilised a 6-point scale developed by Clarkin, Hurt and Crilly (1987) to rate the quality of the initial therapeutic alliance based on an initial evaluation of the patient.

The Psychotherapy Status Report was used to measure patient behaviours during psychotherapy, which were reported to be suggestive of the quality of the therapeutic alliance (Svenson & Hanson, 1999a). Patients' views of the therapeutic alliance were measured in terms of collaboration with the therapist using a revised scale developed by Allen, Deering, Buskirk and Coyne (1988). The short version of the Bern Session Questionnaire (Grawe & Braun, 1994) was used to rate both therapist and patient perspectives of the therapeutic alliance. This measure is used to emphasise the emotional bond between patients and therapist (Wittorf et al., 2009).

Correlates of the Therapeutic Relationship

Measures used to predict correlates of the therapeutic relationship varied considerably between studies. The most common correlates that have been reported in the literature are described below.

Symptoms

The most frequently used correlate investigated was patient symptoms and these were examined in 23 studies. Symptoms were most often measured using the Positive and Negative Syndrome Scale (PANSS; Kay, Fiszbein, & Opler, 1987), which was utilised in 10 studies and the Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962) used in eight studies.

Positive And Negative Syndrome Scale

The Positive and Negative Syndrome Scale (PANSS; Kay et al., 1987) is a 30-item semi-structured interview and was designed to measure three domains: The positive subscale, the negative subscale and the general psychopathology subscale. The PANSS is one of the most commonly used assessment tools to assess symptoms in patients with schizophrenia and has sound psychometric properties (Johnson et al., 2008). Each symptom is rated on a seven-point scale (1= absent; 3= mild; 5= moderately severe; 7= extreme).

Brief Psychiatric Rating Scale

The Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962) is a widely used measure of psychopathology with documented reliability and validity. Therapists rate patients on 18 symptom scales ranging from 0 (symptoms not present) to 6 (extremely severe).

Other scales used to measure patient symptoms included: the Hopkins Symptom Checklist 90 (HSCL-90; Dergoatis & Fath, 1997). This is a 90-item self-rating scale containing various symptoms relating psychiatric illness including somatisation, obsessive compulsion, depression and paranoid ideation. The Comprehensive Psychopathological Rating Scale (CPRS; Asberg, Montgomery, Perris, Schalling & Sedvall, 1978) was also utilised. This is a semi-structured interview and assesses clinical symptoms. The Strauss-Carpenter scale (SCS; Strauss & Carpenter, 1974) was used to measure social contacts and psychiatric symptoms. The Present State Examination (PSE; Wing, 1989) has been utilised to measure the clinical status of patients.

Other scales that have been reportedly used to measure patient symptoms are the Behaviour Rating Scale (BRS; Gurel, 1967), the Operational Criteria Checklist for Psychotic Illness (OCCPI; McGuffin, Farmer & Harvey, 1991), the Assessment of Negative Symptoms (SANS; Andreasen, 1989), the Assessment of Positive Symptoms (SAPS; Andreasen, 1984) and the Psychotic Symptom Rating Scale (PSYRATS; Haddock et al., 1999).

Functioning

Patient functioning was investigated in 12 studies and was most frequently measured utilising the Global Assessment of Functioning Scale (GAF; Hall, 1995), which was adopted in seven studies. The Social Functioning Scale (Birchwood, Smith, Cochrane, Wetton & Copestake, 1990) was used in three studies to measure functioning.

Global Assessment of Functioning Scale

The Global Assessment of Functioning Scale (GAF; Hall, 1995) measures the global social functioning of the patient taking into account symptoms and psychological, social and occupational functioning. The GAF is an observer-rated measure, which has two subscales assessing severity of symptoms and functioning deficits. Scores on the subscales range from 0 (severe symptoms and severe lack of functioning) to 100 (no symptoms and extremely high levels of functioning). The GAF is a reliable measure of disturbance of psychological functioning (Jones, Thornicroft, Coffey & Dunn, 1995).

Social Functioning Scale

The Social Functioning Scale (SFS; Birchwood et al., 1990) is a frequently used self-report measure of social and occupational functioning for individuals with schizophrenia. The SFS has excellent psychometric properties and was developed for schizophrenia research.

Other scales used to measure functioning include the Client Assessment of Strengths Interests and Goals (CASIG; Wallace, Lecomte, Wilde & Liberman, 2001), the Pre-Admission Functioning Scale (PAF; Strauss & Carpenter, 1974) and the Mechlin Activity Scale (MAS; Cools, 1993).

Insight

Four studies measured insight, including the Beck Cognitive Insight Scale (BCIS; Beck, Baruch, Balter, Steer & Warman, 2004), which was used to assess cognitive insight. The Insight Scale (Birchwood et al., 1994) was also used and is an eight-item self-report scale measuring three dimensions of insight: perceived need to treatment; awareness of illness

and re-labeling of symptoms as pathological. The Scale to Assess Unawareness of Mental Disease (SUMD; Amador et al., 1993) was utilized to evaluate goal insight.

Quality of Life

Four studies investigated Quality of Life correlates using the Quality of Life Scale (QOL; Lehman, Ward & Linn, 1982). The QOL is a 45-item questionnaire and uses a seven-point scale ranging from 'terrible' to 'delighted'.

General Satisfaction

Four studies examined the relationship with general satisfaction using the General Satisfaction Index (GSI; Moos, 1997), the Patient/Staff Care Assessment Questionnaire (PACQ & SACQ; Olusina et al., 2002) and the QOL (Lehman et al., 1982).

Ward Atmosphere

Three studies looked at the correlation with ward atmosphere using the Ward Atmosphere Scale (WAS; Moos, 1997), the Ward Environment Scale (WES; Moos, 1997) and the Community Orientated Programs Environmental scale (COPEs; Moos, 1974).

Other Correlates

Studies also examined the impact of the following measures on the quality of the therapeutic relationship: Problem behaviours, empathy, attachment, attitudes and attributions, depression, drug and alcohol use, burnout, self-esteem and engagement.

RESULTS OF FINDINGS

The studies under review investigated the association between the quality of the therapeutic relationship and several staff and patient factors from both inpatient and outpatient settings. The main findings from the studies will now be reviewed.

THE QUALITY OF THE THERAPEUTIC RELATIONSHIP

Of the 28 studies under review, 19 examined the quality of the therapeutic relationship from only the staff members' perspective, two from the patients' point of view and one from an observer's perception. Of the eight that measured the relationship from both the staff and patients' perspective, four used different assessment tools for staff and patients so no concordance of relationship quality could be tested. The remaining four studies that reported correlations between staff and patient ratings were mixed. Wittorf et al's (2009) study utilised the BSQ and found no correlation between staff and patient ratings of the relationship furthermore, Couture et al. (2006) report no significant associations between staff and patient ratings of the WAI. However significant correlations were posited utilising the WAI in both Barrowclough et al's (2010) and Lecomte et al's (2012) investigations.

It is interesting to note that the majority of studies have not investigated the relationship quality from both the staff and patients' perspective. It would seem pertinent to assess the quality of the relationship from both parties as intrinsically any relationship involves two people. However the studies that have measured both staff and patients' perspectives have concluded mixed findings. Further research is needed before any firm conclusions can be drawn.

PATIENT FACTORS

Patient factors that may have an effect on the quality of the therapeutic relationship have been studied quite extensively in the articles identified in this review. The main findings have been documented below.

DEMOGRAPHICS

EE as measured by the CFI was higher towards older patients in Van Humbeek et al's (2002) study of 56 outpatients (diagnosed with schizophrenia) suggesting that staff were more critical of older patients. The sample comprised predominantly older males (mean age 45.36), compared to their caregivers, who were generally female and younger (mean age 34.52). The average length of time since diagnosis was an average of 18.67 years, which may have influenced the results somewhat in that chronicity of illness may have increased the levels of EE rather than just the age of the patient.

Barrowclough et al. (2010) report that race was correlated with the therapeutic relationship, with patients of "white" ethnicity having a better alliance score (on the WAI). Their study of 116 patients with psychosis and substance misuse only measured ethnicity as 'black' or 'white' and no indication of staff ethnicity was reported, limiting the interpretation of this finding.

Other studies (Tatton & Tarrrier, 2000; Hersco-Levy et al., 1999) found no significant associations between demographics and the therapeutic relationship. The majority of the studies reviewed did not investigate or report the effect of patient demographics on the quality of the therapeutic relationship, using descriptive data only in the results section.

Considering the importance of demographic factors in everyday personal relationships this may have been an oversight in many of the studies.

FUNCTIONING (GENERAL AND SOCIAL)

Sixty-one inpatients with a variety of diagnoses were investigated by Johansson and Eklund (2004) and it was posited that patients with higher levels of psychosocial functioning (as rated using the GAF) were able to establish better therapeutic relationships (measured by the Haq II). This finding is consistent with Moore et al's 1992 study of 61 inpatients and 35 staff, in that the quality of the therapeutic relationship was related to the inpatients' ability to show warmth and affection (as measured by the CFI and the SBS). Furthermore, measures of social functioning at baseline were also reported to be significant predictors of staff therapeutic relationship ratings 5 weeks later in a sample of 30 outpatients utilising the WAI and the SFS (Couture et al., 2006).

Hersco-Levy et al. (1999) found that ratings of the therapeutic relationship from 29 staff on an inpatient setting were associated with longer hospitalisation, employment interruption and social dysfunction. Van Humbeek et al. (2002) present strong agreement with Hersco-Levy's study in that high EE (measured by the CFI) was associated with poorer social functioning and smaller social network sizes in their outpatient study of 56 patients with a diagnosis of schizophrenia.

Conversely, Johnson et al. (2008) utilised an adapted version of the WAI specifically designed to be used within group settings (Group Working Alliance Inventory, G-WAI) and reported that lower levels of individual social functioning predicted stronger group alliances in their sample of 58 outpatients with treatment resistant schizophrenia. This

finding may be because those who were rated with lower individual social functioning may have been more eager to form alliances within group situations due to their lack of personal social interactions outside of the group dynamic. Lecomte et al. (2012) also intimate that the group environment was a good predictor of the therapeutic relationship, in their study of 36 outpatients and their 19 group therapists using the WAI. Thus, reinforcing the notion that the group environment may facilitate increased participation in therapy sessions and therefore strengthen the relationship not only between the patient and the therapist, but also the wider group dynamic.

Although the sample sizes for the above studies are relatively small, it seems fairly reasonable to conclude that in both inpatient and outpatient settings lower levels of functioning have an adverse effect on the quality of the therapeutic relationship and those patients with higher levels of social functioning seem able to establish better relationships with staff members.

INSIGHT

Patients who were able to report more difficulties in their life situations and showed better awareness of their symptoms were more able to be co-operative. This patient group were also able to form better therapeutic relationships with staff members in Svensson and Hansson's (1999a) study of 26 inpatients with a diagnosis of schizophrenia, utilising Frank and Gunderson's (1990) six-point likert scale. In a follow-up study, Svensson and Hansson (1999b) used the same sample of patients and found that personal insight had a positive association with the therapeutic relationship during the therapy stages of the study (which also examined the effects of cognitive therapy on this patient group). The patients

also felt that ‘feeling involved’ with their treatment and being encouraged and reassured by the staff member during treatment was an important factor.

Patients who were rated as having less insight (as measured by the PANSS) were reported to have worse alliance ratings (using the WAI) from both the staff and patients perspectives in Barrowclough et al’s (2010) study of 116 outpatients and staff with a diagnosis of psychosis and substance misuse. Furthermore, insight was purported to be the only predictor of the therapeutic relationship from the patients’ perspective. In contrast, Evans-Jones et al. (2009) utilised the WAI and failed to find any significant associations between any patient factors, including insight and the therapeutic relationship. However, this sample is described by the authors as being a ‘highly selected’ group in that the therapist had to identify the participants as suitable for the study, which may have introduced selection bias into the sample.

It seems that the majority of studies that have investigated the role of insight (in both inpatient and outpatient settings) have concluded that insight, or lack of insight per se has a detrimental association with the quality of the therapeutic relationship.

PSYCHOLOGICAL FACTORS

Barrowclough et al. (2001) measured the therapeutic relationship (using the CFI) and staff and patient perceptions of the relationship quality utilising a five-point likert scale. They noted that the inpatients in their sample of 33 patients and 20 staff seemed able to pick up on the negativity shown by staff and their ratings of perceived staff feelings towards them correlated significantly with staff EE towards them. Staff were also reported to pick up on negativity towards them from patients but to a lesser degree. In their 2008 study

examining the effects of attachment style and interpersonal relationships, Berry et al. posit that high attachment avoidance was associated with difficulties within the therapeutic relationship (assessed by the FMSS). It may be that inpatients with avoidant attachment styles are less likely to report problems or issues than those with other attachment styles, thus hindering the formation of the relationship.

Picken et al. (2010) examined the effect of trauma history in their sample of 110 outpatients with schizophrenia and substance misuse and found that trauma was not significantly associated with the therapeutic relationship as measured by the WAI. However, Picken et al. also describe significant differences between staff and patient reports of the trauma and they suggest that this finding may be due to the fact that the alliance was only measured from the staff's perspective rather than the client and that staff may have a tendency to rate the relationship more positively than patients.

BEHAVIOUR

In their 1999 investigation of 30 inpatients and 29 staff, Hersco-Levy et al. suggest that inpatients that had difficulty in behaving logically and displayed more negative behaviours, elicited higher levels of rejection and frustration (measured by the PRS) from staff members. Charlesworth et al. (1993) utilised the BRS and concluded similar findings in both male and female patients in their study of 84 inpatients. Furthermore, hostility, uncooperativeness and excitement (measured on the activation factor from the PANSS) were found to be significantly associated with the therapeutic relationship in Couture et al's 2006 outpatient study.

Beauford et al. (1997) utilised a 6-point scale developed by Clarkin et al. (1987) and report that inpatients who had a poorer therapeutic relationship at the time of admission were more likely to display violent behaviour during hospitalisation and more likely to remain inpatients for a longer period, which has great implications for the cost of inpatient care. Similar findings have been documented by Snyder et al. (1994), who posit that the higher the EE in staff (measured by the CFI and FMSS) the greater the increase in hostility and aggressive behaviours from the patient.

The finding in inpatient settings that aggression and hostility displayed by the patient is directly linked to the quality of the therapeutic relationship seems fairly robust. However the same cannot be said for the outpatient studies under review as only one study has reported on this factor.

SYMPTOMS

In their 1994 study involving 30 inpatients and 15 staff, Snyder et al. state that staff ratings of patients (using the FMSS) were directly related to the psychopathology of the patient, intimating that the attitudes of care-workers are affected by the severity of the symptoms displayed by the patient. Similar findings were also reported in a sample of 56 schizophrenic inpatients in Levy et al's (2005) study using the WAI and the PANSS. Prince (2007) found that patients who had three or more admissions onto the inpatient ward and had also rated as having more severe symptomology were viewed by staff as being less involved in their treatment which, in turn was associated with the quality of the therapeutic relationship as measured by their 6 point scale (Frank & Gunderson, 1990) in their study of 307 inpatients. In a study of 100 outpatients diagnosed with schizophrenia, Wittorf et al. (2009) report that both positive and negative symptoms correlated with the

quality of the therapeutic relationship (as measured by the BSQ) with staff alliance ratings found to be higher for those patients with less positive and negative symptoms.

Hersco-Levy et al. (1999) study measured the therapeutic relationship using the PRS and included 30 inpatients with treatment resistant schizophrenia and 29 staff. Patients to whom staff had more critical and rejecting attitudes had a tendency to score higher on the cognitive factors of the PANSS and patients with treatment resistant symptoms, such as auditory and visual hallucinations, elicited higher levels of EE and rejection amongst staff members. However, Hersco-Levy et al. also report that negative symptoms were not directly associated with staff rejection. This finding was also reported by Bordeau et al. in their 2009 study of 150 outpatients with early psychosis utilising the WAI. Suggesting that symptomology that is less directly challenging and menacing to staff are less likely to elicit higher levels of rejection and therefore less likely to have a detrimental impact on the quality of the therapeutic relationship. This finding is particularly interesting because **it** is in direct conflict with the literature published regarding familial EE (see Wearden, Tarrier, Barrowclough, Zastowny & Armstrong-Rahill, 2000).

Moore et al. (1992) found no significant associations between levels of EE (measured by the CFI) and patient symptomology in their sample of 61 inpatients and 35 staff. Moore et al. suggest that the staff in their sample were 'less vulnerable to over involvement' in their relationships with patients and they posit that the staff group had gained extensive training and experience in dealing with the special needs of this client group, possibly moderating the connection of increased psychopathology on the quality of the therapeutic relationship as reported in other studies of this nature. Furthermore, Van Humbeek et al. (2002) study

of 56 outpatients and staff was also unable to establish significant associations between symptoms and EE (utilising the CFI).

The findings that overall levels of symptoms and the quality of the therapeutic relationship were inconsistent; some studies detail positive correlations whilst others reported no associations between the two factors. The majority of studies that were carried out in outpatient environments did not, however, report significant associations between the quality of the therapeutic relationship and symptomology (Barrowclough et al., 2010; Berry et al., 2012; Couture et al., 2006; Tatton & Tarrier, 2000).

The above findings show that studies have reported some inconsistencies regarding the relationship between symptomology and the quality of the therapeutic relationship. It is interesting to note that the studies conducted within inpatient settings have found more correlations between the two factors than those conducted in an outpatient environment. This may be that by its nature the relationship between the two staff and client groups are intrinsically different, with staff and patients on an inpatient unit spending more time together, whereas outpatient staff may see their patients once per week for a limited time period. This may allow inpatient staff more time to form concrete attitudes towards patients with greater symptomology. Or it may be the nature of the illness experienced by patients with a diagnosis of psychosis who find themselves admitted to an inpatient unit at a more acute and disturbing stage in their illness, therefore display more symptomology. Furthermore, it may be that these presenting problems are perceived by staff as more acutely threatening and difficult to treat than their outpatient counterparts creating a more critical and hostile environment for both staff and patients.

DIAGNOSIS

Inpatients with a diagnosis of personality disorder were found to have poorer therapeutic relationships (as measured by the Haq II) in Johansson and Eklund's (2004) study of 61 patients after discharge. Forsyth (2007) also report that inpatients with a diagnosis of borderline personality disorder were less likely to receive assistance from staff than those with a diagnosis of major depressive disorder in their study of 26 mental health workers. This would suggest that diagnosis may be linked to the therapeutic relationship and those patients who evoke strong emotions in staff members early in the alliance may be less able to form positive therapeutic relationships.

STAFF FACTORS

Staff factors that may have an effect on the quality of the therapeutic relationship have been less widely investigated than patient factors in the studies identified in this review. The main findings have been documented below.

DEMOGRAPHICS

In their 2007 study investigating EE (measured using the FMSS) and burnout using a sample of 10 staff members from an inpatient unit for men with learning difficulties and mental health problems, Dennis and Leach report that male staff members were rated as having higher EE than female staff (41% for males and 8% for females).

Hersco-Levy et al. (1999) posit that the age of nursing staff correlated with EE in their study of 30 inpatients with a diagnosis of schizophrenia and 29 staff members. They suggest that the older the staff member, the more they viewed patients as irritable and manifestly psychotic (as measured by the PRS). However, the staff group in this study had

worked on the unit for an average of 9 years and this finding may reflect ‘staff burnout’ rather than just older age groups. Levy et al. (2005) also found that older staff members in their sample of 56 inpatients with a diagnosis of schizophrenia and 23 staff rated patients higher on the PRS than younger members of staff and they intimate that this finding may be explained by ‘staff burnout’ or that more simply extended exposure to working with this challenging client group may contribute to higher levels of EE.

Conversely, in their 2000 study of 158 outpatients with a diagnosis of schizophrenia and 120 case managers, Tatton and Tarrier noted that high EE (as measured utilising the FMSS) was associated with particular case managers and not correlated with age, sex, experience or caseload size. This suggests that EE may be a response style to the patients under their care rather than the personal characteristics of the individual case manager.

The findings of associations between staff demographics and the quality of the therapeutic relationship are mixed. The studies that conclude that age and gender may play a role in the staff-patient relationship in this review have relatively small sample sizes. Although Tatton and Tarrier’s (2000) study has a much bigger sample size, further studies are needed to replicate these findings before any firm conclusions can be drawn from them.

TRAINING AND EXPERIENCE

Dennis and Leach’s (2007) inpatient study examined EE levels in registered nurses and health care support workers using the FMSS. It was found that although the individual staff members exhibited different levels of EE, the health care support workers exhibited the highest levels of EE at 35% compare to the registered nurses at 17%. Van Humbeek et al. (2002) also observed a correlation between EE as measured by the CFI and the

outpatient staff member's level of education in their study of 56 patients and staff members. Staff who had attained education at a vocational level made more critical comments (mean 6.50) than those with a university education (mean 2.40). These findings are in keeping with other studies, such as Barrowclough et al. (2001), who also report that less well-trained and educated members of staff exhibit more critical comments and higher levels of EE.

PSYCHOLOGICAL FACTORS

Dennis and Leach (2007) examined EE and burnout in the context of an inpatient setting utilising the FMSS and the Maslach Burnout Inventory (MBI). Although none of the staff members met all of the criteria for high overall burnout, their findings revealed that those staff members with higher ratings of EE also scored higher on the depersonalisation and emotional exhaustion elements of the MBI. This could possibly indicate that the emotional state of the member of staff as shown by the MBI may increase levels of EE or conversely high levels of EE and therefore a critical environment may exacerbate the emotional state of the individual.

Berry et al's (2008a) pilot study of 20 outpatient staff found that lower levels of staff anxious attachment and avoidant attachment styles were associated with more positive therapeutic relationships. Although this pilot study had a small sample size, this study may represent an important indicator that staff attachment style may play a significant role in the quality of the therapeutic relationship.

In their 2009 study, Evans-Jones et al. suggest that staff personal qualities may be important factors for their sample of outpatients. They report that empathy, expertness,

attractiveness and trustworthiness were all positively correlated with a better therapeutic relationship in the patient's view.

WARD ATMOSPHERE/ENVIRONMENT

The perceived working environment of staff members was reported to be significantly associated with patient satisfaction in Rossberg et al's (2008) study of 129 inpatients and 359 staff on an acute psychiatric ward. Rossberg et al. also posit that staff satisfaction was related to patient perceptions of the ward atmosphere. This study indicates that the quality of the working environment is not only important to both staff and patient groups but may impact on the quality of the staff-patient relationship. Although due to the correlational design of this study the direction of causality cannot be concluded, it would seem that a poor working environment may be costly to both staff and patients.

Johansson and Eklund (2004) found that programme clarity (assessed by the COPES) was an important predictor of the quality of the therapeutic relationship, suggesting that the more explicit the rules and expectations of the inpatient unit, the better the ward atmosphere, therefore enhancing the quality of the therapeutic relationship. This implies that if staff are supported to strengthen the support and clarity of the holding environment it may in turn provide a solid foundation where patients may feel more at ease to express their concerns and emotions

Olusina et al. (2003) examined the quality of staff interactions with patients in their observational study on an inpatient unit for patients with a diagnosis of psychosis and schizophrenia. Of the 101 interactions that were observed, 60.4% were recorded as negative in quality (measured with the QUIS). Staff who reported higher levels of

personal accomplishment exhibited interactions with patients (although the quality of the interactions are not reported). In addition, staff who perceived themselves to be more involved in decision making relating to their work exhibited significantly fewer negative interactions.

Although no distinction is reported as to the context of the interactions (time of day, activity type, role of staff member) it may be fair to suggest that staff satisfaction with their working environment may have a positive affect on the type of interactions between staff and patient and therefore the quality of the therapeutic relationship.

DISCUSSION

This review provides an appraisal of studies that have investigated the quality of the staff and patient relationship within the field of severe and enduring mental health problems in both inpatient and outpatient settings. The aim of the review was to ascertain if any factors within the existing literature could be identified as associates of the relationship quality. Previous research has found that the quality of the staff-patient relationship has an effect on outcomes in the field of severe and enduring mental health problems, although less attention has been given to the factors that may influence the quality of the therapeutic relationship.

The quality of the therapeutic relationship and concordance between staff and patient ratings has not only revealed that the majority of studies have only investigated this phenomenon from one perspective, but also that findings are somewhat mixed. Some studies have found positive associations whereas others have found no correlations.

Although the small number of studies assessing both perspectives make drawing

conclusions as to the nature of staff and patient views of the relationship difficult some suggestions may be proposed. It could be that staff and patients views of what constitutes a good relationship are intrinsically different. Equally the multi-faceted nature of relationships in general may impede on our understanding of the therapeutic relationship and therefore the current measures designed to assess it. It may be that both staff and patients compare the therapeutic relationship to their previous experiences of relationships and that this prior experience could positively or negatively affect their ratings.

From this review evidence of factors associated with the quality of the therapeutic relationship have been found to be mixed. However, one consistent finding is that patient functioning has an effect on the quality of the therapeutic relationship. In both inpatient and outpatient settings lower levels of functioning has a negative association with the quality of the therapeutic relationship. A higher level of functioning was found to have a positive influence on the quality of the therapeutic relationship with patients able to establish better relationships with staff members. However, more research is needed to establish what role higher levels of functioning actually play in the therapeutic relationship. It may be simply that those patients with higher levels of functioning are able to understand the need for treatment and are more able to actively engage in the therapeutic relationship than those with a deficit in functioning.

Lack of insight has also been shown to have a detrimental effect on the quality of the therapeutic relationship. However, does lack of insight also indicate a lack of ability to engage generally or a more simple construct in that the patient does not feel the need to actively engage with staff because they do not feel that they are unwell, or, that they even 'need help to get better', therefore having a negative effect on the quality of the therapeutic

relationship. There is also a possibility that the construct of insight may overlap with other possible relationship predictors, such as illness awareness. It would seem reasonable to assume that if the patient is unaware of their symptoms or the difficulties their symptoms may be causing them, then they may find it difficult to accept that they need help and this would also be detrimental to their treatment and the relationship in general.

Difficult behaviour was found to be associated with the quality of the therapeutic relationship, particularly in inpatient settings. Findings indicate that the more negative behaviour displayed by patients the more rejecting and critical staff were rated as being towards them. More interestingly, the poorer the quality of the therapeutic relationship at admission to hospital (Beauford et al., 1997), the more likely patients were to display violent behaviours during their admission and this also increased the duration of their hospitalisation. This finding intimates that a collaborative approach where patients and staff work together towards agreed treatment goals may reduce the risk of aggressive and hostile behaviours and increase the likelihood of a positive outcome and therefore reducing hospitalisation time in turn, alleviating the financial cost to the health care system.

Patient factors, such as symptomatology, have somewhat inconsistent findings, with some studies concluding that increased symptomology has a detrimental association with the quality of the therapeutic relationship and others finding no associations. Other studies identified in the review suggest that diagnosis had a significant effect on the quality of the therapeutic relationship with those patients who had received a diagnosis of personality disorder developing poorer therapeutic relationships with staff than those with other diagnoses. It is unclear as to whether the patients themselves (due to their illness) were less able to form therapeutic relationships or if conversely, their illness and the nature of

their presenting symptoms elicited strong negative emotions within the staff member preventing the formation of the therapeutic relationship.

Interestingly, results from the review that focus on staff factors which may be associated with the quality of the therapeutic relationship highlight that this area has been less widely investigated. Demographic studies have found that gender and age are associated with the quality of the therapeutic relationship. Male staff members were more critical of patients than female staff. Older staff members were also found to be more rejecting of patients than younger staff members. This finding may be due to many contributing issues; it may be simply that older staff members are generally less tolerant of their patients' behaviours or that the older staff members may have worked with this client group for longer and have experienced extended negative exposure, making them generally more critical than their younger more enthusiastic colleagues. In one study (Tatton & Tarrier, 2000), no associations were found between age and gender and it is posited that the quality of the therapeutic relationship is linked more simply to the staff member's response style to the individual patient rather than their personal characteristics.

A robust finding from the review literature was that staff with lower levels of academic achievement and vocational training were found to be more critical and rejecting of patients. Suggesting a greater need for specialised training for staff members working with patients with a diagnosis of psychosis. Perhaps with more focus on supervision and reflective practice for staff at all levels to allow them to share and acknowledge their difficult feelings towards individual patients and the wider client group as a whole.

Working environment and ward atmosphere were also found to be related to the quality of the therapeutic relationship with patient and staff satisfaction with the holding environment correlating to the quality of their interactions. Patients seem attuned to the ward atmosphere and it was found that the better the working environment for staff the more highly the patients rated the quality of the therapeutic relationship. Staff who reported themselves as being more in control of decision making and clearer about the goals and their role in the treatment process displayed less negative interactions with patients. This suggests that an atmosphere where clarity not only of the treatment programmes but also of the overall holding environment may improve the quality of the therapeutic relationship.

There is evidence that the quality of the therapeutic relationship within the field of severe and enduring mental health is associated with several factors with differing levels of robustness. It is unequivocal from the wealth of previously published research that the quality of the therapeutic relationship is a reliable predictor of patient outcome. However, the therapeutic relationship is a subjective construct and may be intertwined with other factors. It is clear that treatment is delivered through the therapeutic relationship and that the therapeutic relationship is an integral part of treatment. The concept of the therapeutic relationship appears to have been measured in the majority of research under review as a somewhat stable construct. Research needs to address the notion that the therapeutic relationship (as in most other relationships) may be changeable and more fluid over time. Investigation is required to determine what factors mediate and moderate the quality of this important phenomenon to ascertain which components may be essential to ensuring the highest standard of care for people with severe and enduring mental health problems.

It is clear from this review that several factors have been identified as having an affiliation with the quality of the therapeutic relationship. This review adds to the existing literature by focusing on specific elements that contribute to the quality of the therapeutic relationship rather than focusing purely on measures of the therapeutic relationship and outcome. Furthermore, it expands on the previous review literature by examining both staff and patient factors from both inpatient and outpatient settings using the available relationship measures.

It is hoped that this review will have prompted research into the investigation and discovery of a 'unified alliance model', which is an important concept that to date seems to have eluded us.

LIMITATIONS

The findings in this review need to be interpreted alongside the methodological limitations of the individual studies under investigation. One such limitation is that by only including published studies in the inclusion criteria, bias may have been introduced in the fact that there is a tendency to publish studies that have stronger and more significant findings (Borenstein, Hedges, Higgins & Rothstein, 2009). Sample sizes varied considerably between studies (from 10 participants to 359 participants). The small sample size may have increased the possibility of Type II statistical errors, in which significant results may go undetected due to lack of power. Furthermore, due to the nature of the client group, some studies that originally started with large sample sizes suffered from large drop out rates and some studies were unable to complete all the measures with every participant leading to missing data again affecting the power of the studies.

The studies within the review used a variety of different measures to assess the quality of the therapeutic relationship. Although part of the inclusion criteria was that only validated measures of the quality of the therapeutic relationship were included, the tools utilised in the studies may have assessed slightly different constructs, which made making comparisons between the studies somewhat limiting. The measures utilised to assess EE, for example the CFI and FMSS were originally designed for familial relationships rather than professional relationships and may not have elicited the same levels of EE in the targeted groups.

The studies in the review came from inpatient and outpatient environments and results have been reported to demonstrate this difference. However, greater variability in settings could not be controlled for in this review and also different diagnoses, such as dual diagnosis, learning difficulty and treatment resistant issues were variable across studies. Although these inconsistencies made comparisons across the studies more problematic, the consistency in the results suggests more robust findings.

The participants who took part in the studies may also be under-representative of both staff and patient groups in general. The patient group that took part in most studies had to provide consent and therefore may have been more highly functioning and insightful than those who could not or would not consent. Staff who consented to the studies may also have been affected with evaluation apprehension and 'toned down' their evaluations to make themselves look more friendly or professional to the researcher, increasing the risk of social desirability bias.

Studies used a variety of methods to obtain the data including interviews (semi-structured and unstructured), questionnaires, observations and retrospective case notes. These methods may have elicited different types of responses and may have introduced further bias into the studies including self-reporting bias, recall bias, social desirability bias and evaluation apprehension.

IMPLICATIONS FOR RESEARCH

The review indicates key areas for future investigations into the predictors of the quality of the therapeutic relationship between psychiatric staff and people with a diagnosis of psychosis. Firstly the majority of the existing research on the quality of the therapeutic relationship has used cross-sectional designs and although this research has furthered our understanding of the concept of the therapeutic relationship, more studies are needed to take into account the notion that the therapeutic relationship may not be a stable construct and may be more fluid and changeable over time. It may be more important to consider this fluidity than to focus on one 'gold standard' measure of the therapeutic relationship. Perhaps following a longitudinal course to assess the nature of the relationship between staff and patients over time to ascertain what may contribute to the changes that may occur.

The current measures of the quality of the therapeutic relationship between staff and patients assess the bond that exists between the two although it seems in slightly different ways. The original scales were designed for different types of relationship and it is questionable as to whether they are equally applicable to severe and enduring mental health problems and professional caregiver relationship. However, the ideal single assessment tool for measuring the quality of the therapeutic relationship may not exist. It

may be that different measures are needed for different situations, such as service structure, training interventions over and above therapeutic interventions.

Although the review found several indicators of the quality of the therapeutic relationship within the existing literature more research is needed to investigate other factors that have yet received little attention. Attributional and attachment style research is still in its infancy in the field of severe and enduring mental health and may in the future show influential indicators of the quality of the therapeutic relationship. Other factors such as specific personality traits, past traumatic experiences with authority figures and previous relationship experiences may also be linked with the quality of the therapeutic relationship from both the patient and staff perspectives.

It is important for subsequent studies to also include or follow up on participants who disengaged from the studies, so that a more representative sample can be obtained. In terms of generalisability, it is also important for research to include clients with a diverse range of clinical presentation and complexity.

CLINICAL IMPLICATIONS

It seems pertinent in the light of existing research to extend our knowledge of the factors that may influence the development of a positive therapeutic relationship. It is even more important for those people with severe and enduring mental health problems who find engagement particularly difficult during acute phases of their illness (NICE update, 2009). It is also important to develop a flexible approach and pace during the therapeutic process to take into account the different stages of the illness. Although no firm conclusion can be

drawn at present regarding the best measure of the therapeutic relationship some interesting clinical implications can be posited.

The evidence from this review shows that lack of vocational training has a detrimental association with the quality of the therapeutic relationship suggesting that better training and more defined job roles should be explored for those staff groups working with people with severe and enduring mental health problems (Barrowclough et al., 2001; Dennis & Leach, 2007). Training, support and supervision should be offered routinely and regularly evaluated. This should be an ongoing process to encourage knowledge, awareness and understanding of severe and enduring mental health problems. Reflective practice should also be encouraged to help develop coping strategies, collaborative working and staff communication. This in turn may improve the working environment and overall social climate, which would improve the quality of care and the patient experience, which ultimately may reduce the long-term impact of relapse.

It would also be interesting to look at existing theoretical models, such as attachment theory or attribution theory, to ascertain their potential relevance. This may enhance our understanding of the therapeutic relationship between staff and patients with severe and enduring mental health problems. Recently work has begun in the field of attachment theory and this patient group (Berry et al., 2008a) advancing our knowledge of how interpersonal styles of both the patient and the staff member may affect the therapeutic relationship. Attributional theory may also broaden our knowledge and provide a theoretical underpinning on which to base future intervention studies to help staff members who work with this client group.

CONCLUSION

This review aimed at critically appraising studies investigating the indicators of the quality of the therapeutic relationship between psychiatric staff and people with a diagnosis of psychosis. Several factors are associated with the quality of the therapeutic relationship. Patient factors include demographics, psychopathology, insight, functioning and behaviour. Staff factors include demographics, education and training and working environment. However, it is not clear from the studies if each factor contributes independently to the quality of the therapeutic relationship or in combination or if indeed third factor variables are involved.

What is clear from this review is that further research is required to try to broaden our knowledge of the quality of the therapeutic relationship and what factors may moderate or mediate it. There is no doubt that the quality of the therapeutic relationship is an important component (if not the most important) in the wider therapeutic process and also a good predictor of successful outcome. What still requires further investigation is the individual ingredients that are necessary to ensure that both the patient and staff member are able to build and maintain a constructive therapeutic relationship that meets both their needs.

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**Paper two: Research paper –
The role of attributional style, personal and
environmental factors on the staff-patient
relationship.**

PREFACE

This work for this paper was completed between May 2012 and February 2013. A number of individuals made significant contributions towards the research study.

Firstly, Dr Katherine Berry provided overall support and supervision for the study. Dr Anja Wittkowski was the second supervisor for the study and provided support reading drafts of the manuscript. Debora A Vasconcelos E Sa provided support with training in control attributions and research assistants and volunteers provided assistance with recruitment and data collection.

The author intends to publish the research paper in 'Behaviour Research and Therapy' and the paper has been prepared in accordance with their requirements (see appendix B for author guidelines). Tables and figures have been left in the main body of the text to aid readability. The authors on this paper will be: Paula Butroid, Dr Katherine Berry and Dr Anja Wittkowski.

ABSTRACT

We investigated associations between staff-patient relationships, attributional style, environmental and personal factors in a sample of staff and patients from psychiatric inpatient wards for patients with severe and enduring mental health problems. Participants were 52 patients and 84 care workers with the majority of patients having received a diagnosis of schizophrenia. The quality of the staff patient relationship was assessed using the Working Alliance Inventory, while attributions of control were measured using the Five Minute Speech Sample. The role of patient symptoms, levels of functioning and challenging behaviour were also investigated alongside service engagement, ward environment and staff stress. Our findings showed that staff who rated the therapeutic relationship as more favorable made fewer ratings of attributions of control, although this did not affect patient ratings of the relationship. Ward atmosphere was positively associated with the therapeutic relationship; whilst lack of service engagement was found to be detrimental to the quality of the relationship. Patient behaviour and staff stress were not found to be associated. Patient symptoms, functioning and staff morale revealed mixed findings. Our findings highlight the potentially important role of attributions of control on the quality of staff and patient therapeutic relationships.

INTRODUCTION

Although there has been a wealth of research conducted over many years assessing the role of the therapeutic relationship and its importance in the wider therapeutic process. The therapeutic relationship has been difficult to conceptualise. There are different methods of conceptualising and assessing staff-patient relationships, including therapeutic alliance, service engagement, ward atmosphere and expressed emotion. However there is a general consensus that the therapeutic relationship can be defined broadly as the collaborative and affective bond between the therapist and patient, which is an essential element of the therapeutic process (Martin, Garske & Davies, 2000; McCabe & Priebe, 2004). Interest in the therapeutic relationship has grown considerably over the past few decades, primarily because there is a consistent finding that the quality of the therapeutic relationship is linked to outcome (Horvath, 2001; Johansson & Eklund, 2004; Martin et al., 2000), which remains a robust finding in various settings with different mental health issues and indeed different theoretical orientations (Forsyth, 2007; Horvath & Symonds, 1991).

Bordin's (1979) conceptualisation is the most widely used approach to investigate the therapeutic relationship. Bordin described the relationship between the patient and staff as involving three dimensions: (1) the staff and patient's agreement on the goals of therapy; (2) the staff and patient's agreement on the tasks of therapy needed to attain these goals; and (3) the emotional bond between the staff member and the patient. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) was developed with Bordin's theory in mind and has become one of the most widely used measures of the therapeutic relationship to date (Martin et al., 2000).

Some researchers have argued that the therapeutic relationship is more influential than the type of therapeutic orientation used when it comes to predicting outcome (Hovarth & Symonds, 1991; Safran & Muran, 1995) and that the relationship may be therapeutic in itself (Henry, Strupp, Schact & Gaston, 1994). Previous research has also suggested that the quality of the therapeutic relationship is correlated with patient functioning (Couture, Roberts, Penn, Cather, Otto & Goff, 2006; Dinger, Strack, Schasse & Schauenberg, 2009), possibly playing an important role in preventing the escalation of psychotic symptoms and improving family relationships (Berry, Gregg, Vasconcelos e Sa, Haddock & Barrowclough, 2012; Smerud & Rosenfarb, 2008). Hence poorer functioning and more difficult symptoms may have a detrimental influence on the quality of the therapeutic relationship. Although the evidence that the staff-patient relationship is an important predictor of outcomes in severe and enduring mental health problems seems unequivocal, there is limited research looking at the predictors of the relationship quality (McCabe & Priebe, 2004).

High expressed emotion (EE) is a popular measurement of the therapeutic relationship. EE is defined in terms of critical comments, hostility and emotional over involvement (Snyder, Wallace, Moe & Liberman, 1994). Staff and patient studies have reported relatively low levels of EE compared to relative-patient relationships and there is evidence to suggest that the absence of a positive relationship may be a more important predictor of outcome in staff-patient relationships (Berry et al., 2011; Tatton & Tarrier, 2000). There is also some evidence indicating that patient factors, such as symptoms, functioning and challenging behaviour, predict EE (Berry et al., 2011). However, a consistent finding in the EE literature is that EE is more dependent on appraisals of the client's problems than on the client's actual deficits (Wearden, Tarrier, Barrowclough, Zastowny, & Armstrong-Rahill,

2000). Attributions have been shown to be an important predictor of EE in familial relationships and may play a role in the development of positive staff-patient relationships and other relationship constructs, such as therapeutic alliance, service engagement and ward atmosphere.

Attributional theory has been around since the 18th century. In 1739 David Hume wrote the essay “A Treatise of Human Nature”. As a philosopher Hume asserted that understanding the cause of events is “an essential part in all our reasoning’s” that should be examined through experiments on which “we may hope to establish...a science” (Hume, 1739, cited in Sweeton & DeRose, 2003, p.31). Fritz Heider championed the first attributional theory in 1958. Heider believed that when individuals understand the causes behind an action or event, they are able to reduce the feeling that the world is unstable and unpredictable because they are able to identify what or who is responsible for the event (Hogg & Vaughan, 2002). His theory suggests that attributions are internal, external or a combination of both. In other words a person may behave in such a way due to their disposition (internal cause), due to the environment (external cause), or due to both.

Kelly (1967) examined how people decide whether to make external or internal attributions thus advancing Heider’s original model. Kelly identified three factors that influence attribution making: consistency, distinctiveness and consensus. In other words when a person behaves how most people would in a situation then an external attribution would be made. However, if the behaviour seems unusual compared to what is expected, internal (or dispositional) attributions will be made. For example, symptoms that are perceived as internal or within the patient’s control may tend to provoke more negativity and criticism

than those attributed to external or uncontrollable factors (Barrowclough and Hooley, 2003).

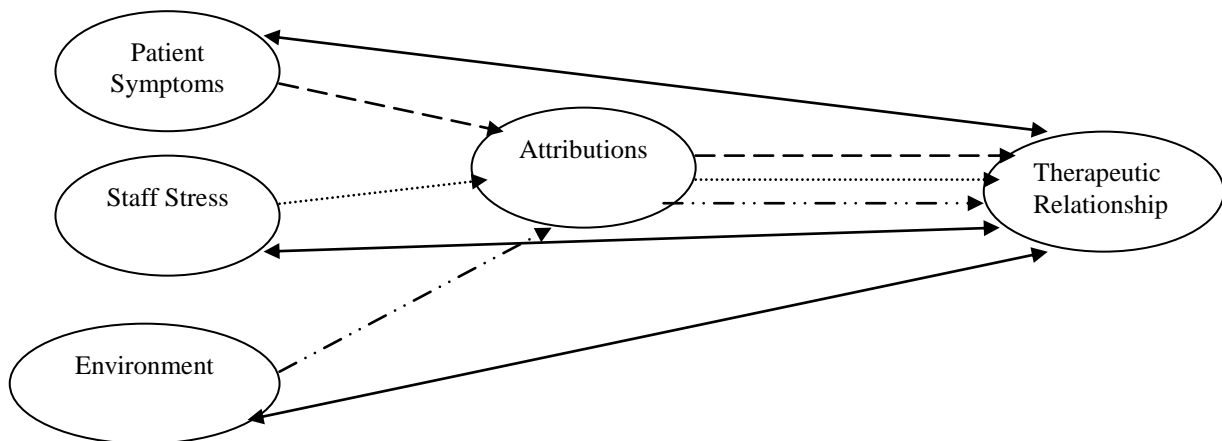
Staff attributions have also been found to influence EE in staff-patient relationships (Barrowclough, Haddock, Lowens, Conner, Pidliswyi, & Tracey, 2001). The authors found that critical comments were associated with more stable attributions for problems. In a recent study of 176 patients with a diagnosis of schizophrenia, Berry et al. (2012) noted that staff were less likely to attribute patients' problems as being within their control if they had been categorised as having a positive relationship with the patient as opposed to a neutral relationship. Furthermore, Berry et al. found that patients' who had been in positive relationships with staff (measured at baseline) had significantly less symptoms at twelve-month follow-up.

The perceived working environment has also been posited as having an association with the quality of the therapeutic relationship (Johansson & Eklund, 2004; Rossberg, Melle, Opjordsmoen, & Friis, 2008): The quality of the ward atmosphere is not only important to both staff and patient groups but may impact on the quality of the therapeutic relationship. Johansson and Eklund (2004) found that programme clarity was an important predictor of the quality of the therapeutic relationship, suggesting that the more explicit the rules and expectations of the inpatient unit, the better the ward atmosphere, therefore enhancing the quality of the therapeutic relationship. This implies that if staff are supported in strengthening the support and clarity of the ward environment it may in turn provide a solid foundation where patients may feel more at ease to express their concerns and emotions. In contrast, it would seem that a poor working environment may be costly to both staff and patients.

There is evidence to suggest that staff factors, such as burn out and morale, influence EE (Berry et al., 2011). Attributional style has been associated with psychological distress (Collins, 1996), but there are no known studies to date that investigate associations between staff stress and attributions. It is possible that staff suffering from high stress levels within their working environment, may make more negative attributions in general and more specifically towards their patients. It would also follow that making more negative attributions may lead to higher stress levels and burnout amongst staff members.

We propose a model (see Figure 1) whereby attributions mediate associations between patient symptoms, staff stress and environmental factors and staff patient relationships. Poorer relationships are also likely to have adverse effects on symptoms, staff stress and ward environment, thus leading to a negative vicious cycle.

Figure 1. Proposed mediation model



Thus in the current study we set out to test the following hypotheses:

1. Poorer staff patient relationships will be associated with staff rating patients as being more in control of their behaviour and symptoms.

2. Better staff patient relationships will be associated with lower symptomatology, higher functioning and less challenging behaviour.
3. Poorer staff patient relationships will be associated with higher staff stress and lower staff morale.
4. Higher levels of staff stress and lower morale will be associated with higher levels of attributions of control.
5. Better staff patient relationships will be associated with higher levels of service engagement and a more conducive ward atmosphere.
6. Attributions of control will mediate any associations between relationships and staff or patient variables.

METHOD

Participants

Participants were patients and staff who were taking part in a larger study to investigate the feasibility of an intervention to improve staff and patient relationships in psychiatric rehabilitation settings. The participants were recruited from 10 psychiatric in-patient rehabilitation wards in Greater Manchester. Which, provide intensive 24-hour psychiatric treatment of periods of 2-5 years. Inclusion criteria for patients and staff were 1) no proposed discharge date for the duration of the study 2) staff and patient relationship had been ongoing for a minimum of 3 months. Further inclusion criteria for the study was the ability to give informed consent, the ability to complete the questionnaires and to be able to speak and comprehend English. Patients and staff who were due to leave the ward during the study period were excluded. NHS Research Ethics Committees approved the study and all participants provided informed written consent.

Measures

Demographic information was collected using a question sheet for staff (Appendix C) and for patients' (Appendix D).

Five-Minute Speech Sample

The Five-Minute Speech Sample (FMSS; Magna, Goldstien, Karno, Milkowitz, Jenkins & Falloon, 1986) was originally designed to measure expressed emotion. The FMSS was used to ask staff to talk about their thoughts and feelings about a particular patient for five minutes. The specific instructions given to the individual are *'I'd like to hear your thoughts about (patient's name) in your own words and without my interrupting you with any questions or comments. When I ask you to begin, I'd like you to speak for 5 minutes, telling me what kind of a person (patient's name) is and how the two of you get along together. After you have begun to speak, I prefer not to answer any questions'* (Magna et al., 1986). The resulting speech sample is used to assess the respondent's attitudes and feelings about the patient as well as perceptions regarding the quality of their relationship. All speech samples were audio-taped and ratings were made directly from the recordings and transcripts in accordance with the control attribution criteria as detailed below

Attributions of Control (Appendix E for manual)

Weisman, Lopez, Karno and Jenkins (1993) developed a measure focusing on attributional control. The aim of this measure was to assess the level of controllability attributed to a patient on the basis of a natural speech sample (in this study the FMSS). Attributional statements are defined as any implied perceptions of the patients capacity to control their mental health problems, including ratings of control over symptoms and actions as well as perceptions about the patients control over schizophrenia as a whole (Berry et al, 2012). Weisman et al. (1993) extracted controllability statements from audiotapes or transcripts

and assigned global rating of controllability using a five-point scale: 1 = no perceived control; 2 = minimal perceived control; 3 = perceived control over some aspects of the illness but not others; 4 = a fair amount of perceived control over all aspects of the illness; and 5 = perceived control over all aspects of the illness. This method has been used in a number of studies assessing attributions of control in both relatives and professional carers of patients with schizophrenia and has achieved good inter-rater agreement (Hooley & Campbell, 2002; Berry et al. 2012). Attributions of control were independently rated by two fully trained raters; the first author and a peer who was independent to the research team. High levels of inter-rater reliability were obtained from a random selection of 23 speech samples from the study. (Interclass Correlation Coefficient was performed with ICC = .97). Speech samples were excluded from the analysis if no ratable attributions of control were identified (n = 6).

Working Alliance Inventory – Short Form (Appendix F)

The Working Alliance Inventory (WAI-S; Tracey & Kokotovic, 1989) is a 12-item self-report measure and uses a seven-point rating scale ranging from 1 (never) to 7 (always), was used to assess the quality of the working alliance. Parallel forms are available for the therapist (WAI-T) and client (WAI-C). The scale consists of three different subscales, as proposed by Bordin (1979): 1) therapeutic bond, 2) task agreement and 3) goal agreement. It also provides an overall working alliance score, with higher scores indicating a more favourable alliance. The WAI was found to have consistent reliability and validity across a range of diagnoses (Horvath & Greenberg, 1989) and has been found to have good psychometric properties when used in research with individuals with psychosis and their care workers (Berry, Barrowclough & Wearden, 2008).

Positive and Negative Syndrome Scale (Appendix G)

The Positive and Negative Syndrome Scale (PANSS, Kay, Fiszbein & Opler, 1987) a 30-item semi-structured interview consists of three domains: The positive subscale, the negative subscale and the general psychopathology subscale. Each symptom is rated on a seven-point scale (1= absent; 3= mild; 5= moderately severe; 7= extreme). The raters were research assistants, fully trained in using the PANSS, which involved assessing sample tapes and DVDs prior to the data collection process, and received group supervision in rating the PANSS. The PANSS is one of the most commonly used assessment tools to assess symptoms in patients with schizophrenia and has sound psychometric properties (Johnson et al., 2008; Berry et al., 2012).

Global Assessment of Functioning Scale (Appendix H)

The Global Assessment of Functioning Scale (GAF; Hall, 1995) measures the global social functioning of the patient taking into account symptoms and psychological, social and occupational functioning. The GAF is an informant rated measure and was completed by staff members for specific patients. The GAF has two subscales assessing severity of symptoms and functioning deficits. Scores on the subscales range from 0 (severe symptoms and severe lack of functioning) to 100 (no symptoms and extremely high levels of functioning). The GAF is proven to have good reliability and validity in the field of severe and enduring mental health problems (Jones, Thornicroft, Coffey & Dunn, 1995).

Social Behaviour Schedule (Appendix I)

The Social Behaviour Schedule (SBS; Wykes & Sturt, 1986) is a 21-item rating scale that is completed by staff members rating patients' behaviour. It assesses communicative

skills, socially inappropriate behaviours, autistic symptoms (muttering, laughing to self), affective symptoms (anxiety, restlessness, depression), and movement disorders (bizarre behaviour, mannerisms, posturing). Each item is rated according on a likert-type scale ranging from 0 (no problem or acceptable behaviour) to 4 (serious problem).

Barrowclough et al. (2001) report high levels of agreement and reliability with the SBS.

The Service Engagement Scale (Appendix J)

The Service Engagement Scale (SES; Tait, Birchwood & Tower, 2002) is a 14-item staff rated measure consisting of statements that assess a patient's engagement with services.

The scale consists of four sub-scales measuring availability, collaboration, help seeking and treatment adherence. The SES uses a four-point likert scale from 'not at all or rarely' to 'most of the time'. Higher scores on the scale indicate greater levels of difficulty engaging with services. The scale has high internal consistency and retest reliability (Tait, Birchwood & Trower, 2003).

The Ward Atmosphere Scale – Short Form (Appendix K)

The Ward Atmosphere Scale (WAS-S; Moos, 1974) is a self-report questionnaire comprising of 40 statements about the ward in respect of both atmosphere and ideology. Each response requires a true or false answer. There are 10 subscales that are then clustered into three different dimensions: the relationships dimension (involvement, support and spontaneity), the treatment dimension (autonomy, practical orientation, personal problem orientation, anger and aggression) and the maintenance systems dimension (order and organisation, program clarity, staff control). Higher scores indicate more positive responses to the dimensions of the ward atmosphere. The WAS has been

shown to have excellent psychometric properties and has been found to be related to both staff and patient satisfaction (Burti, Glick & Tansella, 1990).

Maslach Burnout Inventory (Appendix L)

The Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) is a self-report questionnaire consisting of 22 items that are rated on a six-point likert scale from 0 (never) to 6 (every day). The MBI measures three aspects of burnout in staff members; emotional exhaustion, depersonalisation and personal accomplishment. High scores on the emotional exhaustion and depersonalisation subscales and low scores on the personal accomplishment subscale suggest high burnout rates.

Staff Morale - Intention to Leave the Workplace (Appendix M)

Staff morale was measured using an adapted questionnaire based on Rosin and Korabik's (1991) Intentions to leave scale. The measure consisted of three items, which were scored on a likert scale from 1 (never) to 3 (frequently). Staff were also asked to give reasons for their intention to leave if they had indicated that they had a desire to do so. Research has shown that an individual's thoughts and intentions to leaving are the strongest predictor of an actual decision to leave (Cotton & Tuttle, 1986; Lee & Mowday, 1997).

Procedure

Following ethical approval, the research protocol and information packs were disseminated to psychiatric in-patient wards in Greater Manchester and the study was discussed with participating services. The purpose and nature of the study was clearly outlined in the participant information sheets (Appendix N for staff and Appendix O for client information sheets). All participants completed consent forms (Appendix P for staff and appendix Q for client consent sheets). Patients were recruited first and asked to identify their key workers;

the key worker was then approached and consent to participate was obtained from both. A pairing system was introduced for wards that had more consenting staff than patients whereby staff members were randomly allocated by an independent statistician to report on their relationship with a patient (n = 10). On one particular ward this system was implemented for the patient sample, because there were more consenting patients than staff members (n = 3). Once consent had been obtained, the staff measures were given to key workers who were identified as having at least three months' experience of working with individual patients. A key worker (sometimes called named nurse or care co-ordinator) is usually a member of staff who is introduced to a new patient within a few days of admission. The role of the key worker includes co-ordinating nursing care and providing relevant information; for example, a person's rights under the Mental Health Act. Researchers then administered the client measures and staff and patient data were matched using an anonymised coding system.

Data Analysis

Data were analysed using SPSS 20.0 for Windows. Descriptive statistics were obtained and skewness and Kurtosis values were calculated in order to check if the variables were normally distributed (see Appendix R for details). Seven of the 32 variables were not normally distributed. GAF scores were successfully transformed using the log transformation method but all other attempts at transformation were unsuccessful.

Power Calculation

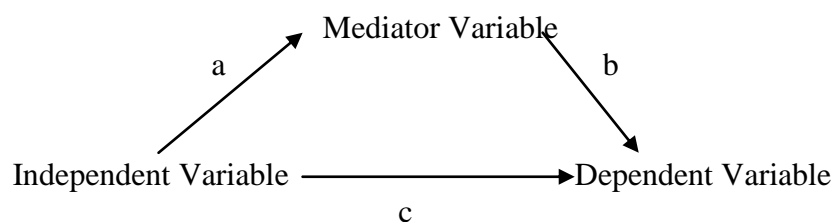
A power calculation was undertaken prior to recruitment for the study and according to Field (2009) a sample size of 50 participants would enable correlations of 0.4 or above to be detected as statistically significant with 80% power at the conventional 5% significance

level. In addition a reasonably robust regression analysis could be carried out using the 10:1 rule of subjects to predictors. Due to the exploratory nature of the study all correlations at the 5% significance level will be reported.

Associations between relationships, attributions, symptoms, functioning, service engagement, staff morale and ward atmosphere were assessed using Pearson's correlation co-efficient. Independent sample t-tests were performed where appropriate. Associations between relationships, behaviour, and burnout were measured using Spearman's bivariate correlations. Associations that involved both parametric data and non-parametric data were assessed using Spearman's bivariate correlations for consistency. Further analysis was conducted using multiple regressions to further investigate associations between the therapeutic relationship and other variables of interest.

Finally, Mediation analysis (Baron & Kenny, 1986) was undertaken to ascertain if attributions of control would mediate any observed effects between the quality of the therapeutic relationship and variables identified as correlating significantly with the relationship (see figure 2 below for a diagrammatic illustration of the hypothesised mediation process). Sobel tests were also performed to confirm the strength of any observed effects (Sobel, 1982).

Figure 2. Illustration of the mediation analysis process.



RESULTS

Participant Characteristics: Staff and Patients

The characteristics of the staff sample are summarized in Table I. below, while Table II shows patient characteristics.

Table I. Demographic characteristics of the staff sample

Staff characteristic (n = 84)	
Median length of time on unit in months (range)	43.00 (3-276)
Gender	36% male (n= 30), 64% female (n= 54)
Mean age in years (SD)	42.30 (11.09)
Ethnic group	88% White British (n= 74), 1% White Irish (n= 1), 4% Black British (n= 3), 6% Black African (n=5), 1% Black Caribbean (n= 1)
Professional background	43% Registered Mental Health Nurse (n= 36), 50% Support Worker/Nursing assistant (n= 42), 5% Occupational Therapist (n= 4), 2% House Manager (n= 2)
Median years experience in MH (range)	10.00 (1-35)
Experience in psychological interventions	43% Yes (n= 36), 57% No (n= 48)

The demographic characteristics of the patient sample are summarised in table II.

Table II. Demographic characteristics of patient sample

Patient Characteristic (n = 52)	
Median length of time on unit in months (range)	12.00 (3-96)
Gender	79% Male (n= 37), 21% Female (n= 10), No response recorded (n= 5)
Median Age in years (range)	37.00 (22-62)
Ethnic Group	77% White British (n= 36), 2% White Irish (n= 1), 11% Black British (n= 5), 2% Black African (n= 1), 2% Chinese (n= 1), 6% Mixed Caribbean (n= 3), No response recorded (n= 5)
Marital Status	0% Married (n= 0), 2% Widowed (n= 1), 13% Divorced/separated (n= 6), 85% Single (n= 40), No response recorded (n=5)
Pre-morbid Socio Economic Status	0% Professional (n= 0), 2% Intermediate (n= 1), 46% Skilled (n= 7), 17% Semi-skilled (n= 7), 3% Unskilled (n= 1), 32% Unemployed (n=13), No response recorded (n= 11)
Education level Achieved	13% University degree (n= 5), 15% A Levels (n= 6), 70% Secondary School (n=28), 2% No examinations taken (n= 1), No response recorded (n= 12)
Primary Diagnosis	84% Schizophrenia (n= 37), 7% Schizoaffective disorder (n= 3), 9% Other (n= 4), No response recorded (n= 8)
Median age of onset of illness in years (range)	21.50 (11-59)
Median no of hospitalisations (range)	3.50 (1-20)
Mental Health Act Status	63% Voluntary (n= 29), 24% Section 3 (n= 11), 4% Section 37 (n= 2), 7% Section 117 (n= 3), 2% Other (n= 1), No response recorded (n= 6)
Psychotherapy received	72% Never (n= 28), 5% Current (n= 2), 23% Past (n= 9), No response recorded (n= 13)

A summary of staff and patient measures used can be found below in Table III for staff and Table IV for patients. The tables indicate mean (SD) scores for normally distributed data and median (range) scores for data that were not normally distributed.

Table III. Staff measures

Measure	Mean (SD)	Median (Range)
WAI Task	19.38 (4.39)	
WAI Bond	22.69 (3.52)	
WAI Goal	19.28 (3.86)	
WAI Total	61.45 (10.63)	
Control Attributions	2.06 (0.99)	
WAS Relationship	5.20 (2.46)	
WAS Personal Growth	6.84 (2.75)	
WAS System Maintenance	7.98 (2.11)	
MBI Emotional Exhaustion		16.00 (3-47)
MBI Depersonalisation		3.00 (0-20)
MBI Personal Accomplishment		35.00 (19-42)
Intention To Leave	6.87 (2.20)	

Table IV. Patient measures

Measure	Mean (SD)	Median (Range)
WAI Task	18.85 (5.93)	
WAI Bond	19.48 (6.08)	
WAI Goal	18.74 (4.86)	
WAI Total	59.68 (15.22)	
PANSS Positive	13.56 (4.74)	
PANSS Negative	14.35 (5.97)	
PANSS General	31.71 (7.08)	
PANSS Total	59.11 (13.49)	
GAF Symptoms	47.57 (16.05)	
GAF Disability	41.15 (11.20)	
GAF Total	39.35 (10.59)	
SBS		14.50 (0-47)
SES Availability	2.92 (2.03)	
SES Collaboration	3.81 (2.11)	
SES Help Seeking	4.37 (2.85)	
SES Treatment Adherence	1.70 (0.99)	
SES Total	12.82 (6.49)	
WAS Relationship	5.20 (2.46)	
WAS Personal Growth	6.84 (2.75)	
WAS System Maintenance	7.98 (2.11)	

Demographic Characteristics

The quality of the therapeutic relationship was not found to be related to staff demographics, including staff gender ($t(80) = -1.91, p = .060$), ethnicity ($t(80) = -1.16, p = .24$), age ($r = -.031, p = .784$), years of experience ($r = -.109, p = .330$), and months on the unit ($r = .105, p = .365$). Patient demographics were not related to the quality of the staff-patient relationship: patient age ($r = -.134, p = .250$), gender ($t(45) = -.840, p = .405$), ethnicity ($t(74) = .423, p = .423$), Mental Health Act status ($t(70) = -.237, p = .814$), months on the unit ($r = -.127, p = .394$), and number of hospitalisations ($r = -.156, p = .302$). No other significant results were noted, suggesting that staff and patient demographics do not have an effect on the quality of the therapeutic relationship in this sample.

Staff and Patient ratings of the therapeutic relationship

Table V. Correlations for Staff and Patient WAI ratings

Measure	r	p value
WAI Total	.113	.454
WAI task subscale	.080	.594
WAI bond subscale	.019	.896
WAI goal subscale	.064	.667

No significant associations were found between staff and patient ratings of the therapeutic relationship.

Associations between staff and patient relationships and attributions of control

It was hypothesised that poorer staff-patient relationships would be positively associated with higher ratings of attributions of control (see Table VI).

Table VI. Correlations for WAI and attributions of control

Measure	r	p value
Staff WAI Total	-.511	< .001
Staff WAI task subscale	-.453	< .001
Staff WAI bond subscale	-.472	< .001
Staff WAI goal subscale	-.443	< .001
Patient WAI Total	-.001	.996
Patient WAI task subscale	-.036	.813
Patient WAI bond subscale	.086	.568
Patient WAI goal subscale	.017	.909

As predicted, there were significant negative correlations between attributions of control and staff ratings of the therapeutic relationship ($r = -.511$, $p < .001$). However, there was no association between attributions of control and patient ratings of the therapeutic relationship ($r = -.001$, $p = .996$). The results indicate that higher attributions of control resulted in a poorer rating of the quality of the therapeutic relationship from the staff member's perspective.

Are patient symptoms, functioning and challenging behaviour associated with the staff patient relationship?

It was hypothesised that better staff-patient relationships would be associated with lower symptomology, higher functioning and less challenging behaviour (see Table VII).

Table VII. Correlations for WAI and PANSS

Measure	PANSS Total		PANSS positive		PANSS negative		PANSS general	
	r	p	r	p	r	p	r	p
Staff WAI Total	-.217	.058	.014	.903	-.281	.011	-.183	.104
Staff WAI task subscale	-.348	.002	-.055	.631	-.373	.001	-.273	.014
Staff WAI bond subscale	-.133	.247	.039	.734	-.184	.097	-.150	.182
Staff WAI goal subscale	-.107	.353	.090	.428	-.239	.030	-.059	.601
Patient WAI Total	.221	.132	.383	.006	.137	.333	.122	.399
Patient WAI task subscale	.097	.508	.262	.064	.105	.453	.009	.952
Patient WAI bond subscale	.252	.077	.410	.003	.115	.406	.174	.218
Patient WAI goal subscale	.241	.096	.326	.020	.127	.363	.175	.220

Staff therapeutic relationship ratings were not found to be associated with symptom scores as measured by the PANSS total, positive subscale or the general psychopathology subscale. However, staff ratings of the relationship were found to be negatively associated with the negative symptom subscale on the PANSS ($r = -.281$, $p = .011$). Additionally, staff ratings on the task subscale of the WAI correlated with both the negative ($r = -.373$, $p = .001$) and general ($r = -.273$, $p = .014$) subscales as well as total PANSS scores ($r = -.348$, $p = .002$), but not the PANSS positive subscale. Furthermore, staff ratings on the goal subscale of the WAI were also negatively associated with the negative symptom subscale of the PANSS ($r = -.239$, $p = .030$) but not the positive, general or total scores. No significant findings were noted on any of the PANSS subscales and the WAI bond scale, suggesting that increased patient symptomology may have a detrimental effect on the therapeutic relationship at least in terms of task and goal agreement, and it would indicate that negative symptoms have the most detrimental effect of all.

Patient ratings of the therapeutic relationship were not found to be significantly associated with patient symptomology as measured by the PANSS total, negative subscale or the general subscale. However, patients' ratings of the therapeutic relationship correlated positively with the positive symptom subscale on the PANSS ($r = .383$, $p = .006$). Patient ratings of the WAI task scale were not found to be associated with the PANSS total, positive subscale negative subscale or general subscale. Significant correlations were noted with the PANSS positive subscale and the WAI bond scale ($r = .410$, $p = .003$) but not the PANSS total, negative or general subscale. Significant correlations were also found between the patient WAI goal subscale and the PANSS positive subscale ($r = .326$, $p = .020$) but not the PANSS total, negative or general subscale. These suggestions indicate that the

more positive symptoms displayed by the patient the better their rating of the therapeutic relationship.

The results for patient functioning and the therapeutic relationship are displayed in Table VIII.

Table VIII. Correlations for WAI and GAF

Measure	GAF total		GAF symptoms		GAF disability	
	r	p	r	p	r	p
Staff WAI Total	.054	.628	.063	.577	.198	.074
Staff WAI task subscale	.085	.449	.145	.193	.186	.095
Staff WAI bond subscale	.063	.573	.032	.774	.246	.025
Staff WAI goal subscale	.016	.884	.006	.956	.143	.198
Patient WAI Total	-.310	.026	-.222	.114	-.241	.085
Patient WAI task subscale	-.271	.050	-.088	.531	-.215	.122
Patient WAI bond subscale	-.219	.112	-.195	.157	-.142	.305
Patient WAI goal subscale	-.366	.007	-.328	.016	-.320	.019

With respect to patient functioning significant results were noted between the WAI bond and the GAF disability subscale ($r = .246$, $p = .025$). There were no other significant associations found for any other subscales or total scale scores in relation for patient functioning and staff ratings of the therapeutic relationship. These findings are in contrast to the original hypothesis in that levels of patient functioning did not appear to be associated with staff ratings of the quality of the therapeutic relationship, other than the bond subscale of the WAI, which suggests that higher functioning patients are perceived as more able to bond with staff which is in line with our original hypothesis.

Patient scores on the WAI and the GAF total scores were negatively associated ($r = -.310$, $p = .026$), but not for the GAF symptom subscale or the disability subscale. Negative associations were found between the WAI task scale and the GAF total ($r = -.271$, $p = .050$), but not the symptoms or disability subscale of the GAF. Further negative associations

were also found between the WAI goal subscale and the GAF total ($r = -.366, p = .007$), symptom ($r = -.328, p = .016$) and disability subscale ($r = -.320, p = .019$). No significant correlations were found between the WAI bond subscale and the GAF total, symptoms or disability subscale. These findings suggest that lower levels of functioning amongst patients is negatively associated with the quality of the patient rated therapeutic which is in line with our original prediction.

It was hypothesised that patient’s challenging behaviour would have a negative impact on the quality of the staff patient relationship. The results for associations between the WAI and SBS are detailed in Table IX.

Table IX. Correlations for WAI and SBS

Measure	SBS total	
	r	p value
Staff WAI Total	-.214	.060
Staff WAI task subscale	-.227	.045
Staff WAI bond subscale	-.194	.087
Staff WAI goal subscale	-.194	.086
Patient WAI Total	-.033	.832
Patient WAI task subscale	-.021	.890
Patient WAI bond subscale	.003	.984
Patient WAI goal subscale	-.052	.737

No significant correlations were found between staff ratings of the WAI total, bond or goal subscales and the SBS; significant findings were noted between the WAI task subscale and SBS ($r = -.227, p = .045$). No associations were found with patient ratings of the WAI total, task, bond or the goal subscale and the SBS. This finding suggests that the therapeutic relationship is not dependent on a patient’s challenging behaviour other than on the task subscale of the WAI for staff members.

Are staff and patient relationships associated with staff stress levels?

It was hypothesised that poorer staff and patient relationships will be associated with higher levels of staff burnout and lower staff morale. The correlations for the WAI and MBI are reported in Table X.

Table X. Correlations for the WAI and MBI

Measure	Maslach Burnout Inventory					
	Emotional exhaustion		Depersonalisation		Personal accomplishment	
	r	p value	r	p value	r	p value
Staff WAI Total	-.150	.178	-.115	.303	.353	.001
Staff WAI task subscale	-.166	.137	-.084	.451	.311	.004
Staff WAI bond subscale	-.175	.114	-.092	.407	.395	< .001
Staff WAI goal subscale	-.123	.268	-.144	.195	.336	.002
Patient WAI Total	-.051	.718	-.278	.046	-.023	.873
Patient WAI task subscale	.078	.577	-.267	.053	-.009	.949
Patient WAI bond subscale	-.072	.607	-.072	.607	-.313	.021
Patient WAI goal subscale	-.162	.246	-.250	.071	-.050	.721

In terms of staff burnout no significant association was found between staff ratings of the WAI total and the emotional exhaustion subscale of the MBI or the depersonalisation subscale. However, a significant positive correlation was found between the staff WAI total and the personal accomplishment subscale of the MBI ($r = .353, p = .001$). No significant correlations were noted between the WAI task subscale and MBI emotional exhaustion, or MBI depersonalisation subscale, but there were significant positive associations between staff WAI task subscale and the MBI personal accomplishment scale ($r = .311, p = .004$). No associations were noted between the WAI bond subscale and MBI emotional exhaustion, or MBI depersonalisation, again a significant positive correlation was found between the WAI bond and the MBI personal accomplishment ($r = .395, p < .001$). A similar pattern was observed between the WAI goal subscale with non-significant findings for the MBI emotional exhaustion subscale and MBI depersonalisation subscales and positive associations with the MBI personal accomplishment scale ($r = .336, p = .002$).

This seems to indicate that staff stress per se did not affect the quality of the therapeutic relationship but rather higher feelings of personal accomplishment may improve the relationship quality for staff.

There were no significant associations between the patient ratings of the WAI total and MBI emotional exhaustion or personal accomplishment scale. Conversely, there was a significant negative relationship found between patient ratings of the WAI total and the depersonalisation subscale of the MBI ($r = -.278, p = .046$). No significant findings were observed for the WAI task or goal subscales and the MBI emotional exhaustion, depersonalisation or personal accomplishment subscales. The WAI bond subscale revealed no association between MBI emotional exhaustion or personal accomplishment scales, but a significant negative correlation was observed with the depersonalisation subscale ($r = -.313, p = .021$). As predicted, higher staff stress in terms of depersonalisation has a detrimental effect on the quality of the staff and patient relationship from the patient's perspective.

It was hypothesised that lower staff morale would lead to poorer staff and patient relationships; staff morale was measured by the intention to leave scale (See in table XI).

Table XI. Correlations for the WAI and Staff Morale

Measure	r	p value
Staff WAI Total	-.081	.470
Staff WAI task subscale	-.097	.386
Staff WAI bond subscale	-.105	.343
Staff WAI goal subscale	-.067	.547
Patient WAI Total	-.017	.906
Patient WAI task subscale	-.072	.607
Patient WAI bond subscale	.055	.692
Patient WAI goal subscale	-.043	.758

There were no significant associations found between staff or patient ratings of the WAI and staff morale. Intimating that staff morale and the quality of the therapeutic relationship were not related.

Are attributions of control associated with staff stress levels and morale?

It was hypothesised higher levels of staff stress and lower morale would be associated with higher levels of attributions of control.

No significant correlations were noted between the MBI emotional exhaustion subscale ($r = -.102$, $p = .367$), the MBI depersonalisation subscale ($r = -.002$, $p = .098$) or the personal accomplishment subscale ($r = -.186$, $p = .098$) and attributions of control. Attributions of control were not found to be significantly correlated with staff morale as measured by the intention to leave scale ($r = .015$, $p = .896$). These findings are contradictory to our original hypothesis and suggest that staff stress and morale are not associated with attributions of control.

Are staff and patient relationships associated with service engagement and ward atmosphere?

It was hypothesised that better staff-patient relationships would be positively associated with higher levels of service engagement and a more conducive ward atmosphere (see Table XII).

Table XII. Correlations for WAI and SES

Measure	Service Engagement Scale									
	Total		Availability		Collaboration		Help seeking		Treatment Adherence	
	r	p	r	p	r	p	r	p	r	p
Staff WAI Total	-.599	< .001	-.299	.006	-.695	< .001	-.274	.013	-.476	< .001
Staff WAI task subscale	-.560	< .001	-.274	.013	-.657	< .001	-.296	.007	-.391	< .001
Staff WAI bond subscale	-.471	< .001	-.241	.028	-.567	< .001	-.163	.140	-.440	< .001
Staff WAI goal subscale	-.611	< .001	-.324	.003	-.673	< .001	-.320	.003	-.498	< .001
Patient WAI Total	-.225	.132	-.003	.983	-.026	.861	-.294	.045	-.263	.077
Patient WAI task subscale	-.216	.144	-.080	.588	-.004	.979	-.250	.086	-.227	.125
Patient WAI bond subscale	-.228	.120	.035	.812	-.040	.783	-.339	.017	-.248	.089
Patient WAI goal subscale	-.097	.519	.073	.622	.049	.739	-.132	.370	-.270	.066

The WAI total and SES total was highly significant ($r = -.599$, $p < .001$), SES availability ($r = -.299$, $p = .006$), SES collaboration ($r = -.695$, $p < .001$), SES help seeking ($r = -.274$, $p = .013$) and SES treatment adherence ($r = -.476$, $p < .001$). Furthermore, the WAI and SES revealed negative significant correlations on all scales apart from the staff WAI bond and SES help seeking subscales. Suggesting that the more engaged the patient is deemed to be with the therapeutic process the better the quality of the alliance. Patient ratings of the therapeutic relationship were not significantly associated with SES total, availability, collaboration or treatment adherence. The SES help seeking subscale was negatively correlated with the WAI total ($r = -.294$, $p = .045$) and WAI bond subscale ($r = -.339$, $p = .017$), intimating that those patients who feel more able to seek help from staff members rate the quality of the therapeutic relationship more favourably.

Ward atmosphere was hypothesised to have an effect on the quality of the staff and patient relationship (see Table XIII).

Table XIII. Correlation for the WAI and WAS

Measures	Ward Atmosphere Scale					
	Relationship		Personal Growth		System maintenance	
	r	p	r	p	r	p
Staff WAI Total	.308	.005	.241	.030	.245	.027
Staff WAI task subscale	.301	.006	.251	.024	.273	.013
Staff WAI bond subscale	.255	.020	.122	.273	.168	.129
Staff WAI goal subscale	.264	.016	.238	.031	.235	.032
Patient WAI Total	.406	.003	.405	.003	.431	.002
Patient WAI task subscale	.384	.005	.348	.011	.503	< .001
Patient WAI bond subscale	.333	.015	.365	.007	.280	.047
Patient WAI goal subscale	.388	.004	.291	.034	.401	.004

Staff ratings of the therapeutic relationship were found to be positively correlated with staff ratings of the ward atmosphere on all subscales; the WAS relationship dimension ($r = .308, p = .005$), personal growth dimension ($r = .241, p = .030$) and system maintenance dimension ($r = .245, p = .027$). Patient ratings of the WAI and WAS were also found to be positively associated on all the WAS subscales. The relationship dimension having a significant positive correlation ($r = .406, p = .003$), the personal growth dimension ($r = .405, p = .003$) and the system maintenance dimension ($r = .431, p = .002$), the results indicate that staff and patient ratings of the quality of the therapeutic relationship were associated with a better ward atmosphere.

Regression Analysis

In order to further examine the associations between staff and patient relationships, multiple hierarchical regression analysis was performed on the variables that had been found to be significantly correlated with the therapeutic relationship (dependent variable, as measured by the WAI) from the staff members' perspective. Seven predictor variables were included in the regression analysis in line with the ratio of 10:1 participants to predictors (Field, 2009). Independent variables included patient symptoms (PANSS negative subscale), attributions of control, staff burnout (personal accomplishment

subscale), service engagement, (SES total), and ward atmosphere (all subscales). The results are presented in table XIV.

Table XIV. Regression model for Staff WAI scores and significant correlations

Variable	Beta	SE b	β	t	p value	95% C.I
Constant	59.23	8.15				
MBI Personal accomplishment	.354	.190	.175	1.86	.067	-.025-.732
Attributions of control	-3.50	1.016	-.328	-3.44	< .001	-5.52-1.47
SES Total	-.600	.169	-.350	-3.54	< .001	-.937-.262
PANNS negative scale	-.160	.172	-.086	-.931	.355	-.502-.183
Ward Atmosphere:						
Relationship	.304	.410	.072	.740	.462	-.515-1.123
Personal Growth	.490	.416	.113	1.17	.243	-.340-1.32
System maintenance	.125	.576	.022	.217	.829	-1.02-1.27

(Note: Adjusted $R^2 = .533$; $F = 11.01$, $p = < .001$)

Using the enter method, a significant model emerged $F(7, 68) = 11.10$. The adjusted R^2 indicated that 53% of the variance in staff-patient relationships (as measured by the staff-completed WAI) was explained by the model. The regression analysis confirmed that attributions of control and service engagement were the strongest associates of the quality of the therapeutic alliance from the staff member's perspective.

A further regression analysis was conducted using the patient scores from the WAI. Due to the smaller number of patient data only four variables were entered into the regression to ensure robustness, these variables were chosen as they had revealed the most significant results previous correlation analysis. The significant correlations explored were symptoms (PANSS positive symptoms subscale) and ward atmosphere (WAS relationship, personal growth and system maintenance dimensions). See table XV.

Table XV. Regression model for Patient WAI scores and significant correlations

Variable	Beta	SE b	β	t	p value	95% C.I
Constant	17.07	8.13				
PANSS Positive Subscale	.760	.414	.229	1.83	.074	-.076 – 1.56
Ward Atmosphere:						
Relationship	1.08	.883	.184	1.22	.226	-.698 – 2.86
Personal Growth	1.49	.780	.267	1.91	.062	-.078 – 3.07
System maintenance	1.71	.942	.248	1.81	.076	-.190 – 3.61

(Note: Adjusted $R^2 = .356$; $F = 7.35$, $p < .001$)

Again using the enter method, a significant model emerged $F(4, 42) = 7.35$. The adjusted R^2 indicated that 36% of the variance in staff-service user relationships (as measured by the patient-completed WAI) was explained by the model. Although the individual variables did not reach statistical significance, the standardised regression coefficients (β) suggest the WAS personal growth and system maintenance dimensions are the strongest predictors of the quality of the therapeutic relationship in the regression model.

Do attributions mediate the effect of staff and patient relationships with other factors?

It was hypothesised that attributions of control would mediate any associations between relationships and staff or patient variables.

To examine the above hypothesis, mediation analysis was performed in accordance with Baron and Kenny's (1986) guidelines. Woodworth's (1928) Stimulus-Organism-Response model (S-O-R) underpins Barron and Kenny's mediation analysis research. A diagrammatic illustration of the mediation analysis can be found on page 80 (Figure 2).

Three regressions were performed to test the effect of a mediator; 1) regression of staff rated WAI (dependent variable) on other variables (criterion variable, e.g., staff gender), 2) regression of attributions of control (mediator variable) on criterion variables and 3) hierarchical regression of the dependent variable (WAI) on the moderator variable (attribution of control) and the criterion variables (see Table XVI).

Table XVI. Mediation Analysis of Staff WAI and Attributions of control and other variables

Stage	Analysis	R	R ²	R ² Change	Beta	P value
One	WAI on PANSS N	.281	.079		-.281	.011
Two	AC on PANSS N	.203	.041		-.203	.049
Three step 1	WAI on AC	.511	.261		-.511	< .001
step 2	WAI on PANSS N	.542	.294	.033	-.187	.064
One	WAI on MBI PA	.410	.168		.410	< .001
Two	AC on MBI PA	.241	.058		-.241	.031
Three step 1	WAI on AC	.511	.261		-.511	< .001
step 2	WAI on MBI PA	.597	.356	.096	.320	.001
One	WAI on SES	.599	.359		-.599	< .001
Two	AC on SES	.288	.083		.288	.010
Three step 1	WAI on AC	.511	.261		-.511	< .001
step 2	WAI on SES	.590	.466	.117	-.474	< .004
One	WAI on WAS R	.308	.095		.308	.005
Two	AC on WAS R	.219	.048		-.219	.050
Three step 1	WAI on AC	.511	.261		-.511	< .001
step 2	WAI on WAS R	.554	.307	.047	.221	.028
One	WAI on WAS PG	.241	.058		.241	.030
Two	AC on WAS PG	.089	.008		.089	.437
Three step 1	WAI on AC	.511	.261		-.511	< .001
step 2	WAI on WAS PG	.578	.334	0.79	.282	.004
One	WAI on WAS SM	.245	.060		.245	.027
Two	AC on WAS SM	.013	.000		-.013	.007
Three step 1	WAI on AC	.511	.261		-.511	< .001
step 2	WAI on WAS SM	.571	.326	.065	.255	.009

Key = WAI – Working Alliance Inventory, PANSS N – Positive and negative syndrome scale (negative subscale), AC - Attributions of Control, MBI (PA) – Maslach Burnout Inventory (personal accomplishment subscale), SES – Service Engagement Scale, WAS R – Ward Atmosphere Scale (relationship dimension), WAS PG - Ward Atmosphere Scale (personal growth dimension), WAS SM - Ward Atmosphere Scale (system maintenance dimension).

The results of the mediation analysis show full mediation has not occurred between any of the variables. Of the six variables tested using Baron and Kenny's (1986) model, the only variable to reveal a mediation effect was the PANSS negative symptom scale, with the resulting regression becoming non-significant at stage three as predicted by the mediation model (Emsley, Dunn & White, 2010). Further analysis utilising Sobel's test (Preacher, 2012; Sobel, 1982) of mediation effects rendered this finding insignificant (Sobel test = .040, $p = .483$). Our results show that although attributions of control were significantly correlated with the quality of the therapeutic relationship (through correlational analysis), it did not have full mediating effects between the other variables and the therapeutic relationship, suggesting that there may be other factors involved in the model. Mediation analysis was not attempted on the patient ratings of the WAI and they were not found to be significantly associated with attributions of control.

DISCUSSION

The aim of the study was to investigate the role of attributions, personal and environmental factors on the quality of the staff patient relationship. Staff and patient ratings of the therapeutic relationship were not significantly correlated. This finding is interesting in itself and may suggest the staff and patients' views of what constitutes a favourable relationship may be different. This could also suggest that the quality of the relationship from the point of view of the individual may not be dependent on the other person's opinion of that individual at that point in time. Although it seems pertinent to assess the quality of the relationship from both parties as intrinsically any relationship involves two people, the WAI may not tap into constructs that overlap between the two.

We found that staff who rated the therapeutic relationship as more favorable made fewer ratings of attributions of control, although this did not correlate with patient ratings of the relationship. Ward atmosphere was found to be positively associated with the therapeutic relationship; furthermore, we found lack of service engagement to be detrimental to the quality of the relationship. Patient behaviour and staff morale were not found to be associated with relationship quality.

Patient symptoms, functioning and staff stress revealed mixed findings. Negative symptoms (as measured by the PANSS) were found to be detrimental to the quality of the therapeutic relationship from the staff perspective, whereas patient ratings of the relationship were found to be positively associated with the PANSS positive symptom scale. With regard to patient functioning no significant findings were noted between staff ratings of the relationship and functioning. In contrast, patients who were rated as having higher levels of functioning rated the therapeutic relationship as more favorable. Staff stress was not related to the relationship quality from the staff perspective, but higher levels of personal accomplishment were found to improve the relationship quality. The depersonalisation subscale of the MBI was found to have a detrimental effect on patients' ratings of the relationship.

The results show that consistent with previous research, staff who perceived that patients had more control over their symptoms and behaviour were more likely to report poorer quality therapeutic relationships (Barrowclough et al., 2001; Berry et al., 2012). This finding suggests that attributions play a role in the development of staff and patient relationships. It may be that if staff feel that the patient is more in control of their problems then they are less likely to form positive relationships with the patient. Or

conversely, it may be that staff who have better therapeutic relationships with patients are less likely to attribute their problems as being within their control and are more likely to blame external influences. It is interesting to note that staff ratings of attributions of control did not seem to influence the patients reporting of the quality of the staff patient relationship. This could imply that staff members do not let their attributions interfere with the way they interact with their patients.

Contrary to the original hypothesis, overall symptom scores (as measured by the PANSS) were not found to be associated with the therapeutic relationship. The only significant findings for staff ratings of the relationship were with the negative subscale of the PANSS, suggesting that the quality of the therapeutic relationship is associated with the patients' lack of emotional response or blunted affect. This finding is supported in the significant association found between the task subscale on the WAI and subscales of the PANSS, further adding to the hypothesis that negative behaviour, such as reluctance to perform agreed tasks, social withdrawal and diminished rapport contributes to a poorer working relationship. This finding is in keeping with previous research in the field of severe and enduring mental health problems (Prince, 2007; Wearden et al., 2000).

Patients' scores of the therapeutic relationship were not found to be significantly associated with the PANSS total score. There was, however, a significant relationship between the quality of the therapeutic relationship and the positive subscale of the PANSS, i.e., patients with more positive symptoms, such as delusions and hallucinations, rated the therapeutic relationship more positively. This finding is interesting in itself and may reflect the patient's desire to form relationships with staff as they are generally socially isolated due

to their symptoms, or that the nature of positive symptoms, such as grandiosity, may have inflated their perception of the therapeutic relationship.

We hypothesized that patient functioning would be associated with the quality of the therapeutic relationship. However, no associations were found between staff ratings of the therapeutic relationships and levels of functioning, this is in contrast to previous research that has found that lower levels of functioning have had a detrimental effect on the quality of the therapeutic relationship (Couture et al., 2006; Johansson & Eklund 2004; Moore, Ball & Kuipers, 1992). It may be that the staff within the rehabilitation units are used to patients' functioning difficulties and that this does not influence their appraisal of the quality of the relationship.

Interestingly, patient reports of the quality of the therapeutic relationship were related to global assessment of functioning, intimating that a higher level of functioning was found to have a positive influence on the quality of the therapeutic relationship from the patient's perspective, which is in keeping with previous research findings (Johansson & Eklund, 2004; Moore et al, 1992). More research is needed to establish what role higher levels of functioning actually play in the therapeutic relationship, at least from the patient's perspective. It may be that patients with higher levels of functioning are able to understand the need for treatment and are more able to actively engage in the therapeutic relationship than those with a deficit in functioning.

Challenging behaviour was also predicted to have a negative impact on relationships. However, our findings show that the only significant association was between the task subscale of the staff rated WAI and the SBS, i.e., severe behavioural problems are not in

fact related to the quality of the therapeutic relationship from either the staff or patients perspectives. This is in contrast to previous inpatient research that has found more challenging behaviour to have links with more rejection and frustration from staff (Charlesworth, Sacks, Templer & Thackery, 1993; Couture et al, 2006).

Staff stress and morale were predicted to have a detrimental effect on the quality of the therapeutic relationship. We were unable to find significant associations between staff ratings of the relationship and burnout, which is not in keeping with previous research. Dennis and Leach (2007) found that higher levels of staff burnout related to higher expressed emotion. It may be that staff in our sample were reluctant to reveal the extent of their stress levels in the study or that perhaps they felt able to deal with any stress they encountered in the workplace. A significant correlation emerged between staff personal accomplishment on the MBI and their ratings of the relationship. This finding may mean that rather than burnout per se having a detrimental effect on the relationship, a positive sense of personal achievement in the workplace may have a positive effect or that a positive relationship gives staff a better sense of personal achievement.

Patient ratings of the therapeutic relationship were found to be associated with the depersonalisation subscale of the MBI. This may suggest that staff that are less emotionally available in the workplace due to high stress levels may be less aware of their patient's needs and therefore alienate themselves from the patient producing poorer patient ratings of the relationship. Conversely, poorer therapeutic relationships may create a more critical environment thereby exacerbating the emotional state of the individual.

Interestingly, there was no relationship between staff morale and patient or staff ratings of the therapeutic relationship, which is in contrast to our original predictions, and previous research (Totman, Lewando-Hundt, Wearn, Paul & Johnson, 2011). The mean score for this scale in our study was 6.87 (which is in line with previous research, Rosin & Korabik, 1997), the maximum score for high staff stress that could have been obtained was 12. It may be that perhaps this staff group did not report high levels of staff morale in this instance, possibly due to the measure used (the Intention to Leave scale). The Intention to Leave scale asks specific questions about intentions to leave their current job and perhaps the current economic climate and lack of alternative employment may have influenced their answers or that they were happy in their current posts.

Service engagement has been found to have an association with the therapeutic relationship (Burti et al., 1990). We found highly significant effects on the staff ratings of the therapeutic relationship which strongly suggests that the more engaged a patient was deemed to be with the therapeutic process in general the better the quality of the alliance from the staff member's perspective. Patient ratings of the therapeutic relationship were not found to be related to service engagement. However, a positive association was noted on the help seeking scale of the SES suggesting that those patients who were more able to seek help from staff members reported better alliances. It may be that they have more interactions with staff members due to their help seeking behaviour or that better therapeutic relationships make it easier for patients to seek help.

In line with our predictions staff and patient ratings of the therapeutic relationship correlated significantly with the ward atmosphere scale. This finding is in keeping with previous research that a more favourable ward atmosphere is positively associated with a better therapeutic relationship for both staff and patients (Johansson & Eklund, 2004;

Rossberg, 2008). It seems that if staff are satisfied with their working environment then this may have a positive association on the type of interactions between staff and patient and therefore the quality of the therapeutic relationship. It is equally plausible that better therapeutic relationships mean staff and patients are happier with the ward atmosphere.

The results of the regression analysis in this study show that there was a highly significant association between staff ratings of the WAI and attributions of control, confirming our original hypothesis that staff who report more positive relationships with patients are less likely to attribute the patients problems as being within their control than those staff who report poor quality relationships. This in itself is an interesting finding and may have significant implications for future research and practice. Service engagement also emerged from the regression model as a strong predictor of the relationship quality.

From the patients' perspective, ward atmosphere appeared to be the strongest predictor of the quality of the therapeutic relationship. This would suggest that patients are attuned to the ward atmosphere and that the better the working environment for staff and patients, the more highly the patients rated the quality of the therapeutic relationship. This would suggest that an atmosphere where clarity not only of the treatment programmes but also of the overall 'holding' environment may improve the quality of the therapeutic relationship.

A mediation analysis was carried out to ascertain if attributions of control would mediate the effects found in other significant variables and the quality of the therapeutic relationship. We did not observe total mediation effects within the analysis, but observed differences when Beta levels were examined; we found changes in the PANSS negative symptom scale in line with Baron and Kenny's (1986) mediation model. However, after

further robust testing in the form of Sobel's test (1982), this observation was proved to be non-significant. Although this finding is not in line with our original predictions, further investigation is warranted to establish if any other factors may mediate effects, thus, furthering our understanding of the very complex and important concept of the therapeutic relationship. It may be that factors such as psychological mindedness play a role in mediating attributions of control.

STRENGTHS AND LIMITATIONS

The present study had a relatively large sample size, and we were able to investigate whether attributions of control were associated with the quality of the therapeutic relationship along with several other factors. Due to the exploratory nature of the study several correlations were performed to ensure that any important findings were not missed. Although the study did not employ Bonferonni adjustment, we acknowledge the problems of multiple testing (i.e. the increase in the possibility of significant results). However, the results are suggestive of relationships between variables and the majority of statistical significance is high. Furthermore, due to the correlational design of the study we cannot say for certain that if staff believe that patients' symptoms and behaviours are more within their control that a poorer therapeutic relationship will automatically follow. It may therefore be possible that better therapeutic relationships lead staff to attribute patients' problems as being outside their control. The cross-sectional design of the study only measured the therapeutic relationship at one moment in time and does not take into account the possibility that relationships are fluid and changeable over time (Berry et al., 2012; McCabe & Priebe, 2004). Further research is needed to measure the quality of the relationship at different time points to map the course of these changes.

Ratings of attributions were made from the Five Minute Speech Sample (Magna et al., 1986), which is a natural speech sample method and would have facilitated the reduction of any social desirability bias that may have been introduced had the researchers asked direct questions regarding attributions. This in itself may produce its own problems in that the staff member is not directed in any way, when speaking, so there is no control over the number or quality (or indeed lack) of the attributions that the participant makes.

Another limitation of the study was that some care workers completed measures for more than one patient and in fact on one particular unit some patients completed measures for more than one staff member, thus producing the problem of non-independent data. This is a common problem in research in staff and patient relationships (Berry et al., 2012).

However, the threat was minimised by the relatively large sample size and the fact that the patients were recruited from quite a number of different sites and different psychiatric teams. We further reduced this risk by ensuring that any data that pertained to specific patient staff dyads were not duplicated. This included the Working Alliance Inventory and Service Engagement Scale because they are designed to ask questions about specific patients or staff members.

A further limitation of the study was the potential selective nature of the sample patients and staff. Staff and patients from across the Greater Manchester were approached to take part in the study. It is possible that staff who felt they already had a positive relationship with their patients were more willing to take part in the study, whereas other staff members who felt they had more difficult relationships at that time may have felt more vulnerable to exposing themselves and be fearful of the potential repercussions despite the reassurances of confidentiality. Patients themselves had to give consent to participate in the research and it may be that those patients with better levels of functioning or at a less acute stage of

their illness may have been able to give consent more easily than those who perhaps were more unwell at the time.

One of the strengths of the research design was that the therapeutic relationship was examined from both the staff and patients' perspective with both staff and patients completing the same measure. This methodology is in keeping with recommendations from the literature base indicating the importance of a dual perspective (Norcross, 2002). Another strength of the design was again that staff and patients completed several measures which meant that perspectives of both staff and patients were taken into account rather than relying solely on staff reports of patient characteristics and psychopathology, thus, giving a more realistic overview of the therapeutic relationship and its component parts.

FUTURE RESEARCH

The study indicates several key areas for future investigations into the predictors of the quality of the therapeutic relationship between psychiatric staff and people with severe and enduring mental health problems. Firstly, the majority of the existing research on the quality of the therapeutic relationship has used cross-sectional designs (including the current study) and although this research has furthered our understanding of the concept of the therapeutic relationship, more studies are needed to take into account the notion that the therapeutic relationship may not be a stable construct and may be more fluid and changeable over time. It may be more important to consider this fluidity of the relationship and map its transition over time, perhaps following a longitudinal design to assess the nature of the relationship between staff and patients to ascertain what may contribute to the changes that may occur.

The current study found associations between attributions of control and the quality of the therapeutic relationship. The measure used was the FMSS, which has both benefits and drawbacks. By its very nature the FMSS is a natural speech sample and the staff member is not directed in any way by the research, which reduces the risk of social desirability bias. However, due to the non-directive nature of this measure the FMSS can only provide limited material from which to rate attributions. Future studies should consider the use of the Camberwell Family Interview (CFI; Vaughn & Leff, 1976). The CFI is a semi-structured interview that is designed to elicit participants' descriptions of daily events and interactions with individuals that have severe and enduring mental problems. Although this measure takes much longer to administer than the FMSS (approximately 45 minutes), it would allow for more attributional material to be elicited. It may also be pertinent to assess individuals' attributional style using questionnaires, such as the ASQ (Attributional Style Questionnaire; Peterson et al., 1982) to see if this affects attributions of control and the therapeutic relationship.

Attributions of control have been found to be associated with the quality of the staff patient relationship in this study and previous research (Barrowclough et al., 2001; Berry et al., 2012). Future studies should examine the effects of interventions to improve staff and patient relationships. Perhaps with the focus on psychological mindedness, assisting staff to examine their own cognitions which, in turn may help them to make less patient blaming attributions, thus increasing their understanding of the psychological underpinnings of the patient's behaviour and perhaps more importantly, what purpose the behaviour serves for the individual patient.

CLINICAL IMPLICATIONS

This study has helped to contribute to the understanding of the factors that influence the quality of the therapeutic relationship from both the staff member and patient perspective. There has been limited research investigating the effects of attributions on the quality of the therapeutic relationship and this study has found that attributions of control do have an effect on staff and patient relationships, at least from the staff members' perspective. Interventions that are aimed at making staff more aware of how their own cognitions and experiences may impinge on the therapeutic relationship may further their understanding of the psychological mechanisms involved in patient difficulties, perhaps allowing staff to reattribute the causes of patients' behaviours and symptomology.

Understanding associations between staff and patients' views of the therapeutic relationship and what may improve the quality of this relationship also highlights the importance of staff training needs. As previously discussed, staff members could be trained to be more aware of the patient's experience and needs, thereby improving the quality of the therapeutic relationship. This highlights areas within the staff members themselves that could be further examined within the training environment (or through effective supervision) to ensure that the best possible therapeutic relationship can be achieved from both the client and patients perspectives.

As previously suggested increasing staff members psychological awareness may have an association with the relationship quality, in 2009, Berry and colleagues trialled a pilot study that involved developing psychological formulations with psychiatric teams. The intervention aimed at helping to reduce negative appraisals of patients with schizophrenia by helping the staff to understand the psychological factors that may be involved in the

development and maintenance of the patient's problems. Berry et al. (2009) found that the interventions had a positive impact on staff perceptions of patients' difficulties. More importantly, there were significant increases in staff perceptions relating to the degree of control patients and staff had over problems. There was an increase in the amount of effort they felt the service user was making in coping with their difficulties, reductions in blame and more optimism about future treatment. Staff also reported an increased understanding of patients' problems and more positive feelings towards their patients and an increase in confidence in their work.

Working environment was found to play an important factor in the relationship quality; perhaps more consideration should be given to staff and patients' expectations and experiences of the ward environment and their future wishes. It is important to remember that by its very nature inpatient unit environments are unique in the fact that staff and patients spend many hours and months on the units (in our study from three months to eight years for patients and three months to ten years for staff). For patients in particular, this becomes their temporary home and their needs should be taken into account. Future research could examine the efficacy of meetings or discussions where patients and staff decide together how they would like their environment to look and what future directions they would like to take. Although it is appreciated that the inpatient environment is essentially a hospital setting, the nature of this patient group's diagnosis dictates longer stays on the unit and their needs should be taken into consideration. This may allow patients to feel more in control of their future and also help to improve the quality of the staff patient relationship.

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Paper Three: Critical Reflection

INTRODUCTION

This paper provides a critical reflection of the research process. I will begin by outlining the rationale for the development of the literature review and the empirical research paper, and continue to discuss some of the methodological considerations of the research paper. Data analysis is discussed with particular attention to mediation analysis. Implications for therapeutic practice will then be considered along with wider service related issues. Recommendations are then suggested for future research. Finally, a personal reflection of the overall research process is presented.

Research question

The aim of the current research was 1) to investigate the quality of the therapeutic relationship between psychiatric staff and patients with severe and enduring mental health problems, 2) to ascertain if any associates of the relationship quality could be identified, and 3) to investigate the role that attributional style, personal and environmental factors may play in the quality of the therapeutic relationship.

RATIONALE AND SUMMARY OF FINDINGS FOR LITERATURE REVIEW AND EMPIRICAL PAPER

The notion that the therapeutic relationship is of utmost importance in the wider therapeutic process seems to be unequivocal. There have been a vast number of studies investigating this phenomenon. The concept of the therapeutic relationship was first brought to the author's attention some five years ago when working as an assistant psychologist on an acute inpatient unit for people with severe and enduring mental health issues. Around the same time New Ways of Working (National Institute for Mental Health in England (NIMHE, 2007) were introduced, the idea came to the assistant psychologist and her clinical supervisor that more informed ways of psychological working for inpatient staff may improve the working relationship between staff and patients on the unit, which at times had been observed to be difficult. The staff on the unit were also keen to improve their relationships with their patients and a programme of basic psychological interventions was designed and rolled out to the unit on a weekly basis (for more details of the programme please contact the author).

The staff seemed to benefit from the time to reflect and look at problems from different perspectives and soon other units within the trust requested the same level of input from the psychology department. The original unit took on board new psychological ways of working and their clients benefited, with relapse and recidivism rates reduced. The staff completed evaluation questionnaires for each psychology session and consistently reported that they felt the sessions had increased their confidence in applying psychological ways of working in their clinical practice. Training in psychometric assessment measures was also included in the programme and staff were introduced to the Beck's depression and anxiety inventories and hopelessness scales (Beck, 1976). A DVD of the assistant and her

supervisor conducting a psychotic symptom rating scale interview (PSYRATS, Haddock, McCarron, Tarrrier & Faragher, 1999) was also included and staff were trained how to administer, interpret and utilize the results effectively. The measures were used where appropriate with patients to inform clinical decisions. The staff progressed significantly and were spearheaded to showcase a brand new purpose built psychiatric unit in Cumbria, intended to be the flagship for New Ways of Working into Teams (NIMHE, 2007). Unfortunately the author had to move on before the unit was completed and was unable to continue with the programme, however my interest in the staff and patient relationship was born and when the opportunity arose to investigate this concept through the clinical doctorate thesis, the author relished the prospect.

As previously stated the therapeutic relationship has been well researched and there is no doubt that the quality of the relationship plays a major role in the wider therapeutic process, as far back as Freud in the 1900's (Freud, 1913, cited in Bale, Catty, Watt, Greenwood & Burns, 2006) and up to the present day, where research is starting to investigate specific relationships and the possible theoretical underpinnings and processes that may be involved.

Comprehensive reviews have now been published in this area. McCabe and Priebe (2004) looked examined the validity and reliability of measurements of the therapeutic relationship. One might have expected their research to come out with an optimum measure of the therapeutic relationship but their research highlighted that all the measures they tested had acceptable or good psychometric properties in the general psychiatric milieu. Their work does not seem to suggest that these measures are easily transferable to the field of severe and enduring mental health problems. In fact, the research does not

seem to shed any more light onto what may make a good relationship or a bad one. Martin, Garske and Davies (2000) reviewed the literature measuring the association between the therapeutic relationship and outcome and again, although they found that the association between the therapeutic relationship and outcome was robust, they failed to find any underlying pattern that may take us a step nearer to understanding what constitutes a good therapeutic relationship. Elvin's and Green (2008) review set out to consider the limitations of the above review studies but their findings did not determine the vital ingredients of an effective therapeutic relationship

Although previous reviews have highlighted the importance of the relationship between staff and patients and its influence on outcomes, there have been no reviews to date that explicitly examine what may predict the relationship quality. The purpose of the literature review was to try to highlight any individual elements that may be associated with a positive therapeutic relationship, thereby helping us to build a better knowledge base of what may underpin this important concept. The author identified empirical papers that had validated measures of the therapeutic relationship and also factors that might be predictive of the quality of the relationship. There were particular challenges when conducting the literature search in that the literature on relationship quality in general is vast and tight inclusion and exclusion criteria had to be developed. However, due to past research concluding that all validated measures of the therapeutic relationship had acceptable psychometric properties (Martin et al., 2000), the literature search process revealed quite a number of studies that met the inclusion criteria and 28 studies were eventually deemed eligible for the review.

The review highlighted several factors (both staff and patient) that had been found to be associated with the quality of the therapeutic relationship, including, demographics, symptoms, work stress and training and experience. However the connection between these factors and the therapeutic relationship is not clear-cut. It may be that one factor enhances the quality of the therapeutic relationship or that it may work in conjunction with other factors or it may be that conversely, the therapeutic relationship may have an effect on a particular factor or factors.

The purpose of the research study was aimed at attempting to answer the above questions by examining several staff and patient factors and also to ascertain what extent attributions may have an affect on the quality of the therapeutic relationship or indeed may even mediate any effects. Results from the study found that staff who rated the therapeutic relationship as more favorable made fewer ratings of attributions of control, although this did not affect patient ratings of the relationship. Ward atmosphere was found to be positively associated with the therapeutic relationship; lack of service engagement was found to be detrimental to the quality of the relationship. Patient behaviour and staff stress were not found to be associated. Patient symptoms, functioning and staff burnout revealed mixed findings.

Mediation analysis was carried out in the study to ascertain if attributions of control would mediate the effects found in other significant variables and the quality of the therapeutic relationship. Although we did not observe total mediation effects within the analysis, further examination of Beta levels revealed difference within the model; we found changes in the PANSS negative symptom scale which is in keeping with Baron and Kenny's (1986) mediation model. However, after further robust testing in the form of Sobel's test (1982),

this observation was proved to be non-significant. Although this finding is not in line with our original predictions, further investigation is warranted to establish if any other factors may mediate effects, thus, furthering our understanding of the very complex and important concept of the therapeutic relationship. It may be that factors such as psychological mindedness play a role in mediating attributions of control.

The literature review and empirical paper contribute to our understanding of the complexity of the therapeutic relationship and the factors that may influence it's quality with a view to improving the lives of both patients with severe and enduring mental health problems and the staff members who work with them.

METHODOLOGICAL CONSIDERATIONS

Review Paper

A systematic approach was considered for the review, but as the subject matter available was so diverse it was decided that a narrative approach would be more appropriate. This would allow for more linkage and interconnection of the available literature. It was felt that the rigorous focus and methodology of a systematic review would provide too narrow a focus and would not allow for the comprehensive coverage needed to address the research question in hand. Quality ratings were not undertaken again due to the diverse nature of the studies under investigation and the myriad of assessment tools used by the journal authors.

Empirical Paper

Design

One of the strengths of the research design was that the therapeutic relationship was examined from both the staff and patients perspective with both staff and patients completing the same measure. This methodology is in keeping with recommendations from the literature base indicating the importance of a dual perspective (Norcross, 2002).

A further strength of the design was that staff and patients completed several measures which meant that perspectives of both staff and patients were taken into account rather than relying solely on staff reports of patient characteristics and psychopathology; thus giving a more realistic overview of the therapeutic relationship and its component parts as a whole. This approach was possible as the study was part of a larger research project with the benefit of research assistants to aid with recruitment and data collection allowing for more measures to be administered over the course of the study.

A potential limitation of the study was that some care workers completed measures for more than one patient and in fact on one particular unit some patients completed measures for more than one staff member, thus producing non-independent data. This is a common problem in research in staff patient relationships (Berry, Gregg, Vasconcelos e Sa, Haddock, & Barrowclough, 2012). However, after consulting the university statistician, it was agreed that the threat was minimised by the relatively large sample size and the fact that the patients were recruited from quite a number of different sites and different psychiatric teams, thus reducing the possibility of cluster effects.

A further limitation of the study was the potential selective nature of the sample. Staff and patients from across Greater Manchester were approached to take part in the study. It is possible that staff who felt they already had a positive relationship with their patients were more willing to take part in the study, whereas other staff members who felt they had more difficult relationships at that time may have felt more vulnerable to being judged and fearful of the potential repercussions. Patients themselves also had to give consent to participate in the research and it may be that those patients with better levels of functioning or at a less acute stage of their illness may have been able to give consent more easily than those who perhaps were more unwell at the time. Careful consideration was given to these issues and every effort was made to ensure participant anonymity and confidentiality was maintained throughout the study process.

Recruitment

As previously stated this study was part of a larger research project and benefited from the assistance of research assistants to encourage interest in the study. They recruited participants from 10 different locations across Greater Manchester and were able to spend the necessary time collecting data from staff and patients once consent had been obtained. It would, however, have been interesting to follow up those participants who either declined to take part or disengaged from the study, this in itself may have proved difficult, but, an informal or semi-structured interview to ascertain why they felt that they did not want to take part may have shed some light for future research into this staff-patient group. Although we collected data on dropout rates, for ethical reasons we did not compile data on those people who refused to consent to the study initially. Therefore, it is impossible to speculate as to how representative the sample may be of the overall population under investigation.

Sample Size

The study exceeded the anticipated 50 participants needed to ensure adequate power for the data analysis. A total of 52 patients and 84 care workers were recruited. The sample size can be considered another strength of this study, the relatively large sample size meant less chance of loss of power, and that insignificant findings would be concluded (Field, 2009). The sample size used in this study is similar to or indeed larger than the majority of previous research reported in the literature review.

Measures

The study utilized the Five Minute Speech Sample (FMSS; Magna, Goldstien, Karno, Milkowitz, Jenkins & Falloon, 1986). The FMSS is an established and validated brief assessment tool for reliably measuring Expressed Emotion (EE) (Dennis & Leach, 2007). The main strength of the FMSS is that it is a natural speech sample and the participant is not prompted or influenced by the researcher at any point. The resulting speech sample is aimed at identifying the respondent's attitudes and feelings about the patient as well as perceptions regarding the quality of their relationship (Tatton & Tarrier, 2000). This would have facilitated the reduction of any social desirability bias that may have been produced had the researchers asked direct questions. However, this in itself may produce its own problems in that the staff member is not directed in any way when speaking, so there is no control over the number or quality (or indeed lack) of the attributions that the participant makes.

Weisman, Lopez, Karno and Jenkins (1993) developed a measure focusing on attributional control. The measure assesses the level of controllability attributed to a patient on the basis of a natural speech sample (in this study the FMSS). Attributional statements are

defined as any implied perceptions of the patients capacity to control their mental health problems, including ratings of control over symptoms and actions as well as perceptions about the patients control over schizophrenia as a whole (Berry et al., 2012). The Weisman method has been used in a number of studies assessing attributions of control in both relatives and professional carers of patients with severe and enduring mental health problems and has achieved good inter-rater agreement (Berry et al., 2012; Hooley & Campbell, 2002). The present study achieved excellent inter-rater reliability for this measure (ICC = .97). As previously stated, the use of the FMSS with regards to attributions of control has both benefits and drawbacks. Future studies are needed to focus on designing and validating other measures of attributions that may overcome these issues. It may also be pertinent to assess individuals' attributional style using questionnaires, such as the Attributional Style Questionnaire (ASQ, Peterson et al., 1982) to see if this is associated with attributions of control and the therapeutic relationship.

The therapeutic relationship has been investigated and measured in many different ways (Elvins & Green, 2008). One of the most investigated measures of the therapeutic relationship is that of Bordin's (1979) conceptualisation. The working alliance inventory (WAI; Horvath & Greenberg, 1989) was developed with Bordin's theory in mind and has become one of the most widely used measures of the therapeutic relationship to date (Martin et al., 2000) and was therefore selected for the current study.

Other measures were chosen as they had good psychometric properties and were chosen as they had been identified as being possible associates of the quality of the therapeutic relationship within the literature review. Factors such as patient symptoms were measured the Positive and Negative Syndrome Scale (PANSS, Kay, Fiszbein & Opler, 1987). The

PANSS is one of the most commonly used assessment tools to assess symptoms in patients with schizophrenia and has sound psychometric properties (Johnson et al., 2008). The Global Assessment of Functioning Scale (GAF; Hall, 1995) measures the global social functioning of the patient taking into account symptoms and psychological, social and occupational functioning. The GAF is a reliable measure of disturbance of psychological functioning (Jones, Thornicroft, Coffey & Dunn, 1995). The Social Behaviour Scale (SBS; Wykes & Sturt, 1986), the Service Engagement Scale (SES; Tait, Birchwood & Tower, 2002) and the Ward Atmosphere Scale (WAS; Moos, 1974) were also utilised.

Two other measures were used to investigate staff stress, which, so far have not been investigated in association with attributions of control. The Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) is a self-report questionnaire for members of staff. The MBI measures three aspects of burnout in staff member: 1) emotional exhaustion, 2) depersonalisation and 3) personal accomplishment. High scores on the emotional exhaustion and depersonalisation subscales and low scores on the personal accomplishment subscale suggest high burnout rates. The other measure that was utilised was Intention to Leave the Work Place Scale, this was assessed using an adapted questionnaire based on Rosin and Korabik's (1991) Intention to Leave Scale, respondents were also asked to give reasons for their intention to leave if they had indicated that they had a desire to do so. Research has shown that an individual's thoughts and intentions to leaving are the strongest predictor of an actual decision to leave (Cotton & Tuttle, 1986; Lee & Mowday, 1997).

The author was fortunate in undertaking the current study at the beginning of the larger research project and so had extensive input into the design. Careful consideration was

given to the selection of measures utilised in this study, in terms of the amount of questionnaires used, their overall validity and the constructs they measured to ensure that there was no overlap between measures. The length of time taken to complete the questionnaires was also taken into account when choosing the measures.

Procedure

The study as previously discussed was part of a larger research project, which investigated the feasibility and acceptability of an intervention to improve staff and patient relationships in psychiatric rehabilitation settings. There was a large training component to the study, which included extensive training in administration, scoring and interpretation of all the aforementioned measures. The author also undertook a rigorous 12-week training programme to learn how to transcribe the FMSS audiotapes and how to extract attributions of control from the transcripts. This training involved listening to many previously recorded speech samples and extracting the attributions of control until a “gold standard” reliability rating (Vasconcelos e SA, 2010) was achieved. This reliability was then measured against another trained rater who had rated 23 of the speech samples from the current study (high inter rater reliability was achieved Interclass Correlation Coefficient = .97). The author rated all FMSS transcripts for attributions of control and assigned each with a global rating.

Due to the intensity and length of the training required for the measures used, particularly the FMSS and control attribution ratings, the author was mainly involved in secondary data analysis. The author had visited several sites prior to data collection and informed staff and patients of the nature and purpose of the study; furthermore, the author was also fully trained in administering, scoring and interpreting all the measures that were used in the

study. Due to the importance of achieving reliability in the attributional aspect of the study, it was necessary to utilize the research assistants for the data collection, this was agreed by the research team. The research assistants had already been recruited to assist with the larger project so no financial implications were incurred.

DATA ANALYSIS

Due to the exploratory nature of the study several correlations were performed to ensure that any important findings were not overlooked. Although the study did not employ Bonferonni adjustment, we acknowledge the problems of multiple testing (i.e. the increase in the possibility of significant results). However, the results are suggestive of relationships between variables and the majority of statistical significance is high.

Nakagawa (2004) notes serious problems with the use of the Bonferonni adjustment, in that it may exacerbate any existing problems of lower power, indeed there seems no formal consensus of when Bonferonni procedures should be used (Perneger, 1998).

Prior to data analysis the author input the raw data and reverse scored the measures as required. Descriptive statistics were obtained and skewness and Kurtosis values were calculated in order to check if the variables were normally distributed. Seven of the 32 variables violated the normality assumptions of parametric statistical analysis. Appropriate transformations were applied to the data as directed by Field (2009). Associations between relationships, attributions, symptoms, functioning, service engagement, staff moral and ward atmosphere were assessed using Pearson's correlation co-efficient. Associations between behaviour and burnout were measured using Spearman's bivariate correlations. Independent samples t-tests were also used for the appropriate demographic data.

Associations that involved non-parametric data and parametric data were assessed using Spearman's bivariate correlations for consistency.

Further analysis was conducted using multiple regression to compare the relationship between the therapeutic relationship and other significant variables identified from the correlational analysis.

Mediation analysis (Baron & Kenny, 1986) was also undertaken to ascertain if attributions of control would mediate any observed effects between the quality of the therapeutic relationship and variables identified as correlating significantly with the relationship. This analysis was only conducted on staff measures of the therapeutic relationships the patient ratings of the WAI did not correlate significantly with the mediator variable (attributions of control). We investigated mediation effects on the WAI (staff version) and the Positive and Negative Syndrome Scale negative symptoms scale, the Maslach Burnout Inventory personal accomplishment subscale, the Service Engagement Scale total and all three subscale of the Ward Atmosphere Scale.

There has been some debate recently regarding the reliability of Baron and Kenny's mediation analysis model. The discourse is mainly around the way the statistics are reported; it is posited by some researchers (Spencer, Zanna & Fong, 2005; Hayes, 2004) that it is common for authors to imply causality from the mediation analysis when in fact causality cannot be concluded. There is also some discourse regarding the power effects of the test and caution is now given for small sample sizes when considering the model. We decided to use the Baron and Kenny (1986) model after consulting the university

statistician and it was agreed that due to relatively large sample size and the simple mediation analysis intended that this test would fit our needs.

IMPLICATIONS FOR THERAPEUTIC PRACTICE AND WIDER SERVICE

RELATED ISSUES

It seems unequivocal in the light of the review and empirical paper that it is important to identify the factors that may influence the development of a positive therapeutic relationship. This is even more important for those people with severe and enduring mental health problems who find engagement particularly difficult during acute phases of their illness (NICE, 2009). Due to the changing nature of the course of illness with this patient group, it is also extremely important for staff to be able to develop a flexible approach and pace during the therapeutic process to take into account the different stages of the illness.

The evidence from the review shows that lack of vocational training has a detrimental association with the quality of the therapeutic relationship, suggesting that better training and more defined job roles should be explored for those staff groups working with people with severe and enduring mental health problems (Barrowclough et al., 2001; Dennis & Leach, 2007). Training, support and supervision should be offered routinely and regularly evaluated. This should be an ongoing process to encourage knowledge, awareness and understanding of severe and enduring mental health problems. Reflective practice should also be encouraged to help develop coping strategies, collaborative working and staff communication. This, in turn, may improve the working environment and overall social climate, which would improve the quality of care and the patient experience, which ultimately may reduce the long-term impact of relapse.

This empirical paper has helped to contribute to the understanding of the factors that influence the quality of the therapeutic relationship from both the staff member and patient perspective. Until recently there has been limited research investigating the role of attributions on the relationship and the current study has found that attributions of control do have an association with staff patient relationships, at least from the staff members' perspective. Interventions that are aimed at making staff more aware of how their own cognitions and experiences may impact on the therapeutic relationship may further their understanding of the psychological mechanisms involved in patients' difficulties, perhaps allowing staff to reattribute the causes of patients' behaviours and symptomology.

Understanding associations between staff and patients' views of the therapeutic relationship and what may improve the quality of this relationship also highlights the importance of staff's training needs. As previously discussed, staff members could be trained to be more intuitive regarding the patient's experience and needs, thereby improving the quality of the therapeutic relationship. This may also highlight areas within the staff member themselves that could be further examined within the training environment (or through effective supervision) to ensure that the right ingredients are available to ensure the best possible quality of the therapeutic relationship from both the staff and patient's perspectives.

Interestingly, working environment was also found to play an important factor in the relationship quality; perhaps more consideration should be given to staff and patients' expectations and experiences of the ward environment and their future wishes. It may be that in our everyday therapeutic practice, we should be more considerate of the impact the working environment has on our patients (and ourselves), not only on inpatient settings but

also in community and outpatient work. All too frequently rooms are used simply because they are available, but perhaps small changes to the environment may improve our therapeutic relationships with patients. It would be interesting to involve our patients in decisions about the working environment; perhaps investigating the feasibility and efficacy of meetings or discussions where patients and staff decide together how they would like their environment to look and what future directions they would like to take.

IMPLICATIONS FOR FUTURE RESEARCH

The review and empirical paper indicate several key areas for future research. Firstly, more studies are needed to take into account the notion that the therapeutic relationship may not be a stable construct and may be more fluid and changeable over time. It may be more important to consider this fluidity of the relationship and map its transition over time. Possibly following a longitudinal design to assess the changing nature of the relationship between staff and patients over time to ascertain what may contribute to the changes that may occur.

Attributions of control have been found to be related to the quality of the staff patient relationship in this study and previous research (Barrowclough et al., 2001; Berry et al., 2012). Future studies are needed to investigate the effects of interventions to improve relationships. Perhaps with the focus on assisting staff to examine their own cognitions which, in turn may help them to make less patient blaming attributions. Thus increasing their understanding of the psychological underpinnings of the patient's behaviour and more importantly, what purpose the behaviour serves for the individual patient.

In 2009, Berry et al trialed a pilot study that involved developing psychological formulations with psychiatric teams. The intervention aimed at helping to reduce negative appraisals of patients with schizophrenia by helping the staff to understand the psychological factors that may be involved in the development and maintenance of the patient's problems. Berry et al. (2009) found that the interventions had a positive impact on the staff perceptions of patient's difficulties. More importantly, there were significant increases in staff perceptions relating to the degree of control patients and staff had over problems. There was also an increase in the amount of effort they felt the service user was making in coping with their difficulties, reductions in blame and more optimism about future treatment. Staff also reported an increased understanding of patients' problems and more positive feelings towards their patients and an increase in confidence in their work.

What is clear from the literature review and empirical paper is that further research is required to continue to broaden our knowledge of the quality of the therapeutic relationship and what factors may moderate or mediate it. There is no doubt that the quality of the therapeutic relationship is an important component in the wider therapeutic process and also a good predictor of successful outcome. What still requires further investigation is the individual ingredients that are necessary to ensure that both the patient and staff member are able to build and maintain a constructive therapeutic relationship that meets both their needs and how we can achieve this goal in the most collaborative and effective way for all concerned.

REFLECTIONS ON THE PROCESS OF RESEARCH

During the research process I encountered many difficulties. Firstly, my enthusiasm for the subject often meant that I was easily side tracked with journal articles that looked interesting and would need to be navigated back to the subject in hand through regular

supervision. The need for strict inclusion and exclusion criteria became apparent quite early on in the process. The field of the quality of the therapeutic relationship is so vast it may have been more appropriate to review the subject matter from a particular theoretical perspective. Having said that the review has highlighted some important factors that may predict the quality of the therapeutic relationship that not only adds to our existing knowledge but also warrants further research and investigation.

Another difficulty encountered during the research process and perhaps the most influential one occurred in my private life. During the initial stages of the research I experienced some personal difficulties, which resulted in my having to take a year's leave of absence. This break in the research process could almost be compared to that of a rupture in the therapeutic relationship (Safron, Muran, Samstag & Stevens, 2001) and I found it very difficult to return to the thesis after dealing with several traumatic events during this time. However with excellent supervision and support from the programme and research team I managed to stay focused and complete the process.

I have always been interested in what may affect the quality of the therapeutic relationship and have generally enjoyed the research process. The journey to the completion of the research process has made me reflect on my own relationships in my life, both professionally and personally. I feel that his work has influenced my clinical practice in expanding my knowledge of the importance of the therapeutic relationship with clients and considering any barriers that may exist. Questioning what may have caused them and how they might be repaired. Conversely, now considering why some of my client therapist relationships work very well and how to utilize this knowledge to ensure positive relationships with future clients.

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APPENDIX A
CLINICAL PSYCHOLOGY REVIEW GUIDELINES

- **Use of wordprocessing software**

It is important that the file be saved in the native format of the wordprocessor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the wordprocessor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: <http://www.elsevier.com/guidepublication>). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork. To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your wordprocessor.

Article structure

Manuscripts should be prepared according to the guidelines set forth in the Publication Manual of the American Psychological Association (6th ed., 2009). Of note, section headings should not be numbered.

Manuscripts should ordinarily not exceed 50 pages, *including* references and tabular material. Exceptions may be made with prior approval of the Editor in Chief. Manuscript length can often be managed through the judicious use of appendices. In general the References section should be limited to citations actually discussed in the text. References to articles solely included in meta-analyses should be included in an appendix, which will appear in the on line version of the paper but not in the print copy. Similarly, extensive Tables describing study characteristics, containing material published elsewhere, or presenting formulas and other technical material should also be included in an appendix. Authors can direct readers to the appendices in appropriate places in the text.

Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Essential title page information

Title. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. **Note: The title page should be the first page of the manuscript document indicating the author's names and affiliations and the corresponding author's complete contact information.**

Author names and affiliations. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author within the cover letter.

Corresponding author. Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.**

Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract

A concise and factual abstract is required (not exceeding 200 words). This should be typed on a separate page following the title page. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

Highlights

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). See <http://www.elsevier.com/highlights> for examples.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Abbreviations

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Tables

Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

References

Citations in the text should follow the referencing style used by the American Psychological Association. You are referred to the Publication Manual of the American Psychological Association, Sixth Edition, ISBN 1-4338-0559-6, copies of which may be ordered from <http://books.apa.org/books.cfm?id=4200067> or APA Order Dept., P.O.B. 2710, Hyattsville, MD 20784, USA or APA, 3 Henrietta Street, London, WC3E 8LU, UK. Details concerning this referencing style can also be found at <http://humanities.byu.edu/linguistics/Henrichsen/APA/APA01.html>

Citation in text

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Web references

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Reference management software

This journal has standard templates available in key reference management packages EndNote (<http://www.endnote.com/support/enstyles.asp>) and Reference Manager (<http://refman.com/support/rmstyles.asp>). Using plug-ins to wordprocessing packages, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style which is described below.

Reference style

References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters "a", "b", "c", etc., placed after the year of publication. **References should be formatted with a hanging indent (i.e., the first line of each reference is flush left while the subsequent lines are indented).**

Examples: Reference to a journal publication: Van der Geer, J., Hanraads, J. A. J., & Lupton R. A. (2000). The art of writing a scientific article. *Journal of Scientific Communications*, 163, 51-59.

Reference to a book: Strunk, W., Jr., & White, E. B. (1979). *The elements of style*. (3rd ed.). New York: Macmillan, (Chapter 4).

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Submission checklist

The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address
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All necessary files have been uploaded, and contain:

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'
- References are in the correct format for this journal
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Web)
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in black-and-white in print
- If only color on the Web is required, black-and-white versions of the figures are also supplied for printing purposes

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APPENDIX B
BEHAVIOUR RESEARCH AND THERAPY GUIDELINES

GUIDE FOR AUTHORS

INTRODUCTION

Behaviour Research and Therapy encompasses all of what is commonly referred to as cognitive behaviour therapy (CBT). The focus is on the following: theoretical and experimental analyses of psychopathological processes with direct implications for prevention and treatment; the development and evaluation of empirically-supported interventions; predictors, moderators and mechanisms of behaviour change; and dissemination and implementation of evidence-based treatments to general clinical practice. In addition to traditional clinical disorders, the scope of the journal also includes behavioural medicine. The journal will not consider manuscripts dealing primarily with measurement, psychometric analyses, and personality assessment.

The Editor and Associate Editors will make an initial determination of whether or not submissions fall within the scope of the journal and/or are of sufficient merit and importance to warrant full review.

PREPARATION

Article structure

Subdivision - unnumbered sections

Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when crossreferencing

text: refer to the subsection by heading as opposed to simply 'the text'.

Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

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- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

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Keywords

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Acknowledgements

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Shorter communications

This option is designed to allow publication of research reports that are not suitable for publication as regular articles. Shorter Communications are appropriate for articles with a specialized focus or of particular didactic value. Manuscripts should be between 3000-5000 words, and must not exceed the upper word limit. This limit includes the abstract, text, and references, but not the title page, tables and figures.

Tables

Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

References

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Reference to a book:

Strunk, W., Jr., & White, E. B. (2000). *The elements of style*. (4th ed.). New York: Longman, (Chapter 4).

Reference to a chapter in an edited book:

Mettam, G. R., & Adams, L. B. (2009). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281–304). New York: E-Publishing Inc.

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APPENDIX C
STAFF DEMOGRAPHIC QUESTIONNAIRE

STAFF PERSONAL DETAILS

Participant code and NHS Trust	
Unit/Ward	
Length of Time on unit (to the nearest number of months from start date to date of consent)	
Patient code	
Age (yrs)	
Gender	
Ethnic Group	
Professional Background (Existing job title e.g. RMN, Support Worker)	
Years experience in mental health	
Experience and training in psychosocial Interventions	

APPENDIX D
CLIENT DEMOGRAPHIC QUESTIONNAIRE

CLIENT PERSONAL DETAILS

Participant code and NHS Trust	
Unit/Ward	
Length of Time on unit (to the nearest number of months from start date to date of consent)	
Key worker code	
Age (yrs)	
Gender	
Ethnic Group	
Marital Status (married, widowed, divorced/separated, single)	
Pre-morbid SES (Professional, intermediate skilled, semi-skilled, unskilled)	
Highest level of education achieved (Degree, A Levels, Secondary school)	
Primary diagnosis (ICD-10 codes or DSM-IV)	
Age of onset (first presentation to services with mental health symptoms)	
No of hospitalisations	
Mental Health Act Status	
Co-morbid psychiatric diagnosis	
Medication	
Details of previous or current Psychotherapy	

APPENDIX E
ATTRIBUTIONS OF CONTROL MANUAL

Manual for extracting and rating controllability attributions in relatives of People with recent-onset psychosis

The following manual describes the criteria for extracting, transcribing, coding and rating attributional material from Camberwell Family Interview (CFI) interviews and assigning a global rating on a 5-point scale for perceived controllability attributions. Controllability ratings are based on the Weisman *et al.* (1995) coding manual for rating controllability attributions and on the Hooley and Campbell (2002) instructions for rating attributions of control, and also on the guidelines for rating controllability from Barrowclough's (1991) and **Brewin's (1991) work**.

The instructions for extracting and rating attributional material are summarized as follows:

Part I: Listening to the CFI for perceived controllability attributional statements and extracting them.

Part II: Rating perceived attributional material either as: controllability attributions in a 5-point scale (1 = no perceived control over virtually all aspects of the disorder; 5 = perceived control over virtually all aspects of the disorder).

Perceived controllability statements should be a transcribed verbatim from the CFI tapes, interviewing relatives (usually parent) or carers who spend at least ten hours per week with a family member diagnosed with psychosis. These statements should include as much of the passage as necessary to fully understand the relative's explanation (attribution¹) for the given outcome. The following **criteria should be used to determine whether all the attributional information is recorded within one statement or under separate ones**:

- When relatives deviate briefly from the topic of the attributional statement and then return to it, include it as **one statement**, separated by irrelevant phrases or statements (you may use (...) rather than transcribing irrelevant phrases or statements);
- When relatives make an attributional statement and then shift topics to discuss another unrelated subject or subjects, and only returned to the original one at a later point in the interview, include it as **two separate statements**;
- When relatives give, explore or infer more than one explanation for the same event (e.g. "*he never went out because he had no energy and no incentive*"): **(a)** include it as **one statement**, even if relatives briefly digressed to other irrelevant issues during his/her explanations; **(b)** include it only as two **separate statements** if relatives shift topics to discuss another unrelated subject, and then return to the same event at a later point in the interview, regardless of any additional explanations to that same outcome.

¹ These attributions are not all necessarily causal attributions. Specifically for controllability attributions, only perceptions of patient's control over the behaviour itself and over the cause of the behaviour or the illness are considered to indicate personal control.

- When relatives give, explore or infer the same explanation for different outcomes (e.g. “he was *untidy, didn’t wash and never went out because he had no energy*”): (a) included it all as **one statement**; (b) however, if the following explanations are separated from the first one by a complete change in the topic of the interview, include it as **separate statements**.
- When relatives repeat the same explanation for the same outcome throughout the interview (a) include it as **separate statements** if the following explanations are separated from the first one by a complete change in the topic of the interview; (b) otherwise, included it all as **one statement**.
- When relatives give different explanations for the different outcomes (e.g. “*I think what set her off this time was basically that her psychiatrist just dropped the levels of the medicine and then something happened that really upset her. I think the time before that it was because she had something to drink and it just totally knocked everything out of whack*”): (a) include it as **separate statements**.

For part I please record all statements in the transcribing sheet attached in *Appendix II*. All statements need to be **accurately transcribed verbatim** from the interview tape. If required, pause and listen to passages several times, in order to get them accurate. Please do not paraphrase or make inferences. In case of doubt, always **be inclusive**, and transcribe all verbatim. The transcript should always be **anonymised**. Thus, persons and places names should be replaced by a consistent reference to the person or place in question using square brackets (e.g. [patient], [care coordinator], [home town], [hospital], etc). For part II use the rating table exemplified in *Appendix II* to allocate a global rating for both relative’s perceived controllability and self-blame attributions.

Before beginning please read carefully the following criteria guidelines, which indicate how perceived controllability statements should be extracted, transcribed, coded and rated.

Definitions

Perceived controllability attributional statement:

Is a statement that comprises one or more **given, explored or inferred explanation or cause** for the occurrence of a certain **event**, which implies the relative’s perception of the patient’s capacity or lack of capacity to control without an exceptional effort the given event².

Event:

Is a reported outcome, behaviour or situation that is directly associated with the patient being discussed in the CFI, including references to:

- Illness (onset or exacerbation)
- Symptoms or related problems behaviours
- Any undesirable characteristic of the patient or in the patient’s life

Explanation or cause:

Comprise all the given, explored or inferred reasons perceived by the relative to be causing the event.

Given explanation or cause

When the event and the cause are linked by causal connectives (e.g. because, so, that's how, that's why, due to, therefore)

Example:

'I think she became ill because she was using all these drugs)

Explored explanation or cause

When relatives will not be certain about the causes of the events, but they will still put forward possible explanations (e.g. it might be, maybe it was, it might have something to do with, I

don't know whether it is X or whether it is because of Y)

Example:

'Being bullied at school and using drugs I think might have all contributed for the start of it'

*** Inferred explanation or cause**

When the event and the cause are still linked although there are no causal connectives.

Example:

'When he was very ill he had, he saw things that wasn't there when he was asleep' (1013)

'I noticed it [beginning of the problems] when we got the divorce'

* Usually the inference that the cause and the event are linked is made through the temporal or situational association between the two components. Somebody says or does something or a particular situation arises (causes) and the event occurs. Such a juxtaposition of an event with causal material in time may be sufficient to assume causal attribution. Thus, for a causal link

between the situation and the event to be coded as inferred: 1) the speaker must infer that the event is present when the situation is present, and absent when the situation is absent, i.e. there is some evidence for **systematic degree of covariance between the event and the cause** AND/OR 2) the **cause has the potential power to create the event**. An idea of consensus agreement amongst people similar to the relative being interviewed might be used to assess the power of the situation to cause the events.

2 These attributions are not all necessarily causal attributions. Specifically for controllability attributions, only perceptions of patient's control over the behaviour itself and over the cause of the behaviour or the illness are considered to indicate personal control (e.g. 'she could go out more if she wanted to').

Criteria for extracting perceived controllability attributional statements

Identify all statements (current and past) from the CFI that imply the relative's perception of the patient's capacity or lack of capacity to control without an exceptional effort:

I) The illness (onset or exacerbation),

II) The symptoms or related problem behaviours, and/or

III) Any undesirable characteristic of the patient or any undesirable situation (current or past) in patient's life.

Definition of perceived control without exceptional effort

A statement of perceived control without exceptional effort refers to a given, explored or inferred explanation for the reason(s) or cause(s) for a given outcome (i.e., the illness, symptoms, related problem behaviours and/or any undesirable characteristics of the patient) in which the relative clearly suggests either:

- a) the patient is not making enough effort to improve his/her condition or situation
- b) the patient is capable of doing more (e.g., “He should do more chores”)
- c) the patient could or should do more than he/she is currently doing
- d) the outcome would be improved if the patient altered his/her behaviour in some way (e.g., “She would do much better if she took her medications”)

Definition of lack of perceived control without exceptional effort

A statement of lack of perceived control refers to a given, explored or inferred explanation for the reason(s) or cause(s) for an given outcome (i.e., the illness, symptoms, related problem behaviours and/or any undesirable characteristics of the patient) in which the relative clearly suggests either:

- a) the given outcome is inevitable and even if the patient tries he/she cannot make an exceptional effort to influence or improve he disorder or his/her condition/situation
- b) the patient’s behaviour/symptom/undesirable characteristic is a direct result of the illness itself, therefore inevitable (e.g., “She started yelling in frustration with the voices” or “When she was in the delusion she was not herself”)
- c) the given outcome is influenced by factors outside³ the patient’s control (e.g., “When they lowered the medication, that was the start of the relapse”)

- I) **References to illness (onset or exacerbation of the illness)** will commonly be mental illness, condition or schizophrenia, because this is the common diagnosis of the patients, but other synonyms or more vague references (e.g. incident) should also be included if there is sufficient attributional material. The relative might make specific or more vague, but still reasonably inferable references, as illustrated in the next examples.

- Specific examples: *“He began to get ill”, “Her illness got worse”, “When his condition started”*.
- Inferable examples: *“That’s when it started”, “Its when he started going downhill”, “Its just been up and down”, “The worse it’s getting”, “It runs streaks”*.

³ If the relative attributes the patient’s behaviour to the medication, this statement should be recorded as outside of the patient’s control. However, if the relative indicates that the patient’s behaviour is influenced by his/her refusal to take the medication (including instances where they say that the patient is not taking the medication because he/she doesn’t think he/she is ill), this is not considered to be outside patient’s control, thus it should be recorded as within the patient’s control.

- II) **References to symptoms or related problem behaviours** include all references to “symptoms and related problem behaviours” listed below irrespective of whether the relative indicates or infers that such symptoms or related problems behaviours have

negative value to them, and irrespective of whether the relative perceives them as “symptoms”.

List of references to symptoms and problem behaviours

- 1. Irritability** (including snappiness and other irritability synonyms)
- 2. Sleep disturbance**
- 3. Appetite change**
- 4. Bodily complains** (including headaches and other aches)
- 5. Underactivity** (including lack of energy, sitting or lying around not doing much, difficulty occupying self, stopping doing things used to do, etc)
- 6. Concentration or attention difficulties**
- 7. Slowness**
- 8. Overactivity**
Unusual cheerfulness, excited/ agitated, being noisy/ shouting, restlessness/ pacing behaviour, being unusually talkative, swearing, etc
- 9. Violence** (including both verbal or physical)
- 10. Destructive behaviour**
- 11. Withdrawal** (including keeping oneself, refusing to meet people, avoiding members of the family or friends, lacking interest in people, being less talkative, spending long periods alone, being unable or unwilling to go out, or any other restriction or reduction in social behaviour or going out from the house)
- 12. Confusion or memory loss**
- 13. Fears/anxiety** (including any restrictions or avoidance due to fear)
- 14. Worrying** (including concern, preoccupation or milder feeling states such as “worrying a little” or “being a bit upset”)
- 15. Depression** (including unhappiness or any demonstration of it (e.g. crying) or milder feeling states such as “being a bit unhappy”)
- 16. Obsessional behaviour** (including routines and rituals)
- 17. Self-care neglect**
- 18. Oddness in manner or appearance** (including oddities in walking or sitting, self rocking, speech oddities)
- 19. Delusions** (including strange ideas, thinking people are against or talking about him/her)
- 20. Hallucinations** (including talking to him/herself)
- 21. Substance abuse** (including alcohol, drugs, tobacco)
- 22. Gambling**
- 23. Failing to participate in household tasks** (including decreases or refuses in participation)
- 24. Poor money management**
- 25. Psychotropic medication or any other treatment non-compliance** (including stopping psychotropic medication, unless prescribed reduction; or non attending or cancelling any medical/psychiatric or psychological treatment)

II) References to any undesirable:

• **characteristic of the patient** include all references which the relative indicates or infers to be negative for themselves or the patient. Examples of undesirable behaviours, feelings

and characteristics would be: ***“He wouldn’t take his medication”, “He had difficulty expressing himself”, “He thought he was the devil himself”, “She couldn’t get on with the other employees”, “She started acting oddly”.***

• **situation (current or past) in patient’s life** include all references to going into hospital, job loss, arguments or quarrels, serious accidents, marital/relationship problems or breakdowns. Examples of undesirable current and past situation in patient’s life would be: ***“It (the job) didn’t last”, “There was a big argument”, “They split up”, “They sacked him”, “The only thing I can think of is he was bullied at school for being over weight”.***

Past tense statements should be included, unless they strongly suggest or clearly state that currently the relative no longer holds that belief.

Perceived controllability attributional statements should be excluded if:

- only mere descriptive or juxtaposed material is given and no given/explored/inferred explanation or cause is reported (e.g. ‘**He seemed to get very depressed**, he never mixed with anybody’ or ‘**He is not very good with people**, he is like that’)
- there is no clear referent (e.g. “It’s been said that he’d be fine if...”);
- they refer to hypothetical (e.g. “If she had an hobby, maybe she would better) or non occurring beliefs (e.g. “He doesn’t get irritable”);
- they refer to past beliefs no longer held by the relative (e.g. “I thought it all started with the drugs, but I don’t anymore”);
- they refer to relative’s view of other people’s, such as the GP, ability to manipulate the illness (e.g. “He would be less agitated if the doctor increased the medication dose);
- they indicate beliefs held by other parties, such as the GP or other relative, unless there is clear evidence that the relative themselves agreed with them (e.g. “My husband was saying “[patient is just being lazy, if he wanted we could do something”, you know, but I don’t think is like that”);
- there is no indication that the relative held a belief expressed by someone else (e.g. “The impression I got the other day from her cousin being here was that, she seems to think that all her problems are basically to do with the way he [father] shows her no affection”);
- only consensus information is available as a potential explanation without being supported by any further explanation (e.g. ‘She has headaches, but a lot of people do’ or ‘Like most of the boys he never tidies up his room’ or “They all do now (drink excessively) it’s the thing isn’t it?”).

Criteria for rating perceived controllability attributional statements

After finishing extracting all statements from the CFI, using the guidelines mentioned above and considering all statements made, allocate a global rating relative’s pattern of controllability attributions by using the following scales. In case of doubt or insufficient information, rather than trying to second-guess the relative’s perception, always give more conservative rating when rating a statement.

I. Rating individual statements for controllability (3-point scale):

Prior to assigning a global rating for perceived controllability, each statement is rated as not, mild/mixed or high in perceived control, according to the guidelines bellow. **Each individual rating should have the event identified in BOLD and the given/explored/inferred explanation(s) UNDERLINED.**

- **Not (0)** perceived control statements indicate that the relative holds the belief that the patient cannot control any aspect of the disorder or reported symptom/ related problem behaviour/ undesirable situation or patient's characteristic; or believes that the cause is inevitable or outside the patient's control (e.g., genetic heritage).

Explanations usually rated as not controllable would be:

Enduring personality traits;
 Environmental stress;
 Illness and handicap (unless if perceived as controllable by the relative);
 Florid psychotic symptoms (e.g., delusional beliefs and hallucinations);
 Mood changes;
 Emotional reactions (e.g., fear, worry, agitation, although not necessarily the expression of such emotions);
 Lack of ability
 Luck, chance or fate;
 Actions and characteristics of others;
 Situational demands;
 Unconscious attitudes;
 Forgetting;
 The effects of prescribed drugs (except if the carer believes that the patient is voluntarily misusing drugs);
 Characteristic (such as shyness, self-confidence, self-esteem);

***Exceptions** apply to this guideline, as illustrated by the following examples:

- if the relative attributes the patient's behaviour to the medication, this statement should be rated as uncontrollable by the patient (i.e., outside the patient's control). However, if the relative indicates that the patient's behaviour is influenced by his/her refusal to take the medication, this is rated as being controllable by the patient (i.e., within the patient's control);
- if relatives perceive certain patient's characteristics, such as self-esteem or self-confidence, as being manageable (e.g. "she could learn to manage her self-esteem" or "she could build-up her selfconfidence"), this is rated as being controllable by the patient.

Thus the above guidelines should be used only as a guide – it is always the relatives' perceptions of controllability that are being rated

- **Mild/mixed (1)** perceived control statements imply that the relative believes that the patient has some degree of control over the reported symptom/ related problem behaviour/ undesirable situation or patient's characteristic, but some control is also explained by other factors outside the patient's control; or indicate that the relative believes that the reported symptom/ related problem behaviour/ undesirable situation or patient's characteristic has different explanations, one controllable and another uncontrollable by the patient; or state that the relative is questioning the legitimacy of the patient's effort to improve the reported symptom/ related problem behaviour/ undesirable situation or patient's characteristic (e.g.

“I guess because I can’t see it [the voices], I don’t know if she is even capable of making a conscious effort to fight it and to try harder”).

Explanations usually rated as mild/mixed controllable would be:

Laziness (controllable patient characteristic) and childhood trauma (uncontrollable patient characteristic);

Voluntary action of the patient (controllable) and an external event (uncontrollable);

- **High (2)** statements in perceived control denote that the relative believes that the patient can control without exceptional effort, but is not making reasonable effort to improve the described symptom/ related problem behaviour/ undesirable situation or patient’s characteristic.

Explanations usually rated as controllable would be:

Voluntary statements and actions (unless if perceived as inevitable by the relative);

Habits and behavioural patterns (e.g. smoking);

Statements made or words spoken to others

Abusing or stopping drugs⁴ (unless if perceived as uncontrollable by the relative or assuming no specific addiction);

Characteristics such as laziness, arrogance, bad temper and contrariness

***Exceptions** apply to this guideline depending on the context, as illustrated by the following example:

- if a relative appears to believe that a voluntary action, such as swearing, is inevitable this should be rated as uncontrollable (e.g., *“He keeps swearing at me, but I know is not him, it is just the illness”*).

- If a relative states that the patient smokes because he/she is addicted to nicotine, this should be rated as uncontrollable (e.g., *“I don’t like him smoking, but he obviously feels like he needs to smoke”*)

Non-rateable explanations would include: statements, actions or characteristics where the degree of voluntary control is uncertain or not explicit or where explanatory factors are not given.

Special guidelines for past attributional statements

Please take into account the following guidelines to rate past attributions.

Past event (i.e. illness reference/symptom/related problem behaviour/situation) where **no explanation/cause** (explicit/explored/inferred) is **given**.

“He was **very depressed**, he never mixed with anybody **Non-ratable** statement (since no clear cause given)

Past event (i.e. illness reference/symptom/related problem behaviour/situation) where a **current explanation/cause** (explicit/explored/inferred) is **given**.

*“He used to have headaches but **I think** that’s just a side effect of the medication”*

Ratable unless otherwise stated (e.g. but I don’t think that anymore)

Past event (i.e. illness reference/symptom/related problem behaviour/situation) where an **unclear if current explanation/cause** (explicit/explored/inferred) is **given**.

“At the beginning he used to have headaches but that was just a side effect of the medication” “He used to self-harm but that was just attention seeking” “[I: has she kept herself to herself a lot?] She has done when she was first ill. She wouldn’t speak to nobody, like I say, she would just follow me all around. She wouldn’t go out or anything and if she was going out it was to go to the bridge to jump off ‘cause the voices were telling her”

Ratable (although is not clear if attribution is still current, is also not otherwise stated)

Past event (i.e. illness reference/symptom/related problem behaviour/situation) where a **past tense explanation/cause** (explicit/explored/inferred) is **given**.

“He used to have headaches but I just thought it was a side effect of the medication”

“She was hearing voices and at the time I thought it was due to the illness”

Non-ratable (not clear what she attributes now because is using the past tense, i.e. I thought)

Statements where the **event** (i.e. illness reference/symptom/related problem behaviour/situation) **has changed (for the better or the worst)** and where the **current explanation/cause** (explicit/explored/inferred) **for the change** is given

“He stated hearing voices again once they changed his medication”

“He used to hear voices but he is fine now. I put that down to his illness”

“He eats, he’s a good eater but he doesn’t overeat. Whereas before he was in a particular drug he was just eating, eating, eating” (5302, 00:45:09)

Ratable Statements where the **event** (i.e. illness reference/symptom/related problem behaviour/situation) **has changed (for the better or the worst)** and where **the past explanation/cause** (explicit/explored/inferred) **prior to the change** is given and the **current explanation/cause is unclear or not given**

“This three months no, before yes (she was cheerful). All the time, overly. Now she’s normal yeah, quite normal. (...) I thought she was drunk sometimes, because she was over the top you know really silly and just loud. And I thought she was drunk, but she wasn’t sometimes, that’s how it looked to me.”

Non-ratable (since the situation has changed but is not clear what the relative attributes this change to, i.e., the current attribution for this past event is unclear) Statements where the **event** (i.e. illness reference/symptom/related problem behaviour/situation) **has changed (for the better or the worst)** and where **only the past Non-ratable** (since is not clear what **explanation/cause** (explicit/explored/inferred) **prior to the change** is given.

“He used to hear voices at the beginning of the illness, but now he is fine, but I just thought it was one of his excuses”

relative thinks now because is using the past tense, i.e. I thought) Statements where the **event** (i.e. illness reference/symptom/related problem behaviour/situation) **is current or past** and where the **explanation/cause** (explicit/explored/inferred) **given has changed**.

“He used to have headaches but I just thought it was one of his excuses for not doing things, but now I can see that’s only a side effect of the medication”

Ratable but only taking into account the most recent explanation

II. Making a global rating of perceived controllability (5-point scale):

After each individual statement has been rated, all statements should be taken into account to assign a global rating on a 5-point scale, ranging from 1 (no perceived control over

virtually all aspects of the disorder) to 5 (perceived control over virtually all aspects of the disorder). The intensity and type of statements made should be considered in assigning the global rating for perceived controllability as well as the events precedence (i.e. most recent or current events should take precedence compared to past or non-current events while assigning the global rating). Each point of the scale is presented in greater detail as follows:

- 1 = no perceived control over virtually all aspects of the disorder
- 2 = minimal perceived control over minor aspects of the disorder
- 3 = some perceived control over some aspects of the disorder
- 4 = fair perceived control over almost all aspects of the disorder
- 5 = perceived control over virtually all aspects of the disorder

• Controllability global rating of 1 (no perceived control over virtually all aspects of the disorder)

Relatives believe that virtually all aspects of the patient's disorder are outside of the patient's control; even if the patient tried to get better there is virtually nothing that he/she could do to improve his/her condition or situation. & Relatives clearly perceive that the cause of the patient's difficulties constitutes a legitimate disorder and that they are virtually unable to control their symptoms and related problem behaviours. Even though, such relatives may make references suggesting mild/mixed control, but if they do so it will be very rarely or over minor aspects of the disorder.

• Controllability global rating of 2 (minimal perceived control over a few aspects of the disorder, but not most part of the others)

Relatives believe that almost all aspects of the patient's disorder are outside of the patient's control; the patient could not change/improve without exceptional effort, help or guidance. & Relatives clearly perceive that almost all aspects patient's problems are a consequence of a legitimate disorder over which they have little control. Such relatives occasionally make statements suggesting control (i.e. individually rated as high in perceived control) over very few aspects of the disorder, but for the most part they implicate uncontrollable or mildly/mixed controllable causal factors in the patient's disorder.

• Controllability global rating of 3 (some perceived over some aspects of the disorder, but not others)

Relatives believe that some aspects of the patient's disorder are outside of the patient's control, but not others; there are some aspects of the disorder that the patient could potentially control without exceptional effort, but there are other aspects that would require exceptional effort to change. Relatives make references to perceived control (i.e. individually rated as high) over some aspects of the disorder, but also perceive other aspects of the patient's problems as consequence of a legitimate disorder (i.e. they make references to other explanatory factors) or they express little doubt about it.

• Controllability global rating of 4 (fair perceived control over almost all aspects of the disorder)

Relatives believe that almost all aspects of the patient's disorder are within the patient's control; there are several aspects of the disorder that the patient can improve, but he/she is not making an effort to do so. & Relatives perceive that almost all aspects patient's problems are not a consequence of a legitimate disorder or express considerable doubt about it. Such relatives frequently believe the patient has a fair amount of control over almost all aspects of the illness (i.e., they make several statements rated as high in perceived control) and they tend to make few references to other mitigating factors.

• Controllability global rating of 5 (perceived control over virtually all aspects of the disorder)

Relatives believe that virtually all aspects of the patient's disorder are within the patient's control; the patient can get better, but he/she is not making an effort to do so. & Relatives perceive that the patient can control virtually all aspects of the disorder and they express considerable doubt or rarely believe that the patient has a legitimate disorder. Such relatives tend to believe that the patient has a great amount of control over virtually all aspects of the disorder, rarely making references to the influence of other mitigating factors; and they also tend to be very dismissive of any psychological reasons for their patients' difficulties. While making the controllability ratings take the evidence as a whole and please adhere to the following additional guidelines:

- Relatives who have a clear perception that the patient has legitimate mental health difficulties, or who not have an illness model, usually receive a controllability rating no greater than 3. However, if there is available evidence suggesting otherwise (i.e., other statements made during the interview suggesting controllability), coders can deviate from this rule. (e.g. "*Maria can't do housework and schoolwork like before, she is just too sick with that*

schizophrenia. She probably could be a little neater around the house though if she tried. I also think if she'd go to therapy and take her medicines as prescribed she might not be as bad off as she is now").

- Relatives who clearly implicate God's will or fate as the primarily reason for the patient's disorder and symptomatic behaviour usually never receive a controllability rating greater than 3. However if there is available evidence suggesting otherwise (i.e., other statements made during the interview suggesting controllability), coders can deviate from this rule (e.g. "*John's illness is just God's fate, he can't help it. I think he might feel better though if he would talk to us more, and stop spending so much time watching dumb television shows that poison his mind."*)

APPENDIX F
WORKING ALLIANCE INVENTORY (STAFF AND PATIENT)

WORKING ALLIANCE INVENTORY – SHORT FORM

KEY WORKER VERSION

This questionnaire lists different ways a person might think about his or her client. Please rate each statement on the seven point scale for _____.

	Never	Rarely	Occasionally	Sometimes	Often	Very often	Always
1. _____ and I agree about the steps to be taken to improve his/her situation	1	2	3	4	5	6	7
2. My client and I both feel confident about the usefulness of our current activities	1	2	3	4	5	6	7
3. I believe _____ likes me	1	2	3	4	5	6	7
4. I have doubts about what we are trying to accomplish together	1	2	3	4	5	6	7
5. I am confident in my ability to help _____	1	2	3	4	5	6	7
6. We are working towards mutually agreed goals	1	2	3	4	5	6	7
7. I appreciate _____ as a person	1	2	3	4	5	6	7
8. We agree on what is important for _____ to work on	1	2	3	4	5	6	7
9. _____ and I have built up mutual trust	1	2	3	4	5	6	7
10. _____ and I have different ideas on what his/her real problems are	1	2	3	4	5	6	7
11. We have established a good understanding between us of the kinds of changes that would be good for _____	1	2	3	4	5	6	7
12. _____ believes the way we are working with his/her problems is correct	1	2	3	4	5	6	7

WORKING ALLIANCE INVENTORY – SHORT FORM

CLIENT VERSION

This questionnaire lists different ways a person might think about his or her key nurse.
Please rate each statement on the seven point scale for _____.

	Never	Rarely	Occasionally	Sometimes	Often	Very often	Always
1. _____ and I agree about the things I will need to do to improve my situation	1	2	3	4	5	6	7
2. The activities I am doing with _____ give me a new way of looking at my problem	1	2	3	4	5	6	7
3. I believe _____ likes me	1	2	3	4	5	6	7
4. I do not understand what I am trying to accomplish with _____	1	2	3	4	5	6	7
5. I am confident in _____'s ability to help me	1	2	3	4	5	6	7
6. _____ and I are working towards mutually agreed goals	1	2	3	4	5	6	7
7. I feel that _____ appreciates me	1	2	3	4	5	6	7
8. We agree on what is important for me to work on	1	2	3	4	5	6	7
9. _____ and I trust one another	1	2	3	4	5	6	7
10. _____ and I have different ideas on what my problems are	1	2	3	4	5	6	7
11. We have established a good understanding of the kinds of changes that would be good for me	1	2	3	4	5	6	7
12. I believe the way we are working with my problems is correct	1	2	3	4	5	6	7

APPENDIX G
POSITIVE AND NEGATIVE SYNDROME SCALE

PANSS QUESTIONS

- G1 Somatic concern**
- G2 Anxiety**
- G6 Depression**
- G3 Guilt feelings**
- P5 Grandiosity**
- P3 Hallucinatory behaviour**
- P1 Delusions**
- P6 Suspiciousness/Persecution**
- G16 Active Social Avoidance**
- N2 Emotional Withdrawal**
- G12 Lack of judgement and insight**
- G10 Disorientation**
- N5 Difficulty in Abstract Thinking**
- P4 Excitement**

- P7 Hostility**
- N1 Blunted Affect**
- N3 Poor Rapport**
- N6 Lack of Spontaneity and Flow of Conversation**
- N7 Stereotyped Thinking**
- G4 Tension**
- G5 Mannerisms and Posturing**
- G7 Motor Retardation**
- G8 Uncooperativeness**

- G9 Unusual Thought Content**

G11 Poor Attention

G13 Disturbance of volition

G14 Poor Impulse Control

G15 Preoccupation

APPENDIX H
GLOBAL ASSESSMENT OF FUNCTIONING SCALE

GLOBAL ASSESSMENT OF FUNCTIONING (GAF) SCALE
ID Number: _____ **Observation Period/Date** _____

Rater

Consider psychological, social, and occupational functioning on a hypothetical continuum of mental illness. Do not include impairment in functioning due to physical (or environmental) limitations.

Code	(note: Use intermediate codes when appropriate, e.g. 45, 68 or 72)
100 91	Superior functioning in a wide range of activities. Life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms.
90 81	Absent or minimal symptoms (e.g. mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g. an occasional argument with family members).
80 71	If symptoms are present, they are transient and expectable reactions to psychosocial stressors (e.g. difficulty concentrating after family argument): no more than slight impairment in social, occupational, or school functioning (e.g. temporarily falling behind in schoolwork).
70 61	Some mild symptoms (e.g. depressed mood and mild insomnia) OR some difficulty in social, occupational, or school functioning (e.g. occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships.
60 51	Moderate symptoms (e.g. flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational or school functioning (e.g. few friends, conflict with peers or co-workers).
50 41	Serious symptoms (e.g. suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational, or school functioning (e.g. no friends, unable to keep a job).
40 31	Some impairment in reality testing or communication (e.g. speech is at times illogical, obscure or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgement, thinking, or mood (e.g. depressed man avoids friends, neglects family and is unable to work: child frequently beats up younger children, is defiant at home and is failing at school).
30 21	Behaviour is considerably influenced by delusions or hallucinations OR serious impairment in communication or judgement (e.g. sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g. stays in bed all day, no job, home or friends).
20 11	Some danger of hurting self or others (e.g. suicide attempts without clear expectation of death; frequently violent; manic excitement) OR occasionally fails to maintain minimal personal hygiene (e.g. smears feces) OR gross impairment in communication (e.g. largely incoherent or mute).
10 1	Persistent danger of severely hurting self or others (e.g. recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.
0	Inadequate information.

APPENDIX I
SOCIAL BEHAVIOURAL SCALE

The Social Behaviour Schedule
For Administration to Staff Members

Edited by T. Wykes and E. Sturt

In all cases, rate for typical behaviour over the past month- keep reminding informant of this time span.

NOTE:

The degree of (severity) of the behaviour and the frequency of occurrence should be taken into account in making the rating. When in doubt, frequency should always carry more weighting than degree.

(1) Communication: taking the initiative.

Does the S. initiate conversations? Will he or she approach a member of staff either to ask a question or to start a conversation?

If S. approaches will he or she carry out the conversation after the initial comments?

0. Good range of spontaneous contacts. Can initiate a conversation and keep it going by spontaneous contributions. If someone else initiates a conversation, S. responds appropriately and quite often keeps the conversation going. (i.e. active as well as passive response).
1. Can sometimes initiate or maintain conversation but this is infrequent or the range of topics is very limited. If another person initiates contact S. usually responds appropriately, but only for a short time and then ceases to respond.
2. Occasionally speaks spontaneously, but this is unusual and limited to greetings, brief factual exchanges etc. Quite often ignores another person's attempt at contact, or turns away.
3. Usually responds negatively to attempts to initiate conversation. (e.g. turns away, walks out of the room). Only spontaneous contact initiated by S. himself is non-verbal (eg. smiling, taking hand, or aggressive contact).
4. S. says virtually nothing. He does not respond when greeted or spoken to. He initiates extremely few verbal or non-verbal contact.

(2) Conversation: incoherence

How far is S. handicapped in engaging in conversation with others through incoherence of speech?

(N.B. this rating is not concerned with how articulate S. is or how intelligently he/she can express himself/herself. The incoherence of speech rated here is associated with psychotic illness- e.g. flight of ideas, knights move etc) (Give examples of incoherent speech)

0. No incoherence of speech
1. Some occasional incoherence of speech (e.g. once or twice a month).
2. Incoherence of speech occurs more frequently (e.g. once a week). Most speech is coherent.
3. Frequent incoherence of speech (e.g. more than once a week).

4. S's conversation is always or almost always characterised by incoherence of speech. Very difficult to understand anything he says.

(3) Conversation: oddity and inappropriateness

How far does S's conversation show a preoccupation with bizarre or eccentric topics, which most people (not only specialists) would regard as extremely odd. Give examples.

0. Above behaviour does not occur.
1. Above behaviour occasionally present (e.g. once or twice a month).
2. Above behaviour occurs more frequently (e.g. once a week) but most speech contains no such examples.
3. Above behaviour occurs very frequently (e.g. daily).
4. Virtually all S's conversations is as described above.

(4) Socially mixing: ability to make social contacts in an appropriate way

If S. was standing at a bus stop and some asked him or her when the next bus was expected would S. be able to respond appropriately? Would he or she appear odd in manner?

0. S. behaves appropriately in the way he or she makes social contacts with others. Or S. is not interested in making social contacts with others.
1. S. makes social contacts with others appropriately to a degree, but is rather handicapped by lack of grasp of what is and what is not socially acceptable (e.g. definitely behaved inappropriately on one or two occasions in the past month).
2. S. can approach others in a socially appropriate manner some of the time but quite often lapses into inappropriate behaviour (e.g. once a week).
3. Most of S's attempts to make social contacts with others are inappropriate in nature (e.g. more than once a week but behaviour is not as extreme as (4)).
4. S. is quite unable to behave appropriately and creates frequent embarrassment because of the inappropriateness of his/his attempts to approach others. He/she never or virtually never approaches others in the appropriate fashion.

(5) Social mixing: proportion of social contacts which are hostile in nature

The rating is concerned with the sorts of contacts S. makes with other people. The emphasis in this rating is on verbal or physical hostility. Only rate hostility if it is inappropriate or more extreme than the situation demands. Verbal hostility includes swearing etc. but does not include apathy or failures to respond to social approach. Only rate physical hostility if S. has had physical contact with another person, which was of a hostile nature.

0. Contacts are nearly always appropriately friendly. Mostly friendly contacts. Occasionally contacts are inappropriately hostile (e.g. one or two incidents in past month or more than this but of a relatively minor nature).
1. More frequent incidents of inappropriately hostile contact or a serious incident involving threatening behaviour in past month, but most contacts have been friendly.
2. Most contacts are verbally hostile (e.g. swear, accuses etc. more than once a week)
3. Contacts are frequently verbally hostile, or S. has at any time in past month been physically hostile.

(6) Social mixing: attention-seeking behaviour

Does S. try to monopolise people's attention? Is he/she resentful if staff members, relatives etc. give attention to others?

0. S. does not seek attention inappropriately.
1. S. sometimes seeks to monopolise attention but does not get upset if attention is paid to others (e.g. an incident when S. sought to monopolise attention in the past month).
2. S. sometimes seeks to monopolise attention of others, and also tends to get angry and resentful if attention is given to others.
3. S. constantly makes demands on others' attention (e.g. more than once a week).
4. S. is constantly making demands on attention of others (either specific others such as a particular relative, or staff in day care or hostel setting, or other people in general). S. also frequently gets angry or resentful if any attention is given to others.

(7) Suicidal and self harming ideas and behaviour

Ratings on this item should be made conservatively. A rating of **3**. or more should only be made if the informant was sure that injuries, which were sustained, were intended by the S. to be of a suicidal nature.

0. S. has not spoken of suicide or made any attempt.
1. S. has alluded to suicide indirectly in the past month.
2. S. has spoken of suicide directly in the past month.
3. S. has made some attempt of a suicidal gesture in past month (e.g. scratching wrists). Or S. has spoken of suicide several times in the past month.
4. S. has made serious attempts at suicide or injured himself seriously in past month.

(8) Panic attacks and phobias

This rating is concerned with how far S. is troubled by anxiety, either attached to particular situations (e.g. being with people, travelling, leaving the house) or generalised feelings of anxiety and tension. Preoccupation with health worries is included if there are no objective grounds.

0. S. is free enough from anxiety to be able to undertake any social or other activity he might choose. S. is troubled by occasional anxiety. Or S's anxiety is not excessively disabling because confined to small areas. Or level of anxiety is low enough that S. can contain and live with it.
1. S. is tense and anxious much of the time, and prevents him/her from functioning in certain key areas in life. Nevertheless S. can cope with his/her anxiety in general.
2. S. suffers anxiety most of the time. Or S. has very frequent (e.g. twice weekly) anxiety attacks. There are few areas where S. can function without being handicapped by anxiety.
3. S. is extremely tense and anxious virtually all the time. His/her anxiety prevents him/her from doing almost anything at all and it troubles him/her deeply.

(9) Over activity and restlessness

Over activity should be rated if one or more of the following are present: purposeless pacing up and down or rushing from room to room, frequent unnecessary movements, general restlessness, fidgeting. If either purposeless frequent pacing is present or more than one of the other behaviours is present then rate as marked over activity.

- 0. No marked over activity or restlessness.
- 1. Occasional periods of restlessness or over activity (e.g. once or twice in past month).
- 2. Over activity occurs quite often (e.g. weekly).
- 3. S. shows marked over activity frequently (e.g. daily, or nightly).
- 4. S. shows marked overactive for long periods on a regular basis (e.g. most nights spends several hours pacing up and down).

(10) Laughing and talking to self

Only rate here if it is obvious to the informant that S. is not laughing socially i.e. evidence of laughing when alone or muttering so no-one else can catch what is said, is enough to consider making a rating.

- 0. No laughing or talking to self.
- 1. Occasional episodes of laughing or muttering to self (e.g. once or twice in past month). Can control behaviour if reminded.
- 2. More frequent episodes of laughing or muttering to self (e.g. three times in past month). S. has some difficulties in controlling behaviour if reminded.
- 3. Laughing or talking to self occurs often (e.g. weekly).
- 4. Very frequent laughing or talking to self (e.g. daily). Or less than daily but episodes last a long time.

(11) Acting out bizarre ideas

This rating is concerned with whether S. decides on some action because of his/her delusions. For example; (a) going to the scene of some major catastrophe because S. feels his or her help is needed. (b) S. assumes that he/she has millions of pounds and so either spends it or tries to spend it on expensive items.

- 0. No such behaviour
- 1. Such behaviour occurred once in the past month
- 2. Such behaviour has occurred more than once in the past month.

(12) Posturing and mannerisms

This rating is concerned with odd, stylised movements or uncomfortable or inappropriate postures. (Give examples).

- 0. No posturing or mannerisms
- 1. Some odd or uncomfortable postures or mannerisms occasionally (e.g. once or twice in past month).
- 2. Behaviour apparent more frequently (e.g. once a week).
- 3. Behaviour apparent very often (e.g. more than once a week).
- 4. Behaviour apparent frequently (e.g. S. adopts odd postures or mannerisms much of the time and every day).

(13) Socially unacceptable habits or manners

This rating concerns unacceptable habits e.g. scratching genitals, passing loud flatus, picking nose etc. Ask particularly about problems at meal times such as poor table manners.

- 0. Has good manners and behaviour and is socially acceptable.
- 1. Behaviour is not markedly unacceptable but S. has positive qualities in manner.
- 2. Occasional unacceptable behaviour (e.g. markedly unattractive habit, surliness, uncouthness). However much of the time S. is passively acceptable.
- 3. Frequent episodes of unacceptable behaviour as in (2) (e.g. once a week).
- 4. Behaviour is markedly unacceptable most of the time.

(14) Destructive behaviour

Under this item only rate behaviour which results in destruction of property only. If an accident included some threatening behaviour to other as well as destruction of property then rate under item 5 only.

- 0. S. has reasonable tolerance for provocation, is in control of angry feelings and acts in a socially appropriate manner.
- 1. Threatens to destroy property occasionally but has not actually done so.
- 2. Frequently threatens to destroy property.
- 3. Has damaged property in anger during the past month e.g. broken window torn clothes.

(15) Depression

This rating concerns periods spent in S. sitting with his/her head in his/her hands looking miserable, remarks such as 'I wish I had never been born' or 'life is pointless' etc. Do not assume suicidal behaviour is an indication of depression; other signs need to be present to make a rating here.

- 0. No such behaviour.
- 1. Such behaviour occurs occasionally (e.g. one or two brief incidents in past month)
- 2. Such behaviour occurs fairly often or for fairly long periods (e.g. once a week).
- 3. Such behaviours occur frequently (e.g. daily).

(16) Inappropriate sexual behaviour

This rating concerns sexual activity, which is directed towards another person. DO NOT INCLUDE self-stimulation. Where S. is unaware of social constraints e.g. masturbating in public place but not directed towards any particular person. If unclear whether behaviour constitutes a sexual advance then rate under item (13), socially unacceptable habits. Include discussions of a sexual nature only when they are aimed at provoking the other discussants- if not provoking then rate under odd or inappropriate conversations, item (3).

- 0. No inappropriate sexual behaviour or talk.
- 1. S. is somewhat preoccupied with sexual matters (e.g. once or twice talked about sex in an inappropriate context in the past month).
- 2. S. more often exhibits inappropriate sexual behaviour (e.g. makes unwelcome sexual advances).
- 3. S. exhibits markedly inappropriate sexual behaviour quite frequently (e.g. exposes self, makes unwelcome sexual advances in an embarrassing manner).
- 4. S. exhibits behaviour as in 3. frequently (e.g. weekly). S's behaviour is sufficiently marked and frequent to cause problems in his/her household and community.

(17) Personal appearance and hygiene

In making this rating, consider cleanliness, hair, changing underwear, and incontinence. Also consider bizarre appearance. Take into account the amount of supervision S. receives. If, for example, S. is in a hostel, consider how S. would care for himself/herself if not in a supervised situation. (Do not consider 'fashionable' disorder in dress).

0. Able to look after appearance and cleanliness adequately.
1. Usually appearance is satisfactory but occasionally needs reminding. Or takes an interest in certain aspects of appearance but neglects others.
2. Quite often needs reminding about appearance (e.g. three times in the past month). Or attends to appearance but in an inappropriate manner so that appearance is bizarre.
3. Considerable self-neglect most of the time. Needs frequent reminding (e.g. more than once a week) and some supervision.
4. Gross self-neglect. No spontaneous care of clothing (e.g. clean underwear), washing hair, hygiene. Needs supervision in all aspects. Would smell if unsupervised. Would be incontinent if not reminded.

(18) Slowness

This item is concerned with abnormal slowness e.g. S. sits abnormally still, walks abnormally slow or is delayed when performing movements. Make allowances for age and physical condition.

0. No abnormal slowness.
1. Moderately slow, but most of the time is not slow.
2. Moderately slow most of the time, even when stimulated.
3. Moderately slow most of the time with periods of extreme as in 4.
4. Extremely slow. Will sit or lie doing nothing if not stimulated and even then very slow to move.

(19) Under activity

This rate concerns under activity alone. Bear in mind that S. may be slow (item **(18)**) and under active or under active only. Under activity here is defined as a lack of spontaneous activity. If S. not stimulated will sit and do nothing (moderate under activity). When it is not possible to stimulate S. into carrying out a task then rate as extreme under activity.

0. No abnormal under activity.
1. Moderately under active on occasions, but most of the time keeps active.
2. Moderately under active most of the time even when stimulated.
3. Moderately under active most of the time, with periods of extreme under activity as in 4.
4. Extremely under active. Will sit or lie doing nothing if not stimulated, and even then very slow to move.

(20) Concentration

Does S. find it difficult to concentrate on a task even when he really wants to do so? On watching a T.V. programme? On reading a book? Is S. distractible? Can S. set his mind to something and do it, or does he/she find it impossible to concentrate long enough to do this?

0. S. does not have problems with his/her ability to concentrate.
1. S. has periods when he/she is unable to concentrate.
2. S. can only concentrate for a few minutes at a time.

(21) Behaviours, not otherwise specified, that impede progress

Specify any other behaviours or attitudes not previously covered that seem to be holding back S's progress (e.g. smoking, over eating, anorexia, stealing, obsessions, sleep disturbances). Be conservative in rating. Do not rate behaviours here which should be rated elsewhere. (Give examples).

0. No such behaviour present (other than those rated elsewhere).
1. Behaviours have no occurred in past month but informant worried they might do so.
2. Behaviours have occurred a few times during the past month.
3. Behaviours have occurred quite frequently.
4. Behaviours have been frequent.

APPENDIX J
SERVICE ENGAGEMENT SCALE

Service Engagement Scale (Tait et al, 2002)

Please circle the response which best describes your client

	Not at all or rarely	Sometimes	Often	Most of the time
1. The client seems to make it difficult to arrange appointments	0	1	2	3
2. When a visit is arranged, the client is available	0	1	2	3
3. The client seems to avoid making appointments	0	1	2	3
4. If you offer advice, does the client usually resist it?	0	1	2	3
5. The client takes an active part in the setting of goals or treatment plans	0	1	2	3
6. The client actively participates in managing his/her illness	0	1	2	3
7. The client seeks help when assistance is needed	0	1	2	3
8. The client finds it difficult to ask for help	0	1	2	3
9. The client seeks help to prevent a crisis	0	1	2	3
10. The client does not actively seek help	0	1	2	3
11. The client agrees to take prescribed medication	0	1	2	3
12. The client is clear about what medication he/she is taking and why	0	1	2	3
13. The client refuses to co-operate with treatment	0	1	2	3
14. The client has difficulty in adhering to the prescribed medication	0	1	2	3

APPENDIX K
WARD ATMOSPHERE SCALE

Ward Atmosphere Scale – Short Form

Instructions:

There are 40 statements below. They are about this ward. Please decide which statements are true of your ward and which are false. Please be sure to answer every statement.

How long have you lived or worked on this ward?

Years: ____ Months: ____ Days: _____

If you are a staff member tick here

Please indicate your job title: _____

Please decide which statements are true of this ward and which are not.

True – Circle **T** if you think the statement is true or mostly true of your ward

False – Circle **F** if you think the statement is false or mostly false of your ward

Please be sure to answer every statement

- | | |
|---|-----|
| 1. Patients put a lot of energy into what they do around here..... | T F |
| 2. Doctors have very little time to encourage patients..... | T F |
| 3. Patients tend to hide their feelings from one another..... | T F |
| 4. The staff act on patients' suggestions..... | T F |
| 5. New treatment approaches are often tried in this ward..... | T F |
| 6. Patients hardly ever discuss their sex life..... | T F |
| 7. Patients often gripe..... | T F |
| 8. Patients' activities are carefully planned..... | T F |
| 9. The patients know when doctors will be on the unit..... | T F |
| 10. The staff very rarely punish patients by restricting them..... | T F |
| 11. This is a lively ward..... | T F |
| 12. The staff know what the patients want..... | T F |
| 13. Patients say anything they want to the doctors..... | T F |
| 14. Very few patients have any responsibility here..... | T F |
| 15. There is very little emphasis on teaching patients solutions to practical problems..... | T F |
| 16. Patients tell each other about their personal problems..... | T F |
| 17. Patients often criticise or joke about the staff..... | T F |
| 18. This is a very well organised ward..... | T F |
| 19. Doctors do not explain what treatment is about to patients..... | T F |
| 20. Patients may interrupt when a doctor is talking..... | T F |
| 21. The patients are proud of this ward..... | T F |
| 22. Staff are interested in following up patients once they leave the ward..... | T F |
| 23. It is hard to tell how patients are feeling here..... | T F |
| 24. Patients are expected to take leadership here..... | T F |
| 25. Patients are strongly encouraged to plan for the future..... | T F |
| 26. Personal problems are openly talked about..... | T F |
| 27. Patients in this ward rarely argue..... | T F |
| 28. The staff make sure that the unit is always neat..... | T F |
| 29. If a patient's medicine is changed, a nurse or doctor always explains why..... | T F |
| 30. Patients who break the rules are punished for it..... | T F |

- 31. There is very little group spirit in this ward..... T F
- 32. Nurses have very little time to encourage patients..... T F
- 33. Patients are careful about what they say when staff are around..... T F
- 34. Patients here are encouraged to be independent..... T F
- 35. There is very little emphasis on what patients will be doing after they leave..... T F
- 36. Patients are expected to share their personal problems with each other..... T F
- 37. Staff sometimes argue openly with each other..... T F
- 38. The unit sometimes gets very messy..... T F
- 39. The patients clearly understand the ward rules..... T F
- 40. Patients who argue with other patients will get into trouble with the staff..... T F

APPENDIX L
MASLACH BURNOUT INVENTORY

Maslach Burnout Inventory

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

Statements:

Answer:

- | | |
|---|-------|
| 1. I feel emotionally drained from my work | _____ |
| 2. I feel used up at the end of the work day | _____ |
| 3. I feel fatigued when I get up in the morning and have to face another day on the job | _____ |
| 4. I can easily understand how my recipients feel about things | _____ |
| 5. I feel I treat some recipients as if they were impersonal objects | _____ |
| 6. Working all day is really a strain for me | _____ |
| 7. I deal very effectively with the problems of my recipients | _____ |
| 8. I feel burned out from my work | _____ |
| 9. I feel I'm positively influencing other people's lives through my work | _____ |
| 10. I've become more callous toward people since I took this job | _____ |
| 11. I worry that this job is hardening me emotionally | _____ |
| 12. I feel very energetic | _____ |
| 13. I feel frustrated by my job | _____ |
| 14. I feel I'm working too hard on my job | _____ |
| 15. I don't really care what happens to some recipients | _____ |
| 16. Working with people directly puts too much stress on me | _____ |
| 17. I can easily create a relaxed atmosphere with my recipients | _____ |
| 18. I feel exhilarated after working closely with my recipients | _____ |
| 19. I have accomplished many worthwhile things in this job | _____ |
| 20. I feel I'm at the end of my rope | _____ |
| 21. In my work, I deal with emotional problems very calmly | _____ |

22. I feel recipients blame me for some of their problems

APPENDIX M
INTENTION TO LEAVE

Intention to leave

a) At this time in your career, would you want to quit this job if it were possible? –

1 = I never think of quitting this job

2 = I occasionally think of quitting this job

3 = I frequently think of quitting this job.

b) Are you actually planning to leave your job within the next six months? 1 = I am not planning to quit this job

2 = I am thinking about quitting this job

3 = I am planning to quit this job.

c) Are you actively searching for another job right now?

1 = I never have searched for another job

2 = I occasionally have searched for another job

3 = I frequently have searched for another job.

d) Please indicate whether you have ever had thoughts of leaving you job. 1 = I never had such thoughts

2 = I occasionally have such thoughts

3 = I frequently have such thoughts.

e) If you have answered 2 or 3 to any of the above questions, please briefly explain your reasons for wanting to leave.

f) How confident do you feel in working with service users

1 2 3 4 5 6 7 8 9 10

No confidence at all

Extremely confident

I can't do it

APPENDIX N
STAFF INFORMATION SHEET

Participant Information Sheet: Staff Improving staff and patient relationships

You are being invited to take part in a research study. Before you decide if you want to take part, it is important for you to understand why the research is being done and what it will involve. Ask us if there is anything that is not clear or you would like more information about. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

We are inviting you to take part in a study looking at improving staff and patient relationships in rehabilitation services. The study will look at factors that are associated with good relationships, such as patient symptoms, staff understanding of symptoms, staff stress and then ask staff to take part in meetings to improve relationships. The meetings will be aimed at staff and involve exploring and developing ways to improve staff-patients relationships. Part of this project is being completed as part of a doctorate in clinical psychology and is funded by the National Institute of Health Research.

Why have I been invited to take part?

We are approaching all staff who have been worked on rehabilitation unit for at least 3 months to ask if they want to help us evaluate the meetings to improve staff and patient relationships. The unit manager has agreed for us to approach you.

What will I have to do if I take part?

We would like to recruit a total of 80 staff and 40 patients in psychiatric rehabilitation services. If you decide to take part, you will be asked to complete the following activities

- a) Interviews and questionnaires about your relationships with patients, your stress levels and job satisfaction. The interviews will take no longer than 1 1/2 hours in total and can be carried out in one go or over several meetings. We will try to make appointments at times which suit you. Interviews will take place in a private room in the unit.
- b) We will then ask you to answer the same questions with the researcher in 6 months and 12 months time. These meetings will also last no longer than 1 1/2 hours in total.
- c) Half the participants will be asked to attend meetings to improve staff-patient relationships. In order to evaluate the meetings, we will compare wards who have the meetings with those that do not. To try to make sure units receiving the meetings and those that do not are the same to start with, the decision will be made by chance i.e. randomly. If your unit receives the meetings, staff will be asked to attend weekly meetings for 6 months facilitated by a clinical psychologist. The meetings will last approximately 1 1/2 hours and will be carried out with groups of staff together on the unit and at a time that is most convenient for the unit. The purpose of the meetings is to provide an opportunity to discuss relationship difficulties and develop support plans. We will ask key workers to feed back any proposed changes to support plans discussed at the meetings to patients. If you decide to take part in the study, we will ask you to attend at least 10 meetings. This is a total of 15 hours.

- d) At the end of the meetings, we will also be giving staff and patients an option to take part in interviews with a researcher to discuss their experiences of the research. These interviews will last 45 minutes.
- e) Units who do not initially receive the meetings, will be given the option of participating in the intervention after 12-months. These meetings will be the same as those provided as part of the main study, but will be facilitated by a trainee clinical psychologist who will work under the supervision of the study investigator.

Will my taking part be kept confidential?

Information which is collected during the course of the study will be strictly confidential, although we do have a responsibility to inform your manager if you tell us information **that** suggests you or someone else might be harmed. If you agree to take part in the study, any information you give the researcher will be kept strictly confidential and in accordance with the Data Protection Act of 1998. Your name will not appear on any of the forms, we will give you a study number instead. Staff will be asked if they would mind the interview about their relationships with patients being recorded by audio tape, so the ratings can be checked by a second researcher. You can still take part in the study even if you do not agree to this interview being taped. Staff who attend the meetings, will also be asked to consent to the sessions being audio recorded, so that the extent to which the psychologist follows the protocol can be monitored. This is a criterion for inclusion in the study. The tape will be destroyed after it has been used and your personal details will not be disclosed. Copies of consent forms may be reviewed by the Trust Clinical Audit Department to confirm that you have given written informed consent. Responsible individuals from the University of Manchester may also look at the research records to audit the conduct of the research.

What are the possible risks of taking part?

The assessments in the study are simple and unlikely to cause you any distress or harm. You do not have to answer any questions you do not want to. If you do feel distressed as a result of the interview you can contact the researcher at the University on XXXX XXX XXXX. You may also want to contact the staff counselling service.

Are there any possible benefits?

We cannot promise the study will help you but the information we get from this study will help us develop ways of improving staff and patient relationships, which we hope will ultimately lead to better outcomes for patients and reduce staff stress. The study is planned for 4 years and the findings will be fed back to interested participants at the end of this time period. You will not be identified in any report of the study.

Do I have to take part?

No, taking part is voluntary. If you would prefer not to take part you do not have to give a reason and this will not affect your position within the Trust. If you take part but later change your mind, you can withdraw at any time from the study without affecting your position. If you do decide to take part you will be given this information sheet to keep and asked to sign a consent form. If you decide not to take part you are still welcome to attend the meetings sessions, assuming your unit has meetings.

What do I do now?

A researcher from the study will contact you in a few days. She will go through the information sheet with you and answer any questions you have. We'd suggest this should take about 10 minutes. You can let her know if you are interested in taking part.

What do I do if something goes wrong?

If you wish to make a complaint, you can contact a University Research Practice and Governance Coordinator.

Tel: 0161 2757583 or 0161 2758093

Email: research-governance@manchester.ac.uk

In the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against the University of Manchester, but you may have to pay for your legal costs.

Thank you very much for considering taking part in our research. Please discuss this information with your family, friends or colleagues if you wish.

APPENDIX O
PATIENT INFORMATION SHEET

Participant Information Sheet: Patients

Improving staff and patient relationships

You are being invited to take part in a research study. Before you decide if you want to take part, it is important for you to understand why the research is being done and what it will involve. Ask us if there is anything that is not clear or you would like more information about. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

We are inviting you to take part in a study looking at improving staff and patient relationships in rehabilitation services. The study will look at factors that are associated with good relationships, such as patient symptoms, staff understanding of symptoms, staff stress and then ask staff to take part in group meetings to improve relationships. The meetings will be aimed at staff and involve exploring and developing ways to improve staff-patients relationships. This study is funded by the National Institute of Health Research. Part of this project is also being completed as part of a doctorate in clinical psychology and a Masters in psychological research methods.

Why have I been invited to take part?

We are approaching all patients who have been patients on a rehabilitation unit for at least 3 months to ask if they want to help us evaluate the meetings to improve staff and patient relationships. Your key worker has agreed for us to approach you.

What will I have to do if I take part?

We would like to recruit a total of 80 staff and 40 patients in psychiatric rehabilitation services. If you decide to take part, you will be asked to take part in the following activities.

- a) complete an interview about your mental health and questionnaires about your relationships with staff. The interview will take no longer than 1 hour in total and can be carried out in one go or over several meetings. We will try to make appointments at times which suit you. Interviews will take place in a private room in the unit.
- b) We will then ask you to answer the same questions with the researcher in 6 months and 12 months time. These meetings will also last no longer than 1 hour.
- c) At the 6 month meeting you will also be given the option of taking part in an interview with the researcher about your experiences of the research. These interviews will last about 45 minutes.

The researcher will need to look at your medical notes to get basic information about your diagnosis and treatment. In order to evaluate the meetings, we will compare wards who take part in the meetings with those that do not. To try to make sure units receiving the meetings and those that do not are the same to start with, the decision will be made by chance i.e. randomly. If your unit has the meetings, staff will attend weekly meetings for 6 months facilitated by a clinical psychologist. The purpose of the meetings is to help explore relationship difficulties and develop support plans. Any proposed changes to support plans discussed at the meetings, will be fed back to you by your key worker.

We are also asking people if they would like to complete diary measures. This part of the study uses a method called Experience Sampling. You will be asked to carry a mobile phone and a small diary for 6 days. The mobile will beep 10 times per day at unpredictable times. When the mobile beeps, you will be asked to fill out answers to questions in the diary. This will include short questions about your symptoms, mood, experiences and activities. For example:

“Using a scale of 1 to 7 where 1 = not at all and 7 = very much so please tell us to what extent you feel.....

Worried

Bored

Hopeless

Calm

Are you with someone else at the moment? Yes, No

If you answered ‘Yes’ who are you with?

How does this person make you feel?”

It will take you no more than two minutes to answer these questions. Each morning you will also be asked some general questions about how you slept (e.g., “I slept well. Yes No”). In the evening, you will again be asked some general questions about how your day has gone (e.g., this has been a normal day. Yes No”). These questions in the morning and in the evening will take no more than a minute to answer. This is an optional part of the study, so you do not have to agree to participate in the diary study in order to participate in the main part of the project. People who fill out the diaries will receive a ten pound high street voucher.

Will my taking part be kept confidential?

Information which is collected during the course of the study will be strictly confidential, although we do have a responsibility to inform your key worker if you tell us information that suggests you or someone else might be harmed. If you agree to take part in the study, any information you give the researcher will be kept strictly confidential and in accordance with in the Data Protection Act of 1998. Your name will not appear on any of the forms, we will give you a study number instead. With your permission, we would like to inform your key worker if you agree to take part in the study. Some participants will be asked if they would mind the interview about their mental health being recorded by audio tape, so the ratings can be checked by a second researcher. The tape will be destroyed after it has been used and your personal details will not be disclosed. As you are under the care of a mental health NHS Trust, a copy of your consent form will be copied into your usual medical notes and this copy may be reviewed by the Trust Clinical Audit Department to confirm that you have given written informed consent. Responsible individuals from the University of Manchester may also look at the research records to audit the conduct of the research.

What are the possible risks of taking part?

The assessments in the study are simple and unlikely to cause you any distress or harm. You do not have to answer any questions you do not want to. If you do feel distressed as a result of the interview you can contact the researcher at the University on XXXX XXX

XXXX. If you are feeling very distressed out of office hours, we suggest you speak to your key worker or other staff on the unit.

Are there any possible benefits?

We cannot promise the study will help you but the information we get from this study will help us develop ways of improving staff and patient relationships, which we hope will ultimately lead to better outcomes for patients and reduce staff stress. The study is planned for 4 years and the findings will be fed back to interested participants at the end of this time period. You will not be identified in any report of the study.

Do I have to take part?

No, taking part is voluntary. If you would prefer not to take part you do not have to give a reason. Staff involved in your care will not be upset and your treatment will not be affected. If you take part but later change your mind, you can withdraw at any time from the study without affecting the standard of your care. If you do decide to take part you will be given this information sheet to keep and asked to sign a consent form.

What do I do now?

A researcher from the study will contact you in a few days. She will go through the information sheet with you and answer any questions you have. We'd suggest this should take about 10 minutes. You can let her know if you are interested in taking part.

What do I do if something goes wrong?

If you wish to make a complaint, you can contact a University Research Practice and Governance Coordinator.

Tel: 0161 2757583 or 0161 2758093

Email: research-governance@manchester.ac.uk

In the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against the University of Manchester, but you may have to pay for your legal costs.

The normal National Health Service complaints mechanisms will still be available to you.

Thank you very much for considering taking part in our research. Please discuss this information with your family, friends or mental health team if you wish.

APPENDIX P
STAFF CONSENT FORM

Consent form

Participant identification number :.....

Centre Number :.....

Study number :.....

Title: Improving staff and patient relationships

Name of Investigator:

Please initial the boxes

1. I confirm that I have read and understand the information sheet dated 19th January 2011 (version 4) for the above study and have had the opportunity to ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my legal rights being affected.

3. I agree that intervention sessions can be audio taped and rated by members of the research team for the purposes of assessing fidelity. I understand that my personal details will not be identified and the recordings will be erased after use.

4. I agree to take part in the above study.

5. I understand that data collected during the study may be looked at by individuals from regulatory authorities or from the NHS Trust where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

Name of Participant

Date

Signature

Researcher

Date

Signature

APPENDIX Q
PATIENT CONSENT FORM

Consent form

Patient identification number :.....

Centre Number :.....

Study number :.....

Title: Improving staff and patient relationships

Name of Investigator:

Please initial the boxes

1. I confirm that I have read and understand the information sheet dated 19th March 2011 (version 5) for the above study and have had the opportunity to ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

3. I understand that relevant sections of my medical notes and data collected during the study may be looked at by individuals from regulatory authorities or from the NHS Trust where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

4. I consent to my key worker being informed about my involvement in the study.

5. I agree to take part in the above study.

Name of Patient

Date

Signature

Researcher

Date

Signature

APPENDIX R
STATISTICAL ANALYSIS FOR SKEWNESS AND KURTOSIS VALUES

Data	Skewness	Skewness SE	Z Score	Kurtosis	Kurtosis SE	Z Score
AC global	0.449	0.269	1.855	-0.865	0.523	-1.625
WASS Relationship	-0.301	0.255	-1.180	-0.360	0.506	-0.711
WASS Personal Growth	-0.588	0.257	-2.288	0.211	0.508	0.415
WASS System Maintenance	-0.495	0.255	1.940	0.077	0.506	0.152
WASC Relationship	-0.255	0.279	0.913	-0.515	0.552	-0.932
WASC Personal Growth	0.114	0.255	0.564	-0.789	0.506	1.559
WASC System Maintenance	-0.622	0.279	-2.229	0.287	0.552	0.519
MBI Emotional Exhaustion	0.645	0.255	2.529	-0.548	0.506	-1.083
MBI Depersonalisation	1.763	0.255	6.193	5.582	0.506	11.031
MBI Personal Accomplishment	-0.731	0.255	-2.866	0.405	0.506	0.800
SES Availability	0.398	0.255	1.560	-0.668	0.506	-1.320
SES Collaboration	0.191	0.255	0.749	-0.369	0.506	-0.729
SES Help Seeking	0.382	0.255	1.498	-0.051	0.506	-0.100
SES Treatment Adherence	0.318	0.264	0.001	-0.996	0.523	1.904
SES Total	0.499	0.257	1.941	-0.079	0.508	-0.155
WAIS Task	-0.630	0.266	-2.360	0.133	0.526	0.252
WAIS Bond	-0.092	0.266	-0.345	-0.662	0.526	-1.258
WAIS Goal	-0.136	0.264	-0.515	-0.421	0.523	-0.804
WAIS Total	-0.213	0.266	-0.800	-0.518	0.526	0.984
WAIC Task	-0.397	0.327	-1.210	-0.388	0.644	-0.602
WAIC Bond	-0.733	0.325	-2.255	0.125	0.659	0.195
WAIC Goal	-0.232	0.327	-0.709	-0.224	0.644	-0.347
WAIC Total	-0.652	0.330	-1.975	0.094	0.650	0.144
Intention to Leave	0.432	0.255	1.690	-0.630	0.506	-1.245
SBS Total	0.840	0.269	3.128	0.813	0.532	1.528
PANSS Total	-0.272	0.283	-0.961	-0.685	0.559	-1.225
PANSS Positive	0.576	0.279	2.064	-0.269	0.552	-0.487
PANSS Negative	0.690	0.277	2.490	0.328	0.548	0.598
PANSS General	0.175	0.279	0.267	0.548	0.552	0.992
GAF Symptoms	0.236	0.255	0.925	-0.498	0.506	-0.984
GAF Disability	0.267	0.255	1.047	0.423	0.506	0.835
GAF Total	0.540	0.255	2.117	0.296	0.506	0.584
Staff Age	-0.133	0.255	0.521	2.710	0.506	5.355
Staff Months on Unit	1.575	0.255	7.646	2.710	0.506	5.355
Staff Years' Experience	0.756	0.255	2.964	-0.603	0.506	1.191
Patient Months on Unit	1.881	0.264	7.125	2.794	0.523	5.324
Patient Age in years	0.861	0.264	3.261	0.314	0.523	0.600
Patient Age onset	2.112	0.271	7.793	4.578	0.535	8.557
Hospital admissions	1.553	0.271	5.730	1.993	0.535	3.725