

A Systematic Literature Review of the Role of Self-esteem in Persecutory and Grandiose Delusions and a Grounded Theory Exploration of Grandiose Beliefs

Sanela Grbic

A thesis submitted in part fulfillment of the requirements of the degree of Doctor of Clinical Psychology, validated by the University of Sheffield

July 2013

The results, discussions and conclusions presented herein are identical to those in the printed version. This electronic version of the thesis has been edited solely to ensure conformance with copyright legislation and all excisions are noted in the text. The final, awarded and examined version is available for consultation via the University Library.

DECLARATION

I hereby declare that this thesis has not been, and will not be, submitted in whole or in part to another university or institution for the award of any other degree.

STRUCTURE

Prepared according to the current guidelines for contributors to the *British* Journal of Clinical Psychology

1. Literature Review:

The Role of Self-esteem in the Development and Maintenance of Delusions: A Systematic Literature Review Focusing on Persecutory and Grandiose Delusions

Word Count: 7,993

2. Empirical Research Report:

First Person Accounts of Grandiose Beliefs: A Grounded Theory Approach

Word Count: 12,101

3. Appendices

Word Count: 4,996

WORD COUNT (excluding references and appendices): 20,094 WORD COUNT (including references and appendices): 29,419

ABSTRACT

This thesis first focuses on reviewing the literature in the field of persecutory and grandiose delusions and the role of self-esteem in their development and maintenance. An empirical study exploring first person accounts of grandiose beliefs is then considered.

A systematic review of the literature was conducted to elucidate the role of self-esteem in persecutory and grandiose delusions. Electronic databases were searched and thirty four studies were included. The review yielded largely mixed results. A number of higher quality studies indicated that persecutory delusions are associated with low selfesteem and that they are predicted by fluctuations in self-esteem. There was some evidence showing that grandiose delusions are associated with higher self-esteem. Studies investigating grandiose delusions are scarce, suggesting a need for further high quality research in this area.

An empirical study was conducted to explore the lived experience of individuals with grandiose beliefs, with the purpose of developing a theory of grandiose beliefs. Seven individuals were interviewed using a Semi-Structured Interview Schedule. A Grounded Theory method was used. The findings demonstrated a number of shared processes: *Expanding Sense of Self, Higher Consciousness, Search for Healing, Re-gaining Control and Element of Truth and Validation*. The developed theory suggested that multiple pathways could lead to the onset of grandiose beliefs, including a pathway leading from the experience of paranoid to grandiose beliefs. The implications of the developed framework of grandiose beliefs for future research and clinical practice are considered.

ACKNOWLEDGEMENTS

I would like to say a big thank you to all the individuals who took part in this research. Without their participation, willingness to share their experiences and honesty this thesis would not be possible. I would also like to thank my research supervisors, Gillian Hardy, Rebecca Knowles, Georgina Rowse and Simon Hamilton, for their guidance and support throughout the research process. Finally, I would like to give a special thank you to my family and friends who have been incredibly patient and supportive, making this exciting journey even more enjoyable.

SECT	CION	PAGE
Sectio	on 1: Literature Review	
	Abstract	2
	Introduction	3
	Method	5
	Results	8
	Discussion	30
	References	33

Section 2: Empirical Research Report

Abstract	49
Introduction	50
Methods	54
Results	62
Discussion	76
References	85

LIST OF APPENDICES

Appendix A. Quality Appraisal Tool

Appendix B. Studies Excluded from the Review

Appendix C. Ethical Approvals

C1. NHS Ethical Approval

C2. University Ethical Approval

Appendix D. R&D Approval

Appendix E. *Measures*

E1. Peters Delusion Inventory-21 (PDI-21)

E2. Hospital Anxiety and Depression Scale (HADS)

E3. Altman Self-Rating Mania Scale (AMRS)

E4. Screening Questionnaire

E5. General Information Questionnaire

Appendix F. Participant Information Sheets

F1. Participant Information Sheet – NHS

F2. Participant Information Sheet – non-NHS

Appendix G. Consent Forms

G1. Consent Form – NHS

G2. Consent Form - non-NHS

Appendix H. Interview Schedule

Appendix I. Example of Analysis

I1. *Line-by-line coding*

I2. Theoretical coding

I3. *Memo-writing*

LIST OF TABLES AND FIGURES

Literature Review

Table 1. Summary of high quality studiesTable 2. Summary of moderate quality studiesTable 3. Summary of low quality studiesFigure 1. PRISMA flow diagram

Empirical Project

Table 1. Demographic characteristics of the sample
Table 2. Clinical characteristics of the sample
Figure 1. Semi-Structured Interview Schedule
Figure 2. Participants' Theory of Grandiose Beliefs

SECTION 1: LITERATURE REVIEW

The Role of Self-esteem in the Development and Maintenance of Delusions: A Systematic Literature Review Focusing on Persecutory and Grandiose Delusions

Abstract

Objectives. Persecutory and grandiose delusions are very common in psychiatric conditions such as schizophrenia and bipolar disorder. The existing theoretical accounts of these delusions view emotion and self-esteem as central in their development and maintenance but differ on their exact role. The review aimed to synthesize the large body of published research, focusing on the role of self-esteem. **Methods.** Web of Knowledge, PsychInfo, and MEDLINE databases were searched for relevant studies. Following screening for relevance and a rigorous quality assessment, 34 studies were included. Only five of these investigated grandiose delusions.

Results. The findings revealed difficulties for the field with defining and measuring self-esteem. Higher quality studies provided some evidence for the emotionconsistent account of persecutory delusions, which argues for the direct rather than defensive role of self-esteem in the development and maintenance of delusions. Persecutory delusions appeared to be associated with low self-esteem. Furthermore, they were predicted by fluctuations and decreases in self-esteem. Although grandiose delusions appeared to be associated with higher self-esteem, there is some evidence that this may be mood dependent and that negative self-esteem may predict the onset of grandiose delusions too.

Conclusions. There is a need for better quality studies to explore the development and maintenance of grandiose delusions. Future research should investigate confounding factors such as comorbidity of persecutory and grandiose delusions, mood and deservingness, which may have impacted on the research to date resulting in the discrepant findings observed. The role of self-esteem in the development and maintenance of delusions: A systematic literature review focusing on persecutory and grandiose delusions

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) defines delusions as false beliefs based on incorrect assumptions and maintained despite evidence to the contrary (APA, 2000). In line with this, persecutory or paranoid delusions have been defined as false beliefs characterised by themes of persecution and the persecutors' intention to cause harm (APA, 2000). Similarly, grandiose delusions (GDs) have been defined as false beliefs featuring an inflated sense of worth (APA, 2000). For example, an individual experiencing this type of delusion may believe that they have special powers, wealth or knowledge, or that they are related to a famous person. These traditional definitions are based on the ideas of Kraepelin (1899) and Jaspers (1913) that delusions are pathological and irrational processes resistant to change, and they continue to dominate modern psychiatry. However, delusions are increasingly being conceptualised as situated on a continuum with ordinary beliefs, ranging from transient beliefs to full-blown delusions, and differing in conviction, preoccupation and distress (Bentall, Jackson, & Pilgrim, 1988; Oltmanns, 1988; Strauss, 1969). This is reflected in the growth of research studying beliefs such as paranoia and grandiosity in general populations. The prevalence of paranoia in the general population has been reported to range between 1.8% to 18.6% (Freeman et al., 2011), whilst the prevalence of grandiosity was found to be 48% (Peters, Joseph, & Garety, 1999).

Clinically relevant persecutory and grandiose delusions are common in psychiatric conditions such as schizophrenia, bipolar disorder and depression (Appelbaum, Robbins, & Roth, 1999). In a sample of 328 inpatients experiencing delusions, Appelbaum et al. (1999) found that 78% reported persecutory delusions and 43% reported GDs. Whilst early research focused on diagnostic categories, more recently researchers have acknowledged difficulties with this approach, noting that psychotic symptoms do not always cluster together as predicted by diagnosis (British Psychological Society, 2000). Researchers have therefore begun to investigate specific psychotic symptoms and their underlying psychological processes, using trans-diagnostic samples (Bentall, 1990; Bentall, Rowse, Kinderman, et al., 2008; Bentall, Rowse, Shryane, et al., 2009; Persons, 1986).

The existing theoretical accounts of delusions place the role of emotion and self-esteem at their centre and can be divided into two groups: emotion-consistent accounts (Freeman, Garety, & Kuipers, 2001; Smith, N., Freeman, & Kuipers, 2005) and defence theories (Bentall, Kinderman, & Kaney, 1994; Neale, 1988). The proponents of the emotion-consistent accounts argue for a direct role of emotion in the development of delusional beliefs. For example, Freeman et al. (2001) argue that persecutory delusions reflect the true emotional state of an individual, such as feelings of anxiety, depression, vulnerability, and low self-esteem. Similarly, Freeman and Garety (2003) alongside Smith, N. et al. (2005) suggest that GDs may relate to current positive emotion and preserved areas of self-esteem. Feelings of elation and mood-congruent positive beliefs are proposed to further reinforce positive self-concept and subsequently lead to development of GDs (Smith, N. et al., 2005).

Defence theories on the other hand suggest that delusions serve a defensive function, protecting an individual from distressing emotions and low self-esteem. Defence theories of persecutory delusions originate from Freud's (1917) psychoanalytic formulations of paranoia, which propose that ideas incompatible with the ego are projected into the external world (McKay, Langdon, & Coltheart, 2007). Contemporary defence theories postulate that individuals with persecutory delusions develop delusions as a consequence of attributing negative events to the actions of other people, a strategy employed to protect them from low self-esteem entering their consciousness (Bentall, Kinderman, & Kaney, 1994; Bentall, Corcoran, Howard, Blackwood, & Kinderman, 2001). Neale (1988) further developed Abraham's (1911) defence theory of mania and GDs by incorporating ideas from the Higgins' (1987) self-discrepancy theory, which postulates that a perceived discrepancy between *ideal* and *actual* self, results in psychological discomfort and increases motivation to reduce this discrepancy. An actual-ideal self-discrepancy has been observed in individuals who are depressed (Scot & O'Hara, 1993; Strauman & Higgins, 1988; Strauman, 1989). According to Neale (1988), mania and GDs are possible strategies for reducing the discrepancy between these two selfrepresentations, and for avoiding distressing cognitions and low self-esteem.

These two theoretical accounts inspired a large body of research, which has tried to shed light on their usefulness. However, to date, there has been no attempt to systematically review the published literature. This review aimed to investigate the evidence regarding the role of self-esteem in the development and maintenance of grandiose and persecutory delusions to inform both theoretical understanding and clinical practice.

Method

Search Method

The Web of Knowledge, PsychInfo, and MEDLINE databases were last searched for relevant studies in May 2013¹. The references of all the relevant studies and Google Scholar were also checked. The following terms were combined for

¹ An additional article was published in July 2013. The inclusion of this article in the review would not significantly change the results, conclusions and implications drawn.

searching: (self-esteem OR self-worth OR self-evaluation) AND (persecutory OR paranoi* OR grandios* OR grandeur OR delusion*). The terms were searched in all fields of an article. The process of identification and inclusion of relevant studies in the review is shown in the flow diagram (Figure 1).



Figure 1. PRISMA flow diagram (following Moher, Liberati, Tetzlaff, Altman & The PRISMA Group, 2010).

The Web of Knowledge identified 386 abstracts. After excluding publications that were not written in English, 332 abstracts were screened for relevance and inclusion/exclusion criteria. Following this, 47 full text papers were checked for relevance and inclusion/exclusion criteria. No additional articles were identified through other sources.

Inclusion/Exclusion criteria

Studies were only included in the review if they were published or translated into English language and if they were peer reviewed. Conference, meeting and dissertation abstracts were excluded. Those studies that looked at attributional style or self-discrepancies but did not measure self-esteem directly were excluded. Those studies that considered psychosis, positive symptoms or delusions in general but did not specifically measure persecutory or GDs were excluded. Only studies investigating clinically relevant delusions were included, so studies employing student and general population samples investigating delusion-like beliefs were excluded. A total of 36 peer reviewed studies were assessed for their methodological quality.

Quality Rating

All the studies were rated for scientific quality and rigour using the adapted checklist created by Downs and Black (1998) (Appendix A). This quality rating tool was developed to assess the methodological quality of both randomised and non-randomised studies. Since all of the studies in this review were cohort, case-control and cross-sectional studies, only questions applicable to these types of design were used to rate their quality. The tool assesses four areas of quality: (a) reporting, (b) external validity, (c) internal validity, and (d) power. Each of these areas were given equal weight, with studies that scored high in all four areas deemed to be of the

highest quality. Studies with a low score in only one of the four areas were deemed to be of moderate quality. Studies with a low score in two of the four areas were rated as low quality. Two studies scored low in all four areas and were excluded from the review (Appendix B). Twelve studies chosen at random were independently assessed and scored by a second rater. The Intraclass Correlation Coefficient was 0.98 suggesting an excellent inter-rater reliability (Fleiss, 1981).

Results

The review included 34 studies and only five of those specifically investigated GDs. Summaries of high, moderate and low quality studies can be found in Tables 1, 2 and 3 respectively. Six themes emerged as significant: (a) explicit versus implicit self-esteem (including the discrepancy between the two, the difference between individuals with current versus remitted delusions and the difference between individuals with *poor me* versus *bad me* paranoia); (b) positive versus negative self-esteem; (c) fluctuations in self-esteem; (d) co-morbidity of grandiose and persecutory delusions; (e) social self-esteem; and (f) causal role of self-esteem. The first three themes reflected the conceptualisation and measurement of self-esteem. The difficulties conceptualising and measuring self-esteem will be considered first. The six themes will then be discussed in turn.

Table 1

Summary of high quality studies

Study	Sample	Self-esteem measure	Findings
Drake et al. (2004)	First-episode psychosis (n=257)	SEI	When paranoia and self-esteem were related greater paranoia was related to low self-esteem.
Fowler et al. (2012)	Non-affective psychosis (n=301) (schizophrenia, n=257; schizo-affective disorder, n=40; delusional disorder, n=4) (same sample as Garety, P. et al., 2012)	BCSS	Evidence of pathways leading from negative cognition (including self-evaluation) to paranoia rather than those in the opposite direction. Negative cognition independently predicted paranoia.
Garety et al. (2012)	Non-affective psychosis (n=301) (schizophrenia, n=257; schizo-affective disorder, n=40; delusional disorder, n=4)	BCSS & SEI	Persecutory delusions were predicted by negative self-evaluations, depression and anxiety. GDs were predicted by less negative self-evaluations and less depression and anxiety.
Palmier-Claus et al. (2011)	First-episode psychosis (n=256) (same sample as Drake et al., 2004)	SEI	Negative self-esteem level and fluctuations in positive self-esteem predicted paranoia.
Romm et al. (2011)	Schizophrenia spectrum disorder (n=113) (schizophrenia, n=68; schizophreniform disorder, n=7; schizoaffective disorder, n=11; brief psychosis, n=1; delusional disorder, n=7; psychosis NOS, n=19)	SEI	Lower self-esteem was associated with greater paranoid delusions, after depression was controlled for.
Smith, B. et al. (2006)	Non-affective psychosis (n=100) (schizophrenia, n=78; schizo-affective disorder, n=20; delusional disorder, n=2) (part of the same sample as Garety et al., 2012)	BCSS & SEI	Low self-esteem and negative self-evaluations were associated with greater paranoid delusions. Higher self-esteem and less negative self-evaluations were associated with greater GDs.

Note. SEI= Rosenberg Self-Esteem Inventory, BCSS= Brief Core Schema Scales

Table 2

Summary of moderate quality studies

Study	Sample	Self-esteem measure	Findings
Bentall, Rowse, Kinderman, et al. (2008)	Currently paranoid group (schizophrenia, schizoaffective disorder or delusional disorder, n=39) Remitted paranoid group (schizophrenia spectrum, n=29) Paranoid depressed group (major depression, n=20) Nonpsychotic depressed group (major depression, n=27) Healthy control group (n=33)	SERS	Negative but not positive self-esteem was associated with paranoia, independent of mood.
Bentall, Rowse, Shryane, et al. (2009)	Current paranoid group (schizophrenia and schizoaffective disorder, n=39) Late onset paranoid (late-onset schizophrenia- like psychosis and delusional disorder,(n=29) Depressed & Paranoid group (major depression with psychotic features and major depressive disorder (n=20) Remitted paranoid group (schizophrenia and schizoaffective disorder, n=29) Older depressed group (major depression,(n=29) Younger depressed group (major depression, n=27) Younger healthy control (n=33) Older healthy control (n=31)	SERS	Paranoid delusions were associated with low self- esteem, independent of depression and anxiety
Ben-Zeev et al. (2012)	Schizophrenia (n=144) Schizoaffective disorder (n=55)	SERS-SF	Negative self-esteem predicted occurrence of GDs.

Erickson & Lysaker (2012)	Schizophrenia (n=37) Schizoaffective disorder (n=20)	SEI	Decreasse in self-esteem predicted increases in paranoia
Green et al. (2006)	Individuals with persecutory delusions (n=70) (schizophrenia, n=63; schizo-affective disorder, n=7)	SEI	Higher self-esteem and lower depression were related to feeling more powerful during persecutory experiences
Jones et al. (2010)	Schizophrenia resistant to medication (n=87)	SEI	Negative association between persecutory ideas and self-esteem disappeared after depression was controlled for. Positive association between grandiose ideas and self-esteem found at baseline but not longitudinally. Changes in GDs did not predict changes in self-esteem.
Kesting et al. (2011)	Currently deluded group (n=28) (schizophrenia) Remitted deluded group (n=31) (schizophrenia) Healthy controls (n=59) Depressed controls (n=21)	SEI & IAT	Paranoid and depressed groups showed decreased explicit but normal implicit self-esteem when compared with healthy controls. There was no discrepancy.
Lincoln, Mehl, Exner, et al. (2009)	Acute or remitted primary persecutory delusions (n=50) (schizophrenia (n=45), delusional disorder (n=3), schizoaffective disorder (n=2)) High subclinical paranoia (n=25) Low subclinical paranoia (n=25)	SEI	Those with acute delusions had lowest self-esteem, followed by those with remitted delusions.
Lincoln, Mehl, Ziegler, et al. (2010)	Schizophrenia spectrum disorders (n=83) Nonclinical controls (n=33)	FSKN (global self- worth subscale)	Low global self-esteem was associated with depression and negative interpersonal self-concept with paranoia.

Moritz, Klinge, et al. (2010)	Schizophrenia spectrum disorders (n=58) Nonclinical controls (n=44)	SEI	There was no association between self-esteem and paranoid delusions. There was a moderate association between higher self-esteem and GDs.
Thewissen, Bentall, Lecomte, et al. (2008)	Currently paranoid group (n=30) (schizophrenia/psychotic disorder, n=28; schizoaffective disorder, n=2) Currently nonparanoid group (n=34) (schizophrenia/psychotic disorder, n=28; schizoaffective disorder, n=6) Remitted group (n=15) (schizophrenia/psychotic disorder, n=14; schizoaffective disorder, n=1) High schizotypy controls (n=38) (mild/moderate depression, n=4) Healthy controls (n=37) (mild/moderate depression, n=6)	SERS & ESM	Decrease in state self-esteem predicted an increase in paranoia. Trait paranoia was related to lower and more unstable self-esteem.
Thewissen, Bentall, Oorschot, et al. (2011)	same sample as Thewissen et al.(2008)	ESM	Decrease in state self-esteem and an increase in anxiety separately predicted the occurrence of paranoia. Paranoid episodes were characterized by low levels of self-esteem.
Vazquez et al. (2008)	Acute delusional group (n=40) Remitted delusional group (n=25) Major depressive episode group (n=35) Healthy controls (n=36)	SEI & SRIRT	Individuals with delusions had lower explicit and implicit self-esteem. There was no discrepancy.

Note. SERS= Self-Esteem Rating Scale, SERS-SF= Self-Esteem Rating Scale-Short Form, IAT= Implicit Association Test, FSKN= Frankfurt Scales of Self-Concept, ESM= Experience Sampling Method

Table 3

Summary of low quality studies

Study	Sample	Self-esteem measure	Findings
Candido & Romney (1990)	Paranoid group without depression (n=15) (paranoid disorder, N=4; paranoid schizophrenia, n=11) Paranoid group with depression (n=15) (paranoid disorder, N=2; paranoid schizophrenia, n=13) Depressed group (n=15) (major unipolar depression)	SEI	Paranoid group had highest self-esteem and depressed group had lowest self-esteem, associated with depression. Paranoid group without depression had significantly more grandiose ideas.
Chadwick et al. (2005)	<i>Poor me</i> group (n=36) (paranoid schizophrenia (n=32), schizo-affective disorder (n=3), psychotic depression (n=1)) <i>Bad me</i> group (n=14) (paranoid schizophrenia (n=12), psychotic depression (n=1) schizo-affective disorder (n=1))	SEI & EBS	<i>Bad me</i> group had lower self-esteem, more negative self- evaluations, depression and anxiety. Differences in self-esteem were partly due to depression.
Combs et al. (2009)	Persecutory delusions group (n=32) Non-persecutory delusions (n=28) (schizophrenia) Healthy controls (n=50)	SEI	Those with persecutory delusions had lower self- esteem and greater depression and anxiety.
Fornells-Ambrojo & Garety (2009)	Persecutory deluded group with <i>poor me</i> paranoia (n=20) (schizophrenia, schizophreniform or schizoaffective disorder) Healthy controls (n=32) Depressed controls (n=21)	SEI	<i>Poor me</i> group had normal levels of self-esteem, more anger, anxiety and depression.

Freeman, Garety, Fowler, et al. (1998)	Drug resistant psychosis (n=53) (schizophrenia, schizoaffective disorder and delusional disorder; persecutory delusions (n=28), other symptoms (n=25)	RSCQ	Most individuals with persecutory delusions had low self-esteem. Changes in self-esteem were not associated with changes in delusional conviction.
Freeman, Garety & Kuipers (2001)	Persecutory delusions (n=25) (schizophrenia $(n=18)$, schizo-affective disorder $(n=5)$, delusional disorder $(n=2)$	SEI	Those who thought their persecution was deserved had lower self-esteem and higher anxiety and depression.
Humphreys & Barrowclough (2006)	Recent onset psychosis (n=35) (persecutory delusions group (n=15), no persecutory delusions group (n=20))	SEI & SESS-sv	Persecutory delusions group had more negative self- evaluations (SESS). Association between negative self-evaluations and paranoia remained after controlling for mood but association between paranoia and low self-esteem (SEI) did not.
Kinderman (1994)	Persecutory delusions group (n=16) (schizophrenia, n=13; delusional disorder, n=3) Depressed group (n=16) Nonclinical control group (n=16)	EST	Patient groups had slower reaction times and showed interference when naming a color of words with personal description.
MacKinnon et al. (2011)	Persecutory delusions (n=16) (schizophrenia (n=14), schizoaffective disorder (n=1), psychotic mood disorder (n=1) Healthy controls (n=20)	SEI, BCSS & IAT	Individuals with persecutory delusions had lower self-esteem and more negative self-evaluations, which was associated with depression and anxiety.
McCulloch et al. (2006)	Late onset psychosis with primary persecutory delusions (n=13) Depressed group (n=15) Healthy controls (n=15)	SEI & EST	Psychosis group and healthy controls had higher explicit self-esteem. There were no differences in implicit self-esteem.
McKay et al. (2007)	Currently paranoid group (n=10) Remitted paranoid group (n=10) (schizophrenia (n=15), bipolar disorder (n=3),	SEI, Adjective Self Relevance Rating Task, IAT	Currently paranoid group scored lower on explicit and implicit measures of self-esteem. Only the differences found using implicit measures were

	schizoaffective disorder (n=2)) Healthy control group (n=19)		significant once depression was controlled for.
Mehl et al. (2010)	Current persecutory delusions (n=23) (schizophrenia spectrum disorders) Remitted persecutory delusions (n=18) (schizophrenia spectrum disorders) Nonclinical controls (n=22)	SEI & IAT	Those with current delusions had low explicit and normal implicit self-esteem.
Moritz, Werner, et al. (2006)	Schizophrenia inpatients (n=23) (persecutory delusions (n=13) Major depressive disorder inpatients (n=14) Healthy controls (n=41)	SEI & IAT	Schizophrenia patients had lower explicit and implicit self-esteem. Those with persecutory delusions had higher self-esteem than those without
Smith et al. (2005)	Grandiose delusions (n=20) (schizophrenia (n=12), schizoaffective disorder (n=4), bipolar affective disorder (n=4) Nonclinical controls (n=21)	RSCQ, EST & SRIRT	Grandiose group showed normal levels of self- esteem, low depression and anxiety and no discrepancy between explicit and implicit self- esteem.
Valiente et al. (2011)	Paranoid group (n=35) (schizophrenia paranoid type (n=18), schizophreniform disorder (n=5), schizoaffective disorder (n=3), delusional disorder (n=6), brief psychotic disorder (n=2), psychotic disorder not otherwise specified (n=1) Depressed group (n=35) (major depressive disorder (n=31), bipolar depression (n=4) Nonclinical control (n=44)	E-SEI & GNAT	Paranoid group did not differ from nonclinical controls on explicit self-esteem measure, however had lower implicit self-esteem, with a discrepancy between the two.

Note. EBS= Evaluative Beliefs Scale, RSCQ= Robson Self Concept Questionnaire, SESS-sv= Self-Evaluation and Social Support Interview, SRIRT= Self-Referent Incidental Recall Task, E-SEI= Explicit Self-Esteem Index

Self-esteem Concept and Measurement

Self-esteem is defined as an evaluative component of the self-concept (Baumeister, 1998). According to Smith and Mackie (2007) "self-concept is what we think about the self and self-esteem is the positive or negative evaluations of the self, as in how we feel about it" (p.107). Based on this conceptual distinction between self-esteem and self-concept, only studies measuring self-esteem or self-evaluations were included in the review. The issues in conceptualising self-esteem are centred around three main areas: (a) its dimensionality, more specifically whether selfesteem is a unitary or a multidimensional concept; (b) its stability, more specifically, is self-esteem a stable personality trait or a state dependant on context; and (c) the level of conscious and unconscious processes involved in making self-evaluations (Heatherton & Wyland, 2003). The challenge of measuring self-esteem has further highlighted the difficulty of defining the concept (Heatherton & Wyland, 2003).

Rosenberg (1965) argued that self-esteem can be divided into global and specific components and he developed the Rosenberg Self-Esteem Inventory (SEI) to measure the former. Most studies included in this review assessed self-esteem using the SEI. The SEI has been the most widely used measure of self-esteem in research (Demo, 1985). Nevertheless, the validity and reliability of the SEI have been questioned. First, it has been found to be influenced by mood (Andrews & Brown, 1993) suggesting that the measure may be capturing a state rather than a trait construct. Second, some researchers argue that the instrument combines both positive and negative self-evaluation into a unitary measure, although demonstrated that they might be independent concepts (Andrews & Brown, 1993). As such the SEI has been used to obtain positive and negative self-esteem scores (Palmier-Claus, Dunn, Drake, Lewis, 2011). However,

according to Carmines and Zeller (1974) the two independent factors of the SEI reflect the response rather than different aspects of self-esteem, since those questions worded in a positive direction loaded on one factor and those worded in a negative direction loaded on the other factor. Furthermore, both factors demonstrated identical correlations with the global measure, suggesting they were measuring the same aspects of selfesteem (Rosenberg, 1979). Therefore, it is more likely that the SEI is measuring the presence or absence of positive self-evaluations closely related to mood, rather than the presence of negative self-evaluations that may be more stable and more strongly held (Smith, B. et al., 2006). These conceptual and methodological issues have to be taken into consideration when reviewing the literature on self-esteem.

Finally, the SEI and other similar measures, which rely on self-reports, conceptualise self-esteem as a conscious process (Heatherton & Wyland, 2003). Implicit self-esteem has been demonstrated as a concept distinct from explicit self-esteem (Greenwald & Farnham, 2000). Instruments thought to measure implicit self-esteem do not rely on self-report but infer self-esteem from individuals' responses such as reaction times or memory biases. It has been suggested that unlike explicit measures, which may capture how individuals wish to present themselves, the implicit measures may be more reliable, although the evidence for this is mixed (Heatherton & Wyland, 2003).

Explicit Self-esteem

Eighteen studies assessed global self-esteem with the SEI and can be divided into correlational and case-control studies.

Correlational studies. Eight studies investigated the relationship between selfesteem and the severity of paranoid delusions in samples of individuals with psychosis. Since self-esteem, as measured with the SEI, was demonstrated to be closely related to mood, it is important to control for the confounding effects of depression. Consistent with the defence theory, Moritz, Werner, and von Collani (2006) found that higher selfesteem was associated with greater paranoid delusions, when depression was controlled for. However, this study was rated as low in quality due to having poor external validity, a small sample and a lack of power to detect a clinically meaningful effect.

Four studies found lower self-esteem was associated with greater paranoid delusions, however, this finding was not significant once depression was controlled for (Garety et al., 2012; Humphreys & Barrowclough, 2006; Jones, Hansen, Moskvina, Kingdon, & Turkington, 2010; Smith, B. et al., 2006). According to Jones et al. (2010), the mediating effect of self-esteem through depression is still in line with the emotionconsistent accounts. However, Jones et al.'s (2010) sample were individuals with a diagnosis of 'schizophrenia resistant to medication', which is not a representative group of individuals experiencing psychosis. They may have also experienced lower selfesteem and depression secondary to their untreated symptoms. In contrast, one study of high quality found that lower self-esteem was associated with greater paranoid delusions, even when depression was controlled for, suggesting a direct and independent role for self-esteem (Romm et al., 2011). Furthermore, although Garety et al. (2012) and Smith, B. et al. (2006) did not demonstrate an independent effect of low self-esteem as measured with the SEI, they did find an independent effect of negative self-evaluations on paranoid delusions, by employing another measure. This will be discussed later in the review.

Moritz et al. (2010) found no association between paranoid delusions and selfesteem over time. It is plausible that if delusions serve as a defence, self-esteem will be maintained resulting in this lack of association between the two (Jones et al., 2010). However, Moritz, Klinge, et al. did not make adequate adjustments for the main confounders in their analysis, subsequently resulting in poor internal validity. A more methodologically sound longitudinal study, conducted over 18 months, compared the relationships between the two variables across four time points (Drake et al., 2004). This study recruited a large representative sample of 257 individuals with psychosis. Furthermore, the participants were individuals experiencing a first episode of psychosis, whose self-esteem is less likely to be influenced by the secondary processes common in those experiencing long term mental health difficulties (Birchwood, Todd, & Jackson, 1998; Drake et al., 2004). Although the association between self-esteem and paranoia was not always demonstrated, when an association was found, lower self-esteem was independently related to greater paranoia. These findings provide some evidence in support of the emotion-consistent account. However, they also suggest the relationship between self-esteem and paranoid delusions is not stable and that there might be other important factors impacting over time and not captured by cross-sectional studies.

Three studies demonstrated a positive association between high self-esteem and GDs (Jones et al., 2010; Moritz, Klinge, et al., 2010; Smith, B. et al., 2006). Although Jones et al. (2010) and Moritz, Klinge, et al. (2009) did not control for mood, which weakened the internal validity, Smith, B. et al. (2006) found that this association was related to mood, more particularly to the absence of depression. Nevertheless, although this is consistent with the emotion-consistent account, correlational studies cannot shed light on the direction of causality. Therefore, it is also possible that GDs are serving a defensive function, subsequently resulting in higher self-esteem (Knowles, McCarthy-Jones & Rowse, 2011). Similar to studies of paranoid delusions, the relationship between high self-esteem and GDs was not present when the variables were assessed longitudinally, suggesting that this relationship may not be stable but dependent on other factors (Jones et al., 2010).

Case-control studies. Although correlational studies employed participants with a range and continuum of psychosis symptoms, enabling the investigation of the severity of paranoid delusions and its relationship with self-esteem, they did not include control groups. Including a nonclinical control group, and more importantly a nonpsychotic psychiatric group, ensures more confidence in any differences between the groups being due to the experience of delusions. Ten studies selected individuals who were experiencing paranoid delusions and investigated whether their level of selfesteem differed to that of a control group. Two studies found higher self-esteem in participants with paranoid delusions when compared to nonclinical controls (Fornelis-Ambrojo & Garety, 2009; McCulloch, Clare, Howard, & Peters, 2006). However, researchers failed to control for the confounding influence of mood on self-esteem. Therefore, it is possible that these samples experienced better mood and less depression. Similarly, two studies found lower self-esteem in those with paranoid delusions but failed to control for mood (Lincoln, Mehl, Exner, Lindenmeyer, & Rief, 2009; Vazquez, Diez-Alegria, Hernandez-Lloreda, & Moreno, 2008). Out of six studies that did control for depression, three demonstrated that although self-esteem was lower in participants with paranoid delusions when compared to nonclinical controls, it correlated with both depression and anxiety (Combs et al., 2009; MacKinnon, Newman-Taylor, & Stopa, 2011; McKay et al., 2007) and this effect disappeared after controlling for depression (McKay, et al., 2007). On the other hand, three studies found that lower self-esteem in individuals with paranoid delusions remained after controlling for depression (Kesting, Mehl, Rief, & Lincoln, 2011; Mehl, Rief, Ziegler, Müller, & Lincoln, 2010; Moritz, Werner, et al., 2006). There is more evidence in support of the emotion-consistent accounts of paranoid delusions although it is not clear whether the role of self-esteem is mediated through depression or more direct.

Alternative measures of explicit self-esteem. Some researchers have employed instruments other than the SEI to measure explicit self-esteem and have obtained mixed findings (Freeman, Garety, Fowler, et al., 1998; Lincoln, Mehl, et al., 2010; Smith, N. et al., 2005; Valiente et al., 2011; Vazquez et al., 2008). These studies were of lower

quality and had methodological limitations such as poor external validity, low power or issues affecting their internal validity.

Bentall, Rowse, Shryane, et al. (2009) used the Self-Esteem Rating Scale (SERS; Nugent & Thomas, 1993), which was validated in individuals with psychosis (Gureje, Harvey, & Herrman, 2004) and found low self-esteem in their sample of individuals with paranoid delusions to be part of the wider "pessimistic explanatory style" independent of mood. Bentall, Rowse, Shryane, et al.'s (2009) study employed a large transdiagnostic sample of 88 participants with paranoid delusions, including individuals with major depression who were experiencing paranoid delusions. As such, their sample was more representative of individuals experiencing this type of delusion, ensuring better external validity and allowing more confidence in interpreting the findings. Therefore, it could be concluded that studies employing alternative measurements of self-esteem to the SEI, although very limited, also provide more sound evidence in support of the emotion-consistent account of persecutory delusions.

Implicit Self-esteem

The defence theories hypothesise that although individuals experiencing grandiose and/or persecutory delusions might have normal or high explicit self-esteem, their implicit self-esteem will be low (Bentall, Kinderman, & Kaney, 1994). However, the interpretations of implicit measures by different researchers have varied and it is highly questionable whether some measures employed are actually tapping into the unconscious feelings about the self. For example, the Emotional Stroop Task (EST; Stroop, 1935) used by Kinderman (1994) measures how long participants take to respond to emotional words of personal description. However, the EST was developed for use in research on depression and it is unclear whether it is measuring implicit self-esteem or depression (MacKinnon et al., 2001).

According to MacKinnon et al. (2009), one measure which is thought to be the most reliable in measuring implicit self-esteem is the self-esteem Implicit Association Test (SE-IAT; Bosson, Swann, & Pennebaker, 2000). This instrument measures the association between the target concepts *self* or *other* and attribute concepts *positive* or *negative*. The nonclinical population shows a bias of responding quicker when self and positive words are presented together. Studies investigating implicit self-esteem and paranoia using the SE-IAT have yielded inconsistent findings, and most of these studies were rated as low quality (MacKinnon et al., 2009; Mehl, et al., 2010; McKay et al, 2007; Moritz, Werner, et al, 2006; Valiente et al., 2011). Kesting et al.'s (2011) study, which was rated moderate in quality (due to having a relatively large sample, more power to detect clinically meaningful effect and scoring high on reporting) found that people with persecutory delusions had normal implicit self-esteem, comparable to nonclinical controls, failing to support the defence theory. There is a need for better quality studies and more valid measures in order to more reliably investigate the defensive role of self-esteem in delusions.

Explicit and Implicit Self-esteem Discrepancy

Defence theories argue that if delusions are successful in protecting individuals from low self-esteem entering consciousness then their explicit self-esteem should be higher than implicit self-esteem. Some authors have suggested that low explicit selfesteem does not necessarily disprove this hypothesis, as long as implicit self-esteem is lower than explicit self-esteem (Moritz, Klinge, et al., 2009). Bentall, Corcoran, et al. (2001) revised their original defence theory and proposed that defence may not always be completely successful and that different individuals may vary in their ability to defend themselves from low self-esteem. This "weak" version of defence theory allows for the explicit self-esteem to be low, as well as for smaller discrepancies between the explicit and implicit self-esteem (McKay et al., 2007, p.19). Four studies measured the discrepancy between explicit and implicit self-esteem in individuals with persecutory delusions and yielded inconsistent results. Two low quality studies found the discrepancy, consistent with the defence theory (Valiente et al., 2011; McKay et al., 2007). In contrast, two studies found no discrepancy in their samples with persecutory delusions (Kesting et al., 2011; Vazquez et al., 2008). Kesting et al.'s (2011) study was considered to be more methodologically sound (due to having bigger samples and more power to detect clinically meaningful effect). Therefore, although very limited, the evidence to date investigating the discrepancy between explicit and implicit self-esteem supports the emotion-consistent account of persecutory delusions. The only study measuring explicit and implicit self-esteem in individuals with GDs did not demonstrate a discrepancy (Smith, N. et al., 2005). However, this study had poor external validity and power, and it failed to control for mood thus resulting in poor internal validity. Therefore, no firm conclusions can be drawn.

Current and Remitted Delusions

One prediction of the defence hypothesis is that there will be a difference between those individuals currently experiencing persecutory delusions and those whose delusions are in remission. More specifically, individuals with current delusions will have higher explicit self-esteem than individuals whose delusions are in remission, although their implicit self-esteem will be the same. Six studies that investigated this line of defence are also inconclusive. For example, some studies found no discrepancies between explicit and implicit self-esteem in either group (Kesting et al., 2011; Vazquez, 2008), some found that those with current delusions had lower implicit self-esteem (McKay et al., 2007) whilst others found they had either lower explicit (Mehl, et al., 2010) or higher explicit self-esteem (Moritz, Werner, et al., 2006). One of the studies that failed to find discrepancies in either of the groups and subsequently failed to support the defence theory, was of a better overall quality (Kesting et al., 2011). Furthermore, there was no difference in explicit self-esteem levels between participants with current and remitted paranoid delusions in the more clinically representative study by Bentall, Rowse, Kinderman, et al. (2008), and the association between low self-esteem and paranoia was demonstrated in both groups, highlighting a direct role of low self-esteem.

Some researchers investigated changes in delusions over time and their relationship with self-esteem. They found no change in self-esteem as a result of a decrease in conviction of persecutory delusions (Freeman, Garety, Fowler, et al., 1998) or as a result of the onset of a paranoid episode (Thewissen, Bentall, Oorschot, et al., 2011). Instead, participants continued to experience low self-esteem. This is not consistent with the defence theory, which would predict an improvement in self-esteem as the paranoid episode commences, or a decrease as the conviction lessens. Therefore, findings to date investigating this line of defence hypothesis do not provide evidence in support of a defence.

Poor Me and Bad Me Paranoia

In order to explain inconsistent findings in the studies investigating self-esteem and paranoid delusions, some researchers have proposed two distinct types of psychological processes which may underlie the development of these delusions. Trower and Chadwick (1995) distinguished between individuals who felt their persecutions were deserved and who blamed themselves (bad me paranoia) and those who felt their persecutions were undeserved (poor me paranoia). Research showed that participants who thought their persecutions were deserved had more anxiety and depression and lower self-esteem than those who thought their persecutions were undeserved (Freeman, Garety, & Kuipers, 2001) and that this finding was not completely due to depression (Chadwick, Trower, Juusti-Butler, & Maguire, 2005). However, these studies had small samples and possibly not representative of the population from which they were recruited.

A better quality study with a larger and more representative sample, found that those who felt that their delusions were deserved are more likely to have negative selfesteem (Bentall, Rowse, Shryane, et al., 2009). The authors proposed that deservedness may be better conceptualised as a dimension since not many participants had extremely low or extremely high scores, and therefore could not be grouped into poor me and bad me categories. It is likely that this phenomenon may impact on self-esteem and therefore may have confounded the results in reviewed studies, leading to contradictory findings. Therefore, it may be important to include deservingness as a confounder when investigating self-esteem in this population in future.

Positive and Negative Self-esteem

Some researchers argue that self-esteem may be better conceptualised as consisting of two independent constructs – positive and negative self-esteem. Two studies found a significant association between persecutory delusions and negative selfesteem but this association disappeared after controlling for depression, anxiety and general symptoms of psychosis (Humphreys & Barrowclough, 2006; MacKinnon et al., 2011). Four studies showed that levels of negative self-esteem significantly predicted severity of paranoia, independent of depression (Bentall, Rowse, Kinderman, et al., 2008; Garety et al., 2012; Palmier-Claus et al., 2011; Smith, B. et al., 2006). However, Palmier-Claus et al. (2011) employed the SEI to measure self-esteem and since the positive and negative factors of the SEI appear to measure the presence and absence of positive self-esteem, this tool may not be valid in assessing negative self-esteem.

Fowler et al. (2006) developed the Brief Core Schema Scales (BCSS). This instrument assesses both positive and negative evaluations of self and others, and according to the authors, more reliably reflects schema constructs relevant to psychosis

SELF-ESTEEM IN PERSECUTORY AND GRANDIOSE DELUSIONS

population. Smith, B. et al. (2006) found that those individuals with more negative selfevaluations had paranoid delusions of greater severity even after controlling for the effects of depression and low self-esteem. In contrast, individuals with GDs of greater severity had less negative self-evaluations. These results were replicated and extended in a large sample of 301 participants with psychosis, which included 100 participants from Smith, B. et al.'s (2006) study (Garety, et al., 2012). However, the independent relationship between negative self-evaluations and delusions was only found for persecutory delusions, suggesting that less negative self-evaluations in individuals with GDs may be mood dependent. It is therefore possible that either GDs or elated mood may serve as a defence or a coping strategy, protecting individuals from negative selfevaluations.

One study investigated whether negative self-esteem predicted GDs. As a measure of negative self-esteem Ben-Zeev, Morris, Swendsen, and Granholm (2012) employed the negative self-evaluations subscale of the SERS-SF (short versions of the SERS). In addition, they assessed the occurrence of delusions with the Experience Sampling Method (ESM; Csikszentmihalyi & Larson, 1987), an ecological method of collecting repeated self-report measurements in the context of daily life, as prompted by an electronic device. The measurements were taken over a week long period, four times a day, ensuring multiple data points. This method has good validity and reliability (Myin-Germeys, Nicolson, & Delespaul, 2001). Ben-Zeev et al. (2012) found that negative self-esteem predicted the occurrence of GDs in a sample of 130 individuals with psychosis. Therefore, research exploring positive and negative self-esteem to date strongly implicates negative self-esteem with both persecutory and GDs.

Fluctuations in Self-esteem

Most traditional theories of self-esteem have argued that self-esteem is a stable personality trait and that changes in self-esteem can only be very small and gradual (Heatherton & Wyland, 2003). Nevertheless, some theories have challenged this view and have conceptualised self-esteem as a context specific state, sensitive to and highly dependent on social situations, evaluations by others and mood (Kernis, 1993). Longitudinal studies have allowed the researchers to explore the more dynamic nature of self-esteem and suggested that fluctuations in self-esteem may be a better predictor of the occurrence of paranoia than the current level of self-esteem (Thewissen, Myin-Germeys, et al., 2007). Since the "weak" defence theory postulates that individuals may not always be successful in avoiding negative feelings, and that their success may be dependent on many external factors, it also predicts that self-esteem in people with persecutory delusions will be unstable (Thewissen, Bentall, Lecomte, van Os, & Myin-Germeys, 2008).

Three studies explored the stability of self-esteem. Erickson and Lysaker (2012) employed the SEI to measure state and trait self-esteem at eight time points over a period of six months. The results demonstrated that those individuals with lower trait self-esteem had greater paranoid delusions and that decreases in self-esteem predicted increases in paranoia. However, there was no association between the instability of selfesteem and severity of paranoia. Since Palmier-Claus et al. (2011) found that only fluctuations in positive but not negative self-esteem, as measured using the SEI, predicted an increase in paranoia, it may be that the SEI as a unitary measure of selfesteem is not sensitive in detecting this instability.

Thewissen, Bentall, Lecomte, et al. (2008) used the ESM, which required participants to self-report on their feelings about self as well as their experience of paranoia, ten times a day, over six consecutive days. The study explored state and trait aspects of both self-esteem and paranoia, whilst controlling for the confounding effects of depression. The findings showed that lower and more unstable self-esteem was associated with higher trait paranoia. Furthermore, they demonstrated that momentary decreases in self-esteem predicted momentary increases in state paranoia. The sample of this study was representative of the population, and their method of measuring selfesteem in daily life enabled researchers to gather more data (up to 60 data points per person) as well as to investigate more momentary daily and even hourly fluctuations. This method is likely to be more sensitive to measuring self-esteem instability. The finding that momentary decreases in self-esteem predicted paranoia was replicated and extended in Thewissen, Bentall, Oorschot, et al.'s (2011) study. They also investigated possible confounding effects of depression, anxiety and hallucinations. Since different experiences of psychosis often co-exist, this increases confidence in the findings obtained. Therefore, taken together the research thus far strongly suggests that decreases in self-esteem and its fluctuations predict the onset of paranoia. The instability of selfesteem in individuals with paranoid delusions could explain the contradictory findings obtained from cross-sectional studies.

Co-morbidity of Grandiose and Persecutory Delusions

Green et al. (2006) investigated the relationship between self-esteem and the content of paranoid delusions and showed that participants who described having more power and grandiose ideas had higher self-esteem. This implies that GDs may interact with persecutory beliefs and impact on the level of self-esteem. Indeed, there is a high co-occurrence between grandiose and persecutory delusions, which makes it difficult to separate their independent effects (Garety et al., 2012). Therefore, studies investigating this co-occurrence, such as Smith, B. et al. (2006) and Garety et al. (2012), are more likely to shed light on the conflicting theories. These studies strongly suggest that persecutory delusions are associated with lower self-esteem and more negative self-evaluations, whilst GDs are associated with higher self-esteem and less negative self-evaluations. Furthermore, Garety et al. (2012) compared individuals who were only experiencing GDs with individuals who were only experiencing paranoid delusions, and
demonstrated that those with GDs had significantly higher self-esteem. Individuals experiencing both types of delusions had self-esteem levels falling in between the other two groups. Employing three groups differing in the type of delusion and possibly being more representative of each other, increases the confidence that the findings were due to different processes involved in these delusions. Similarly, Candido and Romney (1990) found that their group with paranoid delusions without depression had higher selfesteem and significantly more GDs when compared to a group with paranoid depression. This evidence highlights the importance of investigating the co-morbidity of these two types of delusion and provides another plausible explanation for why studies to date might have yielded inconsistent findings.

Social Self-esteem

In a recent review of GDs, Knowles et al. (2011) reviewed the literature on affective and cognitive processes, including the role of self-esteem. According to these authors, lack of support for the defence model of GDs could be due to focusing on selfesteem as a non-relational concept. In line with this, Smith, B. et al. (2006) proposed that GDs could be maintained not only by the positive self-evaluations but also by the negative evaluations of others, which interact together to give an impression of a higher social position. Smith, B. et al. found some evidence of the relationship between negative evaluations of others and GDs. However, their findings were not replicated by Garety et al. (2012) who found instead that GDs were predicted by higher positive evaluations of others. It could be that negative evaluations of others do not provide a reliable and valid measure of self-esteem as a social concept. Indeed, one study of GDs that employed the SERS, which is thought to measure how individuals might feel about themselves in relation to other people, found that negative self-esteem predicted GDs (Ben-Zeev et al., 2012). This might be a more valid measure of social self-esteem. Future research exploring self-esteem in persecutory and grandiose delusions should investigate different aspects of self-esteem such as interpersonal self-esteem, as well as develop more reliable measurements of these concepts.

Causal Role of Self-esteem

Most of the studies in this review are correlational and cross-sectional, therefore making it difficult to draw inferences about the causal role of self-esteem in the development and maintenance of delusions. The findings from the longitudinal studies demonstrate that decreases in self-esteem and negative self-esteem precede the occurrence of paranoid delusions and that negative self-esteem precedes the occurrence of GDs, suggesting that self-esteem contributes to the onset of delusions. Fowler et al. (2012) investigated the direction of effect between self-esteem and paranoid delusions by re-analysing data of 301 participants with psychosis collected over a 12 month period (Garety et al., 2012). They employed Structural Equation Modelling² to explore which directional pathways fitted the model best, using both cross-sectional and longitudinal designs. This method strongly indicated that negative cognition (including self-esteem) was impacting on paranoid delusions, with only a very weak relationship in the opposite direction. The authors suggested that these effects were most likely to be causal but advised caution, since this study was still correlational rather than experimental in nature. Some researchers have developed a novel research paradigm using virtual reality, which has enabled experimental investigations of causal and maintaining factors in the occurrence of paranoia in nonclinical populations (Valmaggia et al., 2007; Freeman, Pugh, et al., 2008). This method may be valuable in exploring the causal and maintaining role of self-esteem in delusions in future.

Discussion

The research in the field of self-esteem and paranoid and grandiose delusions has yielded contradictory findings although overall there has been no strong evidence

XXXXXXXXXXXXX

² Method of confirmatory data analysis, testing association between variables and direction of association.

SELF-ESTEEM IN PERSECUTORY AND GRANDIOSE DELUSIONS

for the defence hypothesis. Larger studies with better external validity and more power have provided evidence consistent with the emotion-consistent hypothesis, suggesting that the role of self-esteem is more direct and non-defensive. Research has demonstrated that low self-esteem and negative self-evaluations are closely related to paranoid delusions. Furthermore, longitudinal studies have provided evidence that fluctuations, as well as decreases in self-esteem predict the occurrence of paranoid delusions.

Nevertheless, research on GDs is very scarce, making it harder to draw conclusions about this type of delusion. Although they appear to be related to high selfesteem and less negative self-evaluations, the evidence to date suggests that this may be mood dependant. Since negative self-esteem has been found to predict the occurrence of GDs, it may still be possible that GDs serve a defensive function or are a consequence of a defensive strategy such as elated mood. Focusing on self-esteem as a relational and social concept may shed more light on this. Furthermore, high co-morbidity of paranoid and GDs may have contaminated the findings and yielded inconsistencies. Therefore, future studies should investigate independent effects of these delusions whilst controlling for a number of confounders or contributing factors such as mood and deservedness. With the development of virtual reality paradigms the evidence for the causal and maintaining role of self-esteem in development of delusions may flourish.

This review has important implications for clinical practice. It strongly suggests that the psychological care offered to individuals with paranoid delusions should include self-esteem interventions. Although it is important to provide individuals with strategies and opportunities to increase their self-esteem, it may be more pertinent to focus on more stable negative self-evaluations, especially in the context of anxiety and depression. Furthermore, psychological interventions should include work on selfesteem regulation, and strategies to manage both decreases and increases in self-esteem. It is likely that this would also be relevant for individuals experiencing GDs, however,

more high quality research is needed to confirm this.

References

- Abraham, K. (1911). Notes on the psychoanalytical investigation and treatment of manic-depressive insanity and allied conditions. In E. Jones (Ed.), *Selected Papers of Karl Abraham*, 1927. London: Hogarth.
- Andrews, B., & Brown, G. (1993). Self-esteem and vulnerability to depression: The concurrent validity of interview and questionnaire measures. *Journal of Abnormal Psychology*, *102*, 565-572. doi:10.1037//0021-843X.102.4.565
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*, 4th edition. Washington, American Psychiatric Association.
- Appelbaum, P. S., Robbins, P. C., & Roth, L. H. (1999). Dimensional approach to delusions: Comparison across types and diagnoses. *American Journal of Psychiatry*, 156, 1938-1943. Retrieved from

http://ajp.psychiatryonline.org/article.aspx?articleid=173853

- Baumeister, R. F. (1998). The self. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The Handbook of Social Psychology* (pp. 680-740). New York: Random House.
- Bentall., R. P., Jackson, H. F., & Pilgrim, D. (1988). Abandoning the concept of "schizophrenia": Some implications of validity arguments for psychological research into psychotic phenomena. *British Journal of Clinical Psychology, 27,* 156-69. doi:10.1111/j.2044-8260.1988.tb00795.x
- Bentall, R. P, Kinderman, P., & Kaney, S. (1994). The self, attributional processes and abnormal beliefs: Towards a model of persecutory delusions. *Behaviour Research* and Therapy, 32, 331-341. doi:10.1016/0005-7967(94)90131-7
- Bentall, R. P. (1990). The syndromes and symptoms of psychosis or why you can't play 'twenty questions' with the concept of schizophrenia and hope to win. In R. P.Bentall (Ed.), *Reconstructing Schizophrenia*, pp.23-60. Routledge: London.

- Bentall, R. P., Corcoran, R., Howard, R., Blackwood, N., & Kinderman, P. (2001).
 Persecutory delusions: A review and theoretical integration. *Clinical Psychology Review*, 21, 1143-1192. doi:10.1016/S0272-7358(01)00106-4
- Bentall, R. P., Rowse, G., Kinderman, P., Blackwood, N., Howard, R., Moore, R.,
 Cummins, S., & Corcoran, R. (2008). Paranoid delusions in schizophrenia
 spectrum disorders and depression The transdiagnostic role of expectations of
 negative events and negative self-esteem. *Journal of Nervous and Mental Disease*,
 196, 375-383. doi:10.1097/NMD.0b013e31817108db
- Bentall, R. P., Rowse, G., Shryane, N., Kinderman, P., Howard, R., Blackwood, N.,
 Moore, R., & Corcoran, R. (2009). The cognitive and affective structure of
 paranoid delusions: A transdiagnostic investigation of patients with schizophrenia
 spectrum disorders and depression. *Archives of General Psychiatry*, *66*, 236-247.
 doi:10.1001/archgenpsychiatry.2009.1
- Ben-Zeev, D., Morris, S., Swendsen, J., & Granholm, E. (2012) Predicting the occurrence, conviction, distress, and disruption of different delusional experiences in the daily life of people with schizophrenia. *Schizophrenia Bulletin, 38*, 826-837. doi:10.1093/schbul/sbq167
- Birchwood, M., Todd, P., & Jackson, C. (1998). The critical period hypothesis. *British Journal of Psychiatry*, 172(Supple.33), 53-59. doi:10.1097/00004850-199801001-00006
- British Psychological Society, 2000 British Psychological Society (2000). *Recent advances in understanding mental illness and psychotic experiences*. Retrieved from www.bps.org.uk.
- Bosson, J. K., Swann, W. B., & Pennebaker, J. W. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited? *Journal of*

Personality and Social Psychology, *79*, 631–643. doi:10.1037//0022-3514.79.4.631

- Bowins, B., & Shugar, G. (1998). Delusions and self-esteem. Canadian Journal of Psychiatry, 43, 154–158.
- Candido, C. L., & Romney, D. M. (1990). Attributional style in paranoid vs depressed patients. *British Journal of Medical Psychology*, 63, 355–363. doi:10.1111/j.20448341.1990.tb01630.x
- Carmines, E. G., & Zeller, R. A. (1974). On establishing the empirical dimensionality of theoretical terms: An analytical example. *Political Methodology*, 75-96.
- Chadwick, P. D. J., Trower, P., Juusti-Butler, T. M., & Maguire, N. (2005).
 Phenomenological evidence for two types of paranoia. *Psychopathology*, *38*, 327–333. doi:10.1159/000089453
- Combs, D.R., Penn, D.L., Michael, C.O., Basso, M.R., Wiedeman, R., Siebenmorgan, M., Tiegreen, J.A., & Chapman, D. (2009). Perceptions of hostility by persons with and without persecutory delusions. *Cognitive Neuropsychiatry*, 14, 30-52. doi:10.1080/13546800902732970
- Csikszentmihalyi, M., & Larson, R. (1987). Validity and reliability of the experiencesampling method. *The Journal of Nervous and Mental Disease*, 175, 526-536. doi:10.1097/00005053-198709000-00004
- Demo, D. H. (1985). The measurement of self-esteem: Refining our methods. *Journal of Personality and Social Psychology*, 48, 1490-1502. doi:10.1037//0022-3514.48.6.1490
- Downs, S. H., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomized and nonrandomized studies of health care interventions. *Journal of Epidemiology Community Health, 52*, 377-384. doi:10.1136/jech.52.6.377

Drake, R., Pickles, A., Bentall, R. P., Kinderman, P., Haddock, G., Tarrier, N., Lewis, S. W. (2004). The evolution of insight, paranoia and depression during early schizophrenia. *Psychological Medicine*, *34*, 285-92. doi:10.1017/S0033291703008821

Erickson, M., & Lysaker, P. (2012). Self-esteem and insight as predictors of symptom change in schizophrenia: a longitudinal study. *Clinical Schizophrenia & Related Psychoses 6*, 69-75. doi:10.3371/CSRP.6.2.4

Fleiss, J. L. (1981). Statistical Methods for Rates and Proportions. New York: Wiley.

- Fornells-Ambrojo, M., & Garety, P. (2009). Understanding attributional biases, emotions and self-esteem in 'poor me' paranoia: findings from an early psychosis sample.. *British Journal of Clinical Psychology*, 48(2), 141 - 162. doi:10.1348/014466508X377135
- Fowler, D., Hodgekins, J., Garety, P., Freeman, D., Kuipers, E., Dunn, G., Bebbington,
 P. (2012). Negative cognition, depressed mood, and paranoia: a longitudinal
 pathway analysis using structural equation modelling. *Schizophrenia. Bulletin, 38*, 1063–1073. doi:10.1093/schbul/sbr019
- Freeman D., Garety P., Fowler D., Kuipers E., Dunn G., Bebbington P., & Hadley, C. (1998). The London East Anglia RCT of CBT for Psychosis IV: Self esteem and persecutory delusions. *British Journal of Clinical Psychology*, 37, 415 430.
- Freeman, D., & Garety, P. A. (2003). Connecting neurosis and psychosis: the direct influence of emotion on delusions and hallucinations. *Behaviour Research and Therapy*, 41, 923-947. doi:10.1016/S0005-7967(02)00104-3
- Freeman, D., Garety, P. A., & Kuipers, E. (2001). Persecutory delusions: Developing the understanding of belief maintenance and emotional distress. *Psychological Medicine*, 31, 1293–1306. doi:10.1017/S003329170100455X

- Freeman, D., McManus, S., Brugha, T., Meltzer, H., Jenkins, R., & Bebbington, P. (2011). Concomitants of paranoia in the general population. *Psychological Medicine*. 41, 923-936. doi:10.1017/S0033291710001546
- Freeman, D., Pugh, K., Antley, A., Slater, M., Bebbington, P., Gittins, M., Dunn, G., Kuipers, E., Fowler, D., & Garety, P. (2008). Virtual reality study of paranoid thinking in the general population. *The British Journal of Psychiatry*, *192*, 258-263. doi: 10.1192/bjp.bp.107.044677
- Freud, S. (1917). Mourning and melancholia. In *Collected Papers* (Vol. 4), 1950. London: Hogarth.
- Garety, P. A., Gittins, M., Jolley, S., Bebbington, P., Dunn, G., Kuipers, E., Fowler, D.,
 & Freeman, D. (2012) Differences in Cognitive and Emotional Processes Between
 Persecutory and Grandiose Delusions. *Schizophrenia Bulletin, 39*, 629-639.
 doi:10.1093/schbul/sbs059
- Green, C., Garety, P.A., Freeman, D., Fowler, D., Bebbington, P.E., Dunn, G. &
 Kuipers, E. (2006). Content and affect in persecutory delusions. *British Journal of Clinical Psychology*, 45, 561-577. doi:10.1348/014466506X98768
- Greenwald, A. G., & Farnham, S. D. (2000). Using the Implicit Associate Test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, 79, 1022-1038. doi:10.1037//0022-3514.79.6.1022
- Gureje, O., Harvey, C., & Herrman, H. (2004). Self-esteem in patients who have recovered from psychosis: profile and relationship to quality of life. *Australian and New Zealand Journal of Psychiatry 38*, 334-8. doi:10.1111/j.1440-1614.2004.01360.x
- Heatherton, T. F., & Wyland, C.L. (2003) Assessing self-esteem. In S. J. Lopez & C. R.Synder (Eds.) *Positive Psychology Assessment*. Washington DC: AmericanPsychological Association.

- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319-340. doi:10.1037//0033-295X.94.3.319
- Humphreys, L., & Barrowclough, C. (2006). Attributional style, defensive functioning and persecutory delusions – symptom specific or general coping strategy? *British Journal of Clinical Psychology*, 45, 231-246. doi:10.1348/014466505X50509
- Jones, R.M., Hansen, L., Moskvina, V., Kingdon, D., & Turkington, D. (2010). The relationship between self-esteem and psychotic symptoms in schizophrenia: A longitudinal study, *Psychosis 2*, 218-226. doi:10.1080/17522431003602430
- Jaspers, K. (1913). General Psychopathology (trans. J. Hoenig and M. W. Hamilton, 1959) Manchester University Press.
- Kernis, M. H. (1993). The roles of stability and level of self-esteem in psychological functioning. In R. F. Baumeister (Ed.), Self-esteem: The puzzle of low self-regard (pp. 167-172). New York: Plenum Press.
- Kesting, M. L., Mehl, S., Rief, W., & Lincoln, T.M. (2011). When paranoia fails to enhance self-esteem: Explicit and implicit self-esteem and its discrepancy in patients with persecutory delusions compared to depressed and healthy controls. *Psychiatry Research, 186*, 197-202. doi:10.1016/j.psychres.2010.08.036
- Kinderman, P. (1994). Attentional bias, persecutory delusions and the self-concept. *British Journal of Medical Psychology*, 67, 53–66. doi:10.1111/j.2044-8341.1994.tb01770.x
- Knowles, R., McCarthy-Jones, S., & Rowse, G. (2011). Grandiose delusions: A review and theoretical integration of cognitive and affective perspectives. *Clinical Psychology Review*, 31, 684-696. doi:10.1016/j.cpr.2011.02.009
- Kraepelin, E. (1899). Dementia praecox and paraphrenia. In G. M. Robertson (Ed.),
 trans. R. M. Bradley, 1919, *Textbook of psychiatry* (8th German edn), Vol. III, Pt.
 II. Livingstone: Edinburgh.

- Lincoln, T. M., Mehl, S., Exner, C., Lindenmeyer, J., & Rief, W. (2009). Attributional style and persecutory delusions. Evidence for an event independent and state specific external-personal attribution bias for social situations. *Cognitive Therapy and Research, 34*, 297-302. doi:10.1007/s10608-009-9284-4
- Lincoln, T. M., Mehl, S., Ziegler, M., Kesting, M.-L., Exner, C., & Rief, W. (2010). Is fear of others linked to an uncertain sense of self. The relevance of self-worth, interpersonal self-concepts and dysfunctional beliefs to paranoia. *Behavior Therapy*, 41, 187-197. doi:10.1016/j.beth.2009.02.004
- MacKinnon, K., Newman-Taylor, K., & Stopa, L. (2011). Persecutory delusions and the self: An investigation of implicit and explicit self-esteem. *Journal of Behavior Therapy and Experimental Psychiatry*, 42, 54-64. doi:10.1016/j.jbtep.2010.05.003
- McCulloch, Y., Clare, L., Howard, R., Peters, E. (2006). Psychological processes underlying delusional thinking in late-onset psychosis: A preliminary investigation. *International Journal of Geriatric Psychiatry*, 21, 768-777. doi:10.1002/gps.1561
- McKay, R., Langdon, R., & Coltheart, M. (2007). The defensive function of persecutory delusions: An investigation using the Implicit Association Test. *Cognitive Neuropsychiatry*, 12, 1-24. doi:10.1080/13546800500363996
- Mehl, S., Rief, W., Ziegler, M., Müller, M. J., & Lincoln, T.M. (2010). Implicit attributional style revisited: Evidence for a state-specific 'self-decreasing' implicit attributional style in patients with persecutory delusions. *Cognitive Neuropsychiatry*. 15, 451- 476. doi:10.1080/13546801003640419
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PRISMA Group (2010).
 Preferred reporting items for systematic reviews and meta-analyses: The PRISMA Statement. *International Journal of Surgery*, *8*, 336-341.
 doi:10.1016/j.ijsu.2010.02.007

- Moritz, S., Werner, R., & von Collani, G. (2006). The inferiority complex in paranoia readdressed: a study with the Implicit Association Test. *Cognitive Neuropsychiatry* 11, 402-415. doi:10.1080/13546800444000263
- Moritz, S., Klinge, R., Randjbar, S., Vitzthum, F., Karow, A., & Lincoln, T.M. (2010).
 Course and determinants of self-esteem in people diagnosed with schizophrenia during psychiatric treatment. *Psychosis*, *2*, 144 153.
 doi:10.1080/17522430903191791
- Myin-Germeys, I., Nicolson, N. A., & Delespaul, P. A. (2001). The context of delusional experiences in the daily life of patients with schizophrenia. *Psychological Medicine*, *31*, 489-498. doi:10.1017/S0033291701003646
- Neale, J. M. (1988). Defensive functions of manic episodes. In T. F. Oltmanns & B. A. Maher (Ed.), *Delusional Beliefs*, pp.138-156. Wiley: New York.
- Nugent, W. R., & Thomas, J. (1993). Validation of a clinical measure of self-esteem. *Research on Social Work Practice*, *3*, 191-207.
 doi:10.1177/104973159300300205
- Oltmanns, T. F. (1988). Approaches to the definition and study of delusions. In T. F. Oltmanns & B. A. Maher (Ed.), *Delusional Beliefs* (pp. 3-12). Wiley: New York.
- Palmier-Claus, J., Dunn, G., Drake, R., Lewis, S. (2011). The negative and positive self:
 a longitudinal study examining self-esteem, paranoia and negative symptoms in
 individuals with first-episode psychosis. *Early intervention in psychiatry*, *5*, 150155. doi:10.1111/j.1751-7893.2010.00250
- Persons, J. B. (1986). The advantages of studying psychological phenomena rather than psychiatric diagnosis. *American Psychologist*, 41, 1252-60. doi:10.1037//0003-066X.41.11.1252

- Peters, E. R., Joseph, S. A., Day, S. & Garety, P. A. (2004). Measuring delusional ideation: the 21-item PDI (Peters et al. Delusions Inventory). *Schizophrenia Bulletin*, 30, 1005-1022. doi:10.1093/oxfordjournals.schbul.a007116
- Peters, E. R., Joseph, S. A., & Garety, P. A. (1999). Measurement of delusional ideation in the normal population: Introducing the PDI (Peters et al. Delusions Inventory). *Schizophrenia Bulletin*, 25, 553–577. doi:10.1093/oxfordjournals.schbul.a033401
- Romm, K. L., Rossberg, J. I., Hansen, C. F., Haug, E., Andreassen, O. A., & Melle, I. (2011). Self-esteem is associated with premorbid adjustment and positive psychotic symptoms in early psychosis. *BMC Psychiatry*, *19*, 11:136. doi: 10.1186/1471-244X-11-136
- Rosenberg, M. (1965). Society and the Adolescent Self-image. Princeton, NJ: Princeton University Press.

Rosenberg, M. (1979). Conceiving the Self. New York: Basic Books.

- Scott, L., & O'Hara, M. W. (1993). Self-discrepancies in clinically anxious and depressed university students. *Journal of Abnormal Psychology*, *102*, 282-287. doi:10.1037/0021-843X.102.2.282
- Smith, B., Fowler, D. G., Freeman, D., Bebbington, P., Bashforth, H., Garety, P., Dunn,
 G., & Kuipers, E. (2006). Emotion and psychosis: Links between depression, selfesteem, negative schematic beliefs and delusions and hallucinations.
 Schizophrenia Research, 86, 181-188. doi:10.1016/j.schres.2006.06.018
- Smith, N., Freeman, D., & Kuipers, E. (2005). Grandiose Delusions: An experimental investigation of the delusion as defence. *The Journal of Nervous and Mental Disease*, 193, 480-487. doi:10.1097/01.nmd.0000168235.60469.cc
- Smith, E. R., & Mackie, D. M. (2007) Social Psychology (3rd edition). Philadelphia: Psychology Press.

- Strauman, T. J. (1989). Self-discrepancies in clinical depression and social phobia: Cognitive structures that underlie emotional disorders? *Journal of Abnormal Psychology*, 98, 14-22. doi:10.1037//0021-843X.98.1.14
- Strauman, T. J., & Higgins, E. T. (1988). Self-discrepancies as predictors of vulnerability to distinct syndromes of chronic emotional distress. *Journal of Personality*, 56, 685-707. doi:10.1111/j.1467-6494.1988.tb00472.x

Strauss, J. S. (1969). Hallucinations and delusions as points on continua function. Archives of General Psychiatry, 20, 581-6.

doi:10.1001/archpsyc.1969.01740230069010

Stroop, J. R. (1935). Studies of interference in serial verbal reactions. Journal of Experimental Psychology, 18, 643-662. doi.org/10.1037/h0054651

Thewissen, V., Bentall, R. P., Lecomte, T., van Os, J., & Myin-Germeys, I. (2008).
Fluctuations in Self-Esteem and Paranoia in the Context of Daily Life. *Journal of Abnormal Psychology*, *117*, 143-153. doi:10.1037/0021-843X.117.1.143

- Thewissen, V., Bentall, R. P., Oorschot, M., Campo, J., van Lierop, T., van Os, J., & Myin-Germeys, I. (2011). Emotions, self-esteem, and paranoid episodes: an experience sampling study. *British Journal of Clinical Psychology*, *50*, 178-195. doi:10.1348/014466510X508677
- Thewissen, V., Myin-Germeys, I., Bentall, R., de Graaf, R., Vollebergh, W., & van Os,
 J. (2007). Instability in self-esteem and paranoia in a general population sample. *Social Psychiatry and Psychiatric Epidemiology*, *42*, 1-5, doi:10.1007/s00127-006-0136-1
- Trower, P., & Chadwick, P. (1995). Pathways to defense of the self: A theory of two types of paranoia. *Clinical Psychology: Science and Practice*, 2, 263–278. doi:10.1111/j.1468-2850.1995.tb00044.x

- Valiente, C., Cantero, D., Vazquez, C., Sanchez, A., Provencio, M., & Espinosa, R.
 (2011) Implicit and explicit self-esteem discrepancies in paranoia and depression. *Journal of abnormal psychology*, *120*, 691-699. doi:10.1037/a0022856
- Valmaggia, L.R., Freeman, D., Green, C., Garety, P., Swapp, D., Antley, A., Prescott, C., Fowler, D., Kuipers, E., Bebbington, P., Slater, M., Broome, M., & McGuire, P.K. (2007). Virtual reality and paranoid ideations in people with an 'at-risk mental state' for psychosis. *British Journal of Psychiatry*, *191* (Suppl. 51), s63-s68. doi:10.1192/bjp.191.51.s63
- Vazquez, C., Diez-Alegria, C., Hernandez-Lloreda, M. J., & Moreno, M. N. (2008). Implicit and explicit self-schema in active deluded, remitted deluded, and depressed patients. *Journal of Behaviour Therapy Experimental Psychiatry*, 39, 587-99. doi:10.1016/j.jbtep.2008.01.006
- Warman, D. M., & Lysaker, P. H. (2011). Delusional Ideation and Self Esteem in Individuals with Psychotic Disorders. *Journal of Nervous and Mental Disease*, 199, 58-61.

LIST OF APPENDICES

Appendix A. Quality Appraisal Tool

Appendix B. Studies Excluded from the Review

Appendix A. Quality Appraisal Tool

Question	Quality measure	Quality rating tool	Answer
1. Is the hypothesis/aim/objective of the study clearly described?	Reporting	Downs & Black	Yes No
2. Are the main outcomes to be measured clearly described in the Introduction or Methods sections? <i>If the main outcomes are first mentioned in the Results section, the question should be answered no.</i>	Reporting	Downs & Black	Yes No
3. Are the characteristics of the patients included in the study clearly described? In cohort studies and trials, inclusion and/or exclusion criteria should be given. In case-control studies, a case-definition and the source for controls should be given.	Reporting	Downs & Black	Yes No
4. Are the distributions of principal confounders in each group of subjects to be compared clearly described? <i>A list of principal confounders is provided</i> .	Reporting	Downs & Black	Yes Partially No
5. Are the main findings of the study clearly described? <i>Simple outcome data should be reported for all major findings so that the reader can check the major analyses and conclusions.</i>	Reporting	Downs & Black	Yes No
6. Does the study provide estimates of the random variability in the data for the main outcomes? <i>The standard error, standard deviation or confidence intervals should be reported.</i>	Reporting	Downs & Black	Yes No
7. Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except where the probability value is less than 0.001?	Reporting	Downs & Black	Yes No
8. Were the subjects asked to participate in the study representative from of the entire population from which they were recruited? <i>The study must identify the source population and describe how the patients were selected. Patients would be representative if they comprised the entire source population, an unselected sample of consecutive patients, or a random sample.</i>	<i>External validity</i>	Downs & Black	Yes No Unable to determine
9. Were those subjects who were prepared to participate representative of the entire population from which they were recruited? <i>The proportion of those asked who agreed</i>	External validity	Downs & Black	Yes No

to participate should be stated. Validation that the sample was representative would include demonstrating that the main confounding factors was the same in the study sample and the source population.			Unable to determine
10. Were the statistical tests used to assess the main outcomes appropriate? The statistical techniques used must be appropriate to the data. For example non-parametric methods should be used for small sample sizes. Where little statistical analysis has been undertaken but where there is no evidence of bias, the question should be answered yes. If the distribution of the data is not described it must be assumed that the estimates used were appropriate and the question should be answered yes.	Internal validity- bias	Downs & Black	Yes No Unable to determine
11. Were the main outcome measures used accurate (valid and reliable)? For studies where the outcome measures are clearly described, the question should be answered yes. For studies which refer to other work or that demonstrates the outcome measures are accurate, the question should be answered as yes.	Internal validity- bias	Downs & Black	Yes No Unable to determine
12. Were the participants and controls recruited from the same population? <i>Patients for all comparison groups should be selected from the same population. This question is answered unable to determine where there is no information concerning the source of patients included in the study.</i>	Internal validity- confounding (selection bias)	Downs & Black	Yes No Unable to determine
13. Were the participants and controls recruited over the same period of time? For a study which does not specify the time period over which patients were recruited, the question should be answered as unable to determine.	Internal validity- confounding (selection bias)	Downs & Black	Yes No Unable to determine
14. Was there adequate adjustment for confounding in the analyses from which the main findings were drawn? <i>The question should be answered no if the effect of the main confounders was not investigated or confounding was demonstrated but no adjustment was made in the final analysis.</i>	Internal validity- confounding (selection bias	Downs & Black	Yes No Unable to determine
15. Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?	Power	Downs & Black	Yes No

Appendix B. Studies Excluded from the Review

Summary of Excluded studies

Study	Sample	Self-esteem measure	Findings
Bowins & Shugar (1998)	Inpatients with psychosis (n=47) (schizophrenia, n=21; schizoaffective disorder, manic episode & major depressive episode, n=5)	Coopersmith Self-Esteem Inventory, SRS	Content of delusions reflected global self-esteem and self-regard. Individuals with persecutory delusions rated persecutory delusions as less comfortable than other delusions.
Warman & Lysaker (2011)	Outpatients with schizophrenia or schizoaffective disorder (n=30)	MSEI (global self-esteem score)	There was a relationship between low self-esteem and persecutory beliefs. There was no relationship between self-esteem and grandiosity.

Note. SRS= Self-Rating Scale, MSEI=Multidimensional Self-esteem Inventory

SECTION 2: EMPIRICAL RESEARCH REPORT

First Person Accounts of Grandiose Beliefs: A Grounded Theory Approach

Abstract

Objectives. Grandiose delusions (GD) are one of the most common types of delusions, held with the greatest conviction, yet there is a lack of clinical and theoretical understanding. Current models of GDs are based on limited research and clinical observations. This study aimed to develop a theory of the development and maintenance of GDs which was empirically grounded in the individuals' lived experience.

Design and Methods. The study explored first person accounts of their experience of grandiose beliefs. Seven individuals were interviewed using a Semi-Structured Interview Schedule. The Grounded Theory method was applied when collecting and analyzing data.

Results. The developed theory of GDs centered on the core category *Expanding Sense* of Self. Four closely related categories described processes involved in the experience of self-growth: *Higher Consciousness, Search for Healing, Re-gaining Control and Element of Truth and Validation.*

Conclusions. The findings suggested a number of processes may be involved in the development and maintenance of GDs. An expanding sense of self was central and viewed by the participants as a positive and healing experience. There also appeared to be pathways which differed between as well as within individuals, including those linking grandiose and paranoid beliefs. Future research should explore these further. Clinical implications are considered, in particular there is a need for mental health professionals to recognise the potential for healing, which may occur during the experience of self as special in the context of psychosis.

First person accounts of grandiose beliefs: A grounded theory approach

Grandiose delusions (GDs) have been defined as false beliefs featuring an inflated sense of worth (APA, 2000). For example, individuals with this type of delusion may believe they are someone special or famous, that they have special powers or that they are related to someone famous, despite these beliefs not being shared by others. GDs are one of the most common types of delusion and are held with greater conviction than other delusions (Appelbaum, Robbins, & Roth, 1999). GDs are most prevalent in bipolar disorder and schizophrenia (Appelbaum et al., 1999) and have traditionally been viewed as abnormal and meaningless symptoms of mental illness (Jaspers, 1913; Kraeplin, 1899).

More recently there has been a move away from seeing delusions as abnormal but rather as part of a continuum with typical beliefs found in the general population. (Bentall, Jackson, & Pilgrim, 1988; Oltmanns, 1988; Strauss, 1969). As such, they may be transient and differ in distress, preoccupation and conviction. Indeed, Peters, Joseph and Garety (1999) found that in their sample of 272 individuals without psychiatric diagnosis 43% reported some grandiose beliefs. This conceptual shift inspired research into the psychological processes involved in the development and maintenance of delusions. Persecutory or paranoid delusions have been the focus of much psychological research in the last decade, yet for GDs there is a lack of both clinical and theoretical understanding. Furthermore, the development of successful psychological interventions for GDs lags behind those for persecutory delusions (Kuipers et al., 1997; Knowles, McCarthy-Jones and Rowse, 2011). There is a need to better understand the processes underlying GDs in order to develop more effective ways of helping individuals who are distressed by them.

The two existing theories of GDs emphasise the experience of emotion. Defence theory suggests that GDs, together with mania, serve a function of protecting the individual from distressing feelings, cognitions and low self-esteem (Neale, 1988). During the experience of GDs it is proposed that there is a reduced discrepancy between actual and ideal self-representations, which prevents distressing feelings and cognitions from entering consciousness. In contrast, emotion-consistent theory postulates that GDs build on positive mood and preserved areas of normal or high self-esteem (Smith, N., Freeman & Kuipers, 2005). Consistent with the second theory, two large scale studies demonstrated that GDs were associated with higher self-esteem and less anxiety and depression (Garety et al., 2012; Smith, B. et al., 2006). However, whilst higher selfesteem was associated with GDs, the direction of causality could not be assumed. For example, it is possible that if GDs successfully serve a defensive function, they may result in increased self-esteem (Knowles et al., 2011).

Following a review of the relevant literature in the field of GDs, Knowles et al. (2011) concluded that although there appeared to be more evidence in support of the emotion-consistent account, it was limited. Knowles et al. (2011) proposed a preliminary model of GDs. Whilst the model shows two different pathways leading to GDs, the emotion-consistent pathway is given more focus and weight. The authors proposed that the main pathway starts with a trigger event such as goal achievement, which leads to a changed internal state, for example, an increase in mood or self-esteem. The subsequent search for meaning and the appraisal of this internal experience is proposed to result in the formation of GDs. Factors such as early life events, cognitive biases and the use of rumination and mental imagery are also considered to impact on the development of beliefs. The alternative pathway was postulated to begin with a negative life event which threatens the individual's self-esteem, leading to the experience of GDs through defensive processes.

GDs often co-occur with paranoid delusions making it difficult to investigate independent processes underlying each delusion (Garety et al., 2012). The model of

GDs developed by Knowles et al. (2011) attempts to explain how paranoid and grandiose delusions may be connected, highlighting the importance of self-esteem fluctuations in this process. Due to negative fluctuations in self-esteem, individuals experiencing GDs may start to fear that others desire their special identity, power or knowledge, subsequently developing secondary paranoid delusions. Similarly, due to positive fluctuations in self-esteem, individuals with paranoid delusions may start to think they are being persecuted because they are special, subsequently developing secondary GDs.

A close interplay between grandiose and persecutory beliefs is highlighted in first person accounts of psychosis (e.g. Chadwick, 2010). A psychologist Peter Chadwick describes an experience of grandiose beliefs, which he feels developed as a way to explain feelings of paranoia. Chadwick distinguishes between this "defensively compensatory and self-inflating" experience (Chadwick, 2010, p.69) and a separate positive experience of self as special. He describes the latter as an intense spiritual experience during which he felt as if he was reborn, gaining a new sense of self and having a purpose. The emotions such as anger and fear, which were previously powerful and overwhelming, became inactive. Instead, he experienced creativity, love and connection with God. Although both experiences followed increasing paranoia they resulted in a different quality of a grandiose experience.

Personal narratives can provide rich information and insights into complex processes and interest has grown in the lived experience of individuals with delusions. According to Hornstein (2013), first person narratives not only demonstrate limitations of psychiatry but also offer alternative explanations to be considered. It is becoming more widely recognised that the meaning that individuals make of their experiences is pertinent to understanding the phenomena studied and more likely to be clinically helpful than diagnostic criteria (Hornstein, 2013). Therefore, it is important to take into account the narratives of individuals who have experienced delusions and to attempt to build an understanding of their beliefs collaboratively.

In a series of studies, Rhodes and Jakes (2000, 2004, 2010) explored first person narratives of delusional beliefs. They suggested that the content of delusions reflected the fundamental life concerns of the individual (Rhodes & Jakes, 2000). For example, one participant, who believed he had special abilities and competence, described experiencing past academic failure and having brothers who had successful professional careers. His main life goals were further education and self-achievement. The authors concluded that although GDs could reflect a desire for achievement or power they did not necessarily serve as a defence against low self-esteem. Rhodes and Jakes also highlighted that their research was purely descriptive, exploring the content rather than the function and causality of delusions.

Almost half of Rhodes and Jakes' (2004) sample used metaphors which reflected the content of the delusions, to describe their experience either in the pre-delusional period or during an acute psychotic episode. For example, one participant, having seen a light in the sky assumed it was a spaceship. He reported initially feeling light "as though in the Milky Way" (Rhodes & Jakes, 2004, p.9), followed by the formation of delusions surrounding alien life and his leadership in this. The authors conceptualised delusions as thoughts about real experiences transformed by the metaphorical meaning, through the "fusion" of conceptual domains (Rhodes & Jakes, 2004, p.14).

The interpersonal difficulties and negative emotions were main themes evident in many participants' accounts of the onset of delusions and appeared to interact with the complex experience of perceptions and appraisals over time (Rhodes & Jakes, 2010). However, some participants described a very sudden onset of delusions, which seemed to come from nowhere. Although these participants reported experiencing interpersonal difficulties when prompted by the researchers, such difficulties were not significant in

their sense-making. However, the participants were experiencing delusions at the time of the study, which is likely to impact on their narratives and the significance they attribute to different events. Furthermore, if delusions serve a defensive function then the negative factors leading to their development may not be in the individual's awareness at that time. Therefore, it may be important to include both individuals with current and individuals with remitted delusions when exploring first person narratives.

Rhodes and Jakes's studies mostly included participants with persecutory delusions; those describing GDs were significantly under represented. To date, no research specifically explores the experience of GDs or the subjective meaning that individuals attribute to GDs. Furthermore, no study has directly explored first person explanations for the development of GDs. The current study starts the process of developing a shared meaning of GDs by exploring how people make sense of this experience and asking participants directly what their explanations for these experiences are. It aims to construct a theory of the development and maintenance of GDs, which is empirically grounded in the experience of individuals who report experiencing these beliefs.

Method

The study employed a qualitative design using grounded theory methodology. The lack of theoretical understanding and empirical research on GDs meant that qualitative research was appropriate due to its exploratory nature. Furthermore, this design is appropriate for exploring first person accounts. A grounded theory approach was appropriate since it places the experience and the meaning individuals give to this experience at its centre, whilst attempting to generate a new theory. The original version of grounded theory (Glaser & Strauss, 1967) assumed that the researcher discovers a new theory by remaining objective and not bringing preconceptions and knowledge of other theories into the analytic process. This method has its roots in a realist

epistemology, proposing that there is a 'true' state of the world that can be discovered and reliably measured. However, the Social Constructionist version of grounded theory (Charmaz, 1990, 2006), which proposes the existence of multiple truths dependent on individual perceptions, recognises the difficulty for the researcher of remaining completely objective. According to Charmaz' method, the researcher's perceptions will influence the way he/she gathers and interprets the data, thereby facilitating the active construction of a new theory based on shared meaning. The current researcher's epistemological view is consistent with social constructivism and the idea of multiple social realities. However, the ultimate purpose of grounded theory is to build a conceptual framework of a phenomenon, rather than to focus on interpreting the individuals' meanings which would result in a diffuse theory (Breckenbridge, Elliott, & Nicol, 2012; Martin, 2006). The researcher therefore adopted the idea that any concepts developed would be shared by participants, although they may have different meanings (Glaser, 2004).

Ethical Reviews

Ethical approval was sought from the University Ethics Committee and a regional NHS Research Ethics Committee, since participants were recruited from both an NHS trust and the community. Governance approval was sought from the University and from the NHS trust, which also included a review by a service user panel. The copies of these approvals can be found in Appendices C and D. Furthermore, a service user from the service user led organisation Bipolar UK was involved in the process of reviewing the research materials in order to check their relevance and acceptability.

Recruitment

Seven participants who experienced GDs were recruited, six of whom were recruited through Bipolar UK. The information about the research was emailed to service users on the local organisation's mailing list, at two different time points, October 2011 and September 2012. In addition, the researcher attended a service user meeting to talk about the study. One participant was recruited via a Community Mental Health Team (CMHT) by liaising with a care co-ordinator.

Participants

All participants who expressed an interest fulfilled the inclusion criteria and were able to take part in the study. The inclusion criteria were: 1) an experience of either past or current GDs, 2) an adequate command of the English language, and 3) an ability to provide informed consent and concentrate on the interview. The demographic characteristics of the sample can be found in Table 1.

Table 1

Characteristics	Number
Gender	
Male	3
Female	4
Age	
26-35	2
36-45	1
46-55	4
Ethnicity	
White British	7
Marital status	
Single	2
Separated	1
Divorced	1
Partner	3
Education	
Left college without qualification	2
College level	1
Degree equivalent	1
BSc degree	3
Employment	
Self-employed	1
Freelance	1
Voluntary	1
Unemployed	2
Other	2
Diagnosis	
Bipolar disorder	6
Paranoid schizophrenia	1
Length of illness	
Since childhood	2
18 years	1
10 years	3
18 months	1
Medication	7

Demographic and clinical characteristics of the sample (n=7)

Measures

Quantitative measures were employed in this study to screen potential participants for suitability and to obtain demographic and clinical information in order to contextualise the sample. See Appendix E for copies of measures.

Screening measures. Past experience of GDs was confirmed using participants' responses to two items on the short form of the Peters Delusion Inventory (PDI-21; Peters, Joseph, Day & Garety, 2004), which ask specifically about GDs³. The PDI-21 has been validated in both general and clinical samples, showing good internal consistency and test-retest reliability (r=0.71) (Peters et al., 2004).

A screening questionnaire specifically designed for this study assessed whether participants were able to take part. It included questions regarding suicidal ideation, substance misuse and psychotic experiences on the day of the interview, all factors which could have prevented them from concentrating or posed a significant risk.

Demographic and clinical measures. A questionnaire was administered to obtain demographic data including diagnosis, history of psychotic episodes and details of prescribed medication.

In order to obtain information regarding other delusional beliefs in addition to GDs the full PDI-21 was administered. All participants reported experiencing other types of delusional belief in addition to grandiosity. Most participants reported beliefs about persecution, suspiciousness, paranoid ideation, religiosity, paranormal beliefs and thought disturbance. A few participants also reported beliefs about negative self, depersonalisation, catastrophic ideation and ideation of reference. The participants varied in distress (scores 13-46), preoccupation (scores 21-46) and conviction (scores 26-50) of delusional beliefs experienced. Furthermore, they differed in the total lviilviilvii

³ Item 6 – *Do you ever feel as if you are, or destined to be someone very important?*

Item 7 - Do you ever feel that you are a very special or unusual person?

delusional ideation experienced (68-154), with three participants scoring below and four scoring above the clinical population mean of 131 (Peters et al., 2004).

The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) measures current levels of depression and anxiety. It has good reliability (Cronbach's alpha=0.86) and was validated in a non-clinical sample (Crawford, Henry, Crombie & Taylor, 2001). The clinical cut-off score for both depression and anxiety is 11. Participants varied in their levels of depression and anxiety (Table 2).

The Altman Self-Rating Mania Scale (ASRM; Altman, Hedeker, Peterson, & Davis, 1997) was used to measure current levels of elated mood. This scale was demonstrated to have good test-retest reliability and a high correlation with the Clinician Administered Rating Scale for Mania (CARS-M; Altman, Hedeker, Janicak, Peterson, and Davis, 1994) (r=0.766). The clinical cut off score indicating hypomania or mania is six. The participants differed in their level of elated mood (Table 2).

Table 2

Measure	Score range	Mean scores	No. reaching clinical cut-off
HADS Depression	0-12	9	2
HADS Anxiety	4-11	7	4
ASRM	0-10	3	2

Clinical characteristics of the sample (n=7)

Note. HADS= Hospital Anxiety and Depression Scale, ASRM= Altman Self-Rating Mania Scale, PDI-21= Peters Delusion Inventory

Procedure

Participants were given written information about the research and the consent forms (Appendix F and G). They were given an opportunity to discuss the study over the telephone or via email prior to meeting the researcher. Informed consent was

obtained on the day and the suitability of the participants was assessed using the

screening measures. The demographic and clinical measures were administered prior to

the interview. Participants were interviewed using a semi-structured interview schedule

(SSIS) (Figure 1, for details please see Appendix H). The interviews were

approximately 45 - 90 minutes long and were tape-recorded.

Semi-Structured Interview Schedule

Please tell me a little bit about your experience of strongly believing that you were very special, unusual or important.

1. **Aim** – to explore the content and the experience of grandiose delusions **Question** – Please tell me about the last time you experienced feeling that you were very special, unusual or important?

2. Aim – to explore relationships with others

Question – What were your relationships with others like at that time?

3. **Aim** – to explore events/factors preceding the development of grandiose delusions

Question – Can you tell me a little bit about what was happening in your life at that time?

Question – When did you first noticed/started thinking that you were...?

4. **Aim** – to explore participants' explanations for experiencing grandiose delusion

Question – What is your understanding of these experiences?

Question – Has your understanding changed over time and how?

Figure 1. Semi-Structured Interview Schedule

Analysis

Each interview was transcribed and analysed in turn using the grounded theory

method (Charmaz, 2006). The following is a description of the procedures and methods

that were employed during this process.

Coding. The analytical process began with a line-by-line or incident-by-incident

analysis of the participants' stories. This involved identifying low-level codes that

described, labelled and summarised participants' words and actions (for an example see

Appendix I1). In order to ensure that the developing codes were closely grounded in the

participants' accounts, they were chosen to reflect action instead of topic where possible. This means that the researcher attempted to use verbs instead of nouns, for example, 'feeling strong' instead of 'strength'. Those codes that kept reappearing were applied to a large amount of data, the method known as focused coding.

Theory development. Theory development began with theoretical coding. During this process the initial codes were compared for similarities and differences, subsequently leading to the development of higher-level categories (for an example see Appendix I2). The categories that emerged using this method were more interpretative and abstract than the initial codes. Re-reading transcripts during the process once new categories emerged, enabled more thorough analysis and further links and categories were formed. The development of more conceptual ideas was enabled by moving constantly between a focus on the similarities among categories and a focus on differences between categories. Theory development was recorded throughout the research process, using memo-writing (for an example see Appendix I3). Memowriting included thoughts about the data and the analytic process and it helped to identify ideas or questions that needed to be explored further, enhancing theory development.

Theoretical sampling. Grounded theory methodology uses theoretical sampling, which means collecting data in parallel to the process of analysis and in light of the categories that are developed. Data are collected to explore the emergent theory further allowing the researcher to refine and elaborate incomplete categories, to distinguish between categories and to explore relationships between categories (Charmaz, 2006). As a result, the SSIS changed over time in order to generate new questions and explore ideas that arose from the ongoing analysis. For example, although the category Safety and Protection emerged as significant in the first interview, it needed further

exploration. Specific questions relating to this category such as "Who is protecting you?" and "What does it mean, feeling safe?" were asked in subsequent interviews.

Theoretical sampling also meant that participants were recruited in order to answer the research question rather than on the basis of their representativeness. Therefore as the theory was developed and new questions and categories emerged, these informed recruitment. For example, most participants' accounts featured two differing states, a state of depression and a state of elated mood. In these participants, who also had a diagnosis of bipolar disorder, GDs appeared to be closely associated with a state of elated mood. The question was raised whether the emerging theory would be applicable to GDs found in individuals with a different diagnosis, who did not experience elated mood, which informed recruitment.

Once analysis of an interview is complete researchers sometimes ask participants to verify categories that emerged or to clarify any points further. This can increase validity as well as aid in elaborating and refining emergent categories. The same participants were not returned to in the current study due to the likelihood of an individual's account differing greatly depending on their mood. However, the emergent categories were explored with new participants, ensuring that the basic concepts developed were shared between participants. In order to capture the impact of mood on the phenomenon studied the researcher aimed to recruit participants differing in mood. In addition, the study included participants who were currently experiencing GDs, as well as those who experienced them in the past and were considered to be in remission, since it was predicted that participants may view and talk about their experiences differently depending on this factor.

Theoretical saturation. The current study aimed towards theoretical saturation, a point at which no new categories or no new properties of the core categories were being identified, although researchers have questioned whether this is truly attainable (Dey,

1999). Theoretical saturation was verified by the research supervisors through the audit of the individual transcripts and the developing categories.

Quality

Elliott, Fischer, and Rennie's (1999) guidelines were followed in order to increase the current study's quality and to ensure good practice. In particular, *Owning one's perspective* and *Providing credibility checks* were carefully considered and viewed as integral parts of the research process.

The researcher aimed to be aware of her own theoretical and personal views and how these might impact on data, by keeping a reflective journal and discussing main themes with research supervisors. Reflexivity has been conceptualised as differing from a simple reflection, and includes an explicit evaluation of the self throughout the research process (Shaw, 2010). It is deemed important to understand what happens in the interactions between researcher and participants, and later between researcher and the data, and how researcher influences these processes. This understanding can help us to distance ourselves from the data and generate alternative and multiple interpretations. The researcher actively engaged with this processes asking questions such as "Why was this category chosen?"

The credibility of the findings was ensured through audits by research supervisors, who audited approximately 57% of the data (two transcripts each). More specifically, they were provided with the transcripts, initial codes and developing categories (including subcategories and their properties). The research supervisors independently checked these materials whilst looking for new categories, properties and links.

Results

The core category that emerged from the analysis was *Expanding Sense of Self*. This category brought together all the other categories that emerged and was strongly evident across participants. It is therefore considered central to the experience of GDs. Four categories described processes involved in self-growth: *Higher Consciousness*, *Search for Healing, Re-gaining Control* and *Element of Truth and Validation*. The processes involved in self-growth are likely to be multi-directional, with an expanding sense of self leading to further healing, an increase in control and feelings of validation, as well as these impacting on each other. The proposed framework can be seen in Figure 2. Each category and the links between them will be described in turn, and illustrated using anonymised transcript excerpts.



Figure 2. Participants' Theory of Grandiose Beliefs

Expanding Sense of Self

Participants gave accounts of always feeling like they were different to others (1). Although some described themselves as unworthy and unimportant, and others described themselves as worthy and special, most participants had both of these views of self at different points in time. Some participants reported a sense of self that was highly dependent on factors such as physical appearance, achievements, relationships and mood (2), which could explain the fluctuating self-esteem. In some cases, this

absence of continuity of self-identity appeared to have led to a lack of real sense of self

and one's personality (3) or wishing they could develop a new self-identity which

would be more stable and less fluid (4).

1 "I can remember, as young as I can remember that I... I were different, thought different to others" (Paul, 5)

2 "I'm a designer so I made a collection and I was very happy with the collection and I started to, my self-esteem started to go higher... But I think that's because no one can be as proud of me as I am of myself. I am proud of my achievements and I was then." (Ella, 39)

3 "...it's a bit of a clash of personalities. If I'm on a downer I'll be right shy and put my head down but if I'm on top of the world and I think the world loves me and I'm all happy I can be quiet outgoing. So I don't know what my personality really is." (Mary, 110)

4 "It's sort of not having these two anymore, it's completely get rid of these two ??? new creation or identity where I'm not that person anymore." (Susan, 751)

During the experience of GDs participants reported a positive sense of self and

high self-worth. Moreover, they described a journey of self-discovery leading to an

expanding sense of self. Participants talked about finding out who they were, being

allowed to be themselves and expressing themselves (5). Some also reported

experimenting with being someone else, reaching their potential or changing as a person

(6). Grandiose beliefs were viewed by many participants as a potential for positive

personal and spiritual change.

5 "it was me just coming out saying to the world ta ta da this is who I am." (Susan, 449)

6 "when you enter these altered states of mind that you kind of become the opposite you know it's a chance to be all these things that you are not normally. (...)...it makes you wonder if, when you are in those states and you've experienced those things, if it's some ability that you may have." (Lisa, 608)

Higher Consciousness

Most participants described a higher state of consciousness, which was

characterised by heightened perception and moving from a focus on materialism to

increased spirituality. More specifically, as their perceptions changed individuals were

experiencing the world as more spiritual (7). This process was found to vary between
participants in terms of the speed by which it happened and the level of consciousness

and control that participants had over it. Some described moving quickly into this

altered state (8) whilst others reported slower more gradual process and having more

control and awareness of this change (9).

7 "I started seeing like trees as l- lungs of the planet and things and just seeing if the, it started, the, the, there seemed to be slightly more magical thing to a, a, a lot of nature." (Tom, 19)

8 "Yeah, well it was very quick really. When I go into these I'm there within a week..." (Lisa, 388)

9 "...they build themselves up over a period of, say like two or three months (...) ...whenever I've been manic I've always just been just able to keep hold of reality of it and, and know that my head was going, other than when I've been on my own m- my thoughts have gone further" (Tom, 173, 504)

During the state of higher consciousness the participants experienced spiritual

connections with other people, nature and supreme beings such as God and Christ.

Some described feeling close to and interconnected with the other, although remaining

conscious of and retaining some sense of self as a separate identity (10). Other

participants experienced a complete loss of the boundaries between self and the other, to

the extent of becoming the other and experiencing sense of oneness (11).

10 "really feeling linked to Christ's spirit or whatever it is (...)I just stood staring into the mirror and I saw my face like I saw all stars coming round as if the, because light, it were, there were only candlelight in the room so I saw all stars round and silhouette of my face had got a beard like it, it, it, it changed from being me into all classical Jesus, everybody, it wasn't, so I still wasn't thinking I was but I was thinking it was coming through me erm." (Tom, 649, 524)

11 "I thought I was Mother Nature and that was just, I didn't really feel like I had any powers I just felt like I was her" (Lisa, 44)

The state of higher consciousness and heightened perceptions also led the

individuals to experience their world as highly significant and meaningful. Individuals

began to feel that they had a purpose in life or a destiny (12), believing that their life

was going to change (13). As a result they experienced changes in their self-identity,

leading them to feel special, worthy and important (14).

12 "all my beliefs about that purpose around me ended up coming true, around me, like signs and awarenesses, I just interacted with them and like (...) Like messages, communicating, as far as I can remember, since I was little, and I just felt like I had a purpose." (Paul, 7)

13 "And I just feel like, if I start following, if God gives me a message and I start following it that will lead to another one and another and another and another. And it will just end up changing my life." (Ella, 75)

14 "I'm this golden child I'm special I'm perfect like I'm doing it with my life but you are not doing nought with yours" (Paul, 168)

Search for Healing

The category Search for Healing was developed from participants' description of how experiencing unbearable pain impacted on self-identity, leading the individual to search for healing and subsequently to experience an expanding sense of self. The category contains four subcategories Managing Loss, Pain of Responsibility, Safety and Protection and Experiencing Unconditional Love .

Most participants talked about experiencing intense emotion and pain. There was also a general sense that expressing this emotion was not accepted by others and that instead it was expected that they should hide it from other people or bottle it up (15). In particular, participants talked about the systems where expressing feelings was not acceptable or encouraged such as Christianity, police force and a patriarchal society, leading them to feel that their emotions were not important (16). Furthermore, the expectation of hiding their feelings was likely to result in emotions being experienced as overwhelming and more difficult to accept or manage (17).

15 "No one really wants to be around thing when I'm depressed anyway. If I get really really depressed like inconsolably weeping about something, grieving about something, everyone is just oh shut up you are so annoying (laughs), stop that" (Ella, 240)

16 "nobody gave shit about my feelings, sorry. Everybody would always trash my feelings (...)...women are a feeling sort of, we are feelings people ...Sometimes we are told as women that feelings aren't good, particularly in the Christian world that feelings, don't go by your feelings" (Susan, 75, 433)

17 "Like you are not supposed to cry out of your house. You are supposed to cry quietly when you get home but I have to release that otherwise I can't carry on with my day. It's so powerful, that emotion. It's like churning, what it feels like is from

the bottom of my spine and shoulders, churning all that negative emotion into having a quick cry." (Mary, 491)

Participants talked about expressing their feelings during their experience of GDs (18), and described higher consciousness and heightened perceptions helping them to cope with distressing feelings (19). Indeed, the change in consciousness appears strongly linked with the experience of intense emotion. Most participants described experiencing distressing feelings prior to changes in perception. Sometimes these overwhelming feelings appeared to lead directly to heightened perceptions, in which case the process was more likely to be quick and less conscious (20). At other times distressing feelings appeared to lead to an increase in positive feelings and elated mood (21), which was subsequently followed by the experience of higher consciousness.

18 "I think a lot of it is to do with feelings and emotions you've kept held down." (Lisa, 152)

19 "like trees and wind blowing and stuff like that, it's like it's all interacting as one. I don't know but it's like a message to me, 'cos I get stressed out and wound up, it's like calmer, it calms me down. If I'm getting wound up I listen to trees blow, it sooths me and that." (Paul, 93)

20 "When I go into these I'm there within a week so there wasn't a lot of time of feeling down and stuff like that, it was just a kind of sense of just pain you know that emotional pain of rejection." (Lisa, 388)

21 "that was over something had gone off with my daughter that brought it all back and I didn't want to face Christmas and I let myself go manic, I encouraged..." (Tom, 1175)

Participants described a process of moving from distressing to positive feelings.

Some individuals remembered making a conscious decision that their life had to change

(22) and others talked about actively doing things to make themselves feel better (23).

For some positive feelings and an increase in spirituality and participation in spiritual

activities (e.g. praying and meditation) was linked to experiencing hope and validated

their feelings (24). Indeed, the experience of GDs was viewed by some as a journey of

recovery (25) during which the individuals had the opportunity for healing (26).

22 "I made a decision in January 2011 that I was not prepared to put up with this life as it was anymore... From that day on things have moved on and on and on." (Nigel, 69, 98)

23 "And I felt very lonely so I started to see my friends more. And I started treating myself to manicures and bikini waxes and fake tans, and things like that, and shopping." (Ella, 182)

24 "... and then you know believing, that was the first time I really really prayed and I felt a lot of peace after I prayed. And it was at that point I thought my feelings were really validated." (Susan, 71)

25 "Experience of feeling special and unique has come about, it was in the last eighteen months in my recovery stage." (Nigel, 3)

26 "I've liked, focus on something, tried to be good things, focusing on things that bring me alive and make me feel happy. And it's like, I'm sure it's healing my brain in a way." (Mary, 330)

Managing Loss. The experience of loss and its impact were evident in most

accounts. Participants described emotions such as pain, grief, sadness, anger, guilt,

blame and fear (27). For some participants it was the loss of a person and a relationship,

for some it was a threat of abandonment and for others it was a loss of a role and status

that caused these emotions (28). Since participants described their sense of self as

dependent on factors such as relationships and status, the loss of these is likely to lead to

a loss of part of self and to impact on self-identity and self-worth. One participant spoke

about their closeness to God making them feel complete (29). Participants also talked

about their experience of higher consciousness having a function of relaxation (30),

enabling them to stay positive and cope with their loss experience, whilst continuing

with life (31).

27 "...I get really really depressed like inconsolably weeping about something, grieving about something..." (Ella, 241)

28 "So all of a sudden, having been through 30 years unblemished career, enjoying my work (...) And I couldn't cope. Because my two children were early teenagers, my wife was only on small amounts of salary per year. That's what sent me crashing." (Nigel, 338)

29 "And to be able to have that communion with God and be complete without, you know, my son doesn't make me complete, [name] doesn't make me complete, God makes me complete. And now I've had completeness hopefully I can be a bit more healthy." (Susan, 599)

30 "I longed for another baby but because I had the miscarriage, and they messed about with me and pulled and tucked me, I felt all the pain down there, do you know what I mean, painfulness. This is when I started going into that erm car light thing, like cars shining lights at me, and lights would pass around my room like that, you know headlights, at night time they would go round like ??? and I used to hypnotise myself. And it used to make me feel relaxed in my body." (Mary, 172)

31 "**R:** (...) you said that it all kind of started around the time...that your daughter was taken away...

P: ...I didn't want there to be any chance that, of her thinking as she got older and, that, with her not seeing me that, yeah? I didn't, yeah, so I didn't want to do that to her so that were the only thing that were making me hold on and I can remember going out fields taking the dog for a walk and just, it was like every day was how am I going to get through today without doing something, and it just come in my head, the, the link between [name] and, and cannabis... (...) I'm trying to make myself occupied to think about, to feel positive..." (Tom, 564, 646)

Pain of Responsibility. Most participants described feelings of responsibility and

guilt. Some felt guilty about not doing anything to protect other people and others talked

about their actions and the impact of their actions on others, which caused them to feel

guilty (32). These feelings probably impacted on how individuals saw themselves.

Indeed, some described believing that they were inherently bad and deserved to suffer

(33). During the experience of GDs some participants described a general sense of

responsibility to protect others and understood this to be due to having special identity

or powers (34), whilst others described a lack of responsibility and guilt for their actions

(35). Some beliefs about one's own responsibility appeared to be closely linked to the

beliefs of being special and having special powers, suggesting their importance in

managing these difficult feelings (36).

32 "We'd actually, on the day he had his accident I decided I had enough and I finished the relationship (...) I kind of thought it was my fault and at that time as well I was thinking, I had lots of believes about energies and things... (...)...I think it was the way of kind of making me feel, you know, I felt, I suppose I felt, although it took me a long time to acknowledge that, think I did feel responsible (...)if I just left it that he had gone, found his own way back, than he probably wouldn't have been in the car that night driving to his friends and, you know, everything would have been different..." (Lisa, 214)

33 "I've been thinking well that's God's punishment for me. God punished me. And that was looking at evil, I'm an evil person, bad person, bad me" (Susan, 685)

34 "Yeah it is a lot of responsibility. I feel like, yeah, it feels like I just got weight on my shoulders and it's like I don't want to mess up 'cos it's a gate like for afterlife, but then I have to think about everyone else's life. If I know what it's doing to my own life I turn around and think well, it's not just doing it to me, it's tied in with others so I'm trying to protect you as well as myself from what I think is wrong." (Paul, 202)

35 "...sometimes, feeling like I can't be caught out so I've been unfaithful to my partners and thinking they'll never find out, they can't catch me. Or if I do something wrong no one will mind." (Ella, 14)

36 "While he was on life support I started to get these feelings I needed to do certain things, to make, because he was in a coma, to bring him back. And I started thinking I was a faith healer so that was a starting point." (Lisa, 19)

Safety and Protection. Most participants talked about experiencing strong fear and panic. They described experiencing a fear of rejection, being let down by the law and a society who failed to protect them, and events or people that caused them to feel unsafe (37). Feeling unsafe and unprotected is likely to foster a negative image of self as unlovable and unworthy. The findings suggest that the experiences of feeling special or having special powers may have a function of safety and protection. For example, some participants described feeling detached from the world and from the feeling of panic when experiencing GDs, which made them feel safe (38). Participants believed they would be protected by their special powers or their special identity (39) and felt like they were looked after and protected (40). Participants also described developing a closeness to God in parallel with experiencing distressing beliefs and hallucinations (41). One participant gave an account of moving from fear to hope in their attempt to manage the intense feeling of lack of safety and protection and used methods such as praying, which helped them to feel closer to God and cope with fear (42).

37 "And, you know, what a psychiatrist would call paranoia was actually a real fear. It wasn't something that wasn't real. It actually was happening. I mean, I was assaulted a few times by work colleagues and it was real. I had the bruise, you know." (Susan, 24)

38 "Well, you put like a, I call it a glass wall, like a screen round your body and your head, there is a wall between you and the world and then you can go out there and just carry on. (...) when I went to the shops the other day (...) I felt like my guard had come down and I was sinking into the floor. So, I don't know if that means I'm getting better, trying to leave that shield, but it's so scary I can't manage without it. (...) But I don't know if it's me trying to live in the real world but I want to be in that bubble, to protect me. (...)

R: And when you feel special and famous it feels safe?

P: Yeah, I feel like I could climb a mountain when I'm safe. I go rushing around." (Mary, 75)

39 "...he is accusing me but 'cos I'm special and perfect, I'm this golden child, I know what to say to get me out of it, from the Devil, gets me out of tr, because I've been good and I've got God with me and 'cos I've been good and special for God." (Paul, 228)

40 "It's like if I hear car beep, I think it means they are going to watch me. You know, if car beeps it's like saying [her name] is looking out of the window or [her name] is walking down the street.(...) It's like they are watching out for me (...)if I needed help there might be somebody there." (Mary, 303)

41" I started to see things and have not auditory hallucinations but visual and touch and smell hallucinations. And I thought they were like bad spirits and at that same time I started to feel more close to god, I don't know why." (Ella, 33)

42 So that was when I prayed and I didn't see anyone else in the room I just said Father God you know if you are there I really need help. And it was at that point I just felt this peace and all the fear went." (Susan, 218)

Experiencing Unconditional Love. Most participants talked about the

importance of love and the impact of unconditional love on their experiences of GDs.

Some talked about feeling unloved and experiencing a lack of comfort and emotional

support from their primary caregivers (43). Others described a strong fear of rejection

and felt unsecure in relationships. Feelings of being unloved and the lack of emotional

support and comfort had led participants to view themselves as unlovable, unworthy and

unimportant, subsequently searching for love and special care (44). For example, many

talked about idealising romantic relationships, which often led to disappointment (45).

Others described the importance of feeling loved, together with the fear of losing that

(46). During the experience of GDs participants described experiencing unconditional

love through feeling interconnected with the other (47). Some felt that their experiences

of being close to God enabled them to experience these important feelings of love and

acceptance, subsequently impacting on their self-worth and helping develop an

expanding sense of self (48).

43 "there has been so much in my family emotional neglect because I think my mum and dad kind of stayed together, fell out of love long and then stayed together and I never witnessed any emotional love. (...) yeah, there was never, very, very

little things shown and, and I think that that's contributed to why I'm like I am" (Tom, 1003)

44 "...there is nobody on this planet that is loved as much as you in this particular moment. And it's between us. But we should all experience that. And when we don't we look for it in all sorts of different places." (Susan, 472)

45 "I know deep down really I think I've grown up for most of my life with this sort of Walt Disney mentality where one day I'd go to the ball. (...) This is where I'm going to meet the man of my dreams. And actually no it wasn't. And having to deal with that disappointment of where else is he gonna be. He should be, you know, almost like a bit of a, when your child realises that father Christmas isn't real." (Susan, 32, 51)

46 "And also, I think that he was the, he was the first person that I had who really made me, he really did make me feel really loved (...) And it was this sudden potential loss of, that he might die or whatever" (Lisa, 358)

47 "I've had connections with trees, feeling unconditional love coming out of trees." (Lisa, 65)

48 "And my mum rejected me years ago but she'd been rejecting me all my life. You know, but God didn't reject me and in all that mess (...) Jesus was the man that actually went out of his way on purpose to get to me and tell me do you know what [name] I love you and I accept you don't matter what anyone else thinks." (Susan, 412, 757)

Re-gaining Control

Most participants described experiencing a lack of control and feelings of

powerlessness throughout their lives, which impacted on their sense of self (49). The

agents of control featuring in their accounts ranged from powerful individuals to

establishments and authorities such as family, school, courts, police, psychiatric

systems, as well as wider society (50). Participants described different processes and

means of control. For example, they talked about being physically threatened or bullied,

having a lack of choice, being held back and being intruded upon (51).

49 "But my own feeling about it is that it comes from feeling quite disempowered really, through your life, being quite a disempowered individual (...) Like you are not fully, you are not being your potential and you are not kind of realising, you are not actually being what your potential really is, because of your experiences that you've had, and you feel like you're keeping this, kept down." (Lisa, 493)

50 ", she used to rule me with the rod of iron. She'd tell me what I can buy what I couldn't, if I could use the tumble dryer or if I could do this. And she was such a tyrant. And I just took it and took it of her all those years." (Mary, 384)

51 "It's like me and Satan, we are in court now. I pursue him, he is invading my life, like he come to my life but didn't have no legal doc no legal ??? to say that he could." (Paul, 176)

Participants' accounts showed that during the experience of GDs the individuals attempted to re-gain control, to feel that they had power to make a difference, have an impact on others, be listened to and taken notice of, and be able to do what they want to do (52). Instead of blending in and being invisible they started to become visible (53). They moved from feeling vulnerable, weak and unable to make changes to gaining strength to make changes (54). Subsequently they felt more powerful, which was likely to impact on their self-image and self-worth. As individuals re-gained control they started to view themselves as important and worthy, and act accordingly (55). Regaining control allows individuals to express themselves. For some individuals empowerment led to healing and recovery, which then led to further increases in positive self-identity and viewing the self as special and unique (56).

52 "... Another thing that happens as well, the whole reason for being naked is to do that it makes me feel like I'm in my power running naked, I don't know just something about it just makes you feel like you are invincible and really strong and people react to that as well don't they so because you are thinking people are scared of you and people get in a state because you take your clothes off but it kind of feels a bit like, powerful yeah" (Lisa, 418)

53 "a friend of mine came to see me and I said to him I'm an angel and he said I know you are, "I've always been able to see your wings and I said yeah they are huge and they are iridescent and they've got pink in them" (Lisa, 272)

54 "And you know it's made me stronger. And I am special, you know. And I wanna help other people going through the same shit to get them some help." (Susan, 272)

55 "I sat on that nice and high up and I sat them down on the settee nice and low down" (Tom, 1288)

56 "That afternoon, having never been out of the house, never spoken to anybody, I signed three Irish songs and I signed two rock song, backed by the first time in my life by a band made up of service users. So that was absolutely a key in my recovery. (...) So that's where the confidence has come back and it must never be mixed up with arrogance." (Nigel, 164, 270)

Element of Truth and Validation

The category Element of Truth and Validation relates to the reality of beliefs experienced. Although most participants questioned the complete reality of their experiences, they still held strong beliefs about the possibility that these were true or that they contained an element of truth. The narratives suggested an idea of multiple truths, and beliefs that ranged from those thought to be entirely personal (57) to those shared by other individuals (58).

57 "P: Because that feeling good really isn't really real, it's part of the illness, isn't it?
R: *Is that what you feel?*P: It's hard to say, it's hard to say. It's real to me but is it real, that's the question. Is it real or not? To me it is real." (Mary, 253)

58 "all these people can't be just completely bonkers. There is a lot of stuff that's happening that we all experience." (Susan, 382)

Participants talked about truth based on a different realm and on a different understanding of the world such as through atoms and archetypes (59). Some accounts suggested that what is considered to be reality was often related to cultural and religious practices and beliefs of the society in which one lives. The understanding of truth and reality in some cultures was thought to differ greatly from ours and to be founded on

intuition (60) and spirituality (61).

59 "I don't want to be offensive to people who don't have bipolar but I think it puts you on a different frequency to everyone else, let's you think about things that other people aren't capable of thinking about, you feel things that other people aren't capable of feeling. (...) At the time I'd been meditating and thinking about atoms and particles, and thinking about everything atomically." (Ella, 406) 60 "I think when you're, when you're in, just saying what if that stuff, the grandiose stuff that you are experiencing, what if there is an element of truth in those things, you feel like you are getting insights into things and wisdoms, there is supposed to be thing that in tribal cultures when people experience these things, that they're kind of respected and seen as people who show what's wrong within the tribe and they are listened to..." (Lisa, 629)

61"...you feel things that other people aren't capable of feeling. And like a lot of monks, Native American worriers, they put themselves through intentionally painful things so they are closer to the spirit world, closer to God all the rest of it. So it's only natural for someone who is experiencing a lot of intense emotion to be opened up to a different realm." (Ella, 410)

Some participants wondered whether their experiences were metaphors to help them through the healing process and to signal pain on both an individual and societal level (62). On the other hand, some participants described beliefs grounded in truth. For example, one participant expressed beliefs about his skills and qualities, which he already possessed but felt they were exemplified by being empowered and re-gaining confidence (63).

62"But it's something special that's happening to you, yeah, and so whereas I thought that I was going to make a difference at the time I think after it was a metaphor and it just really, literally just come in my head the difference I was going to make was to me (...) I think that we're a warning system, we're, yeah, we're sensitive so that society should take some notice, not believe we're Jesus but accept that as a metaphor for something's wrong " (Tom, 978, 1075)

63 "I always knew that when I was a bank manager and a financial advisor that I was consciously competent at my job. I knew how to talk to people, I knew how to listen to them far far more than talk, and empathise with them. So those skills were always there" (Nigel, 16)

The importance of being believed and feeling that their experiences were

validated, either by other people or through the confirmation from the environment, was

strongly highlighted throughout the accounts (64). The validation of participants'

experiences was found to impact on an expanding sense of self. By feeling validated

participants moved from not being important and special to feeling important and

special (65).

64 "I told him about the hallucinations I'd been having and he explained to me that in Islam there is a very valid explanation for those. And I kind of felt there wasn't much to sort out from that point (...) I had been directed to possibly the only person that will ever believe me. I feel like God has taken me towards that path, just from following things." (Ella, 117)

65 "So I think yes I am special, I do believe that. I do believe I'm chosen by God, not because I'm brilliant but because I've had an experience that is so validated" (Susan, 326)

In summary, all the categories appeared to be closely linked and impacted on each

other. Nevertheless, Expanding Sense of Self emerged as a central category, since it

featured as most significant in all of the accounts. Furthermore, all the other categories

appeared directly linked to this core category and showed how the participants experienced an expanding sense of self.

Discussion

This study explored seven first person accounts of grandiose beliefs, using a grounded theory method. The experience of an expanding sense of self was central in the participants' stories. Four other processes emerged as significant and likely to impact on the expanding sense of self: higher consciousness, searching for healing, regaining control and experiencing an element of truth and validation.

The participants reported a fluctuating self-esteem and a lack of a real sense of self at times. The experience of GDs led them to experience high self-esteem and an expanding sense of self. Issues related to self-esteem in individuals who experience delusions have been highlighted in other literature. There is growing evidence in support of the dynamic nature of self-esteem, in particular linking the fluctuations in self-esteem with the onset of paranoia (Thewissen et al., 2007). The themes of the loss of self and the self-growth resulting from psychosis were also found in a large meta-synthesis of 97 studies exploring individuals' accounts (McCarthy-Jones, Marriott, Knowles, Rowse, & Thompson, 2013). The current findings suggest that experiences of self-growth such as reaching one's potential and experimenting with being someone else, enabled individuals to feel special and unique. Moreover, feeling special and unique facilitated the process of self-growth and self-discovery.

The participants in this study described experiencing a higher state of consciousness including heightened perceptions, feeling connected to the other, increased significance and meaning, having a purpose and increased spirituality. These processes were found to impact on the participants' expanding sense of self and a view of self as worthy and special. The association between psychosis and spirituality is well recognised in the literature (Chadwick, 2010; Kinderman, Setzu., Lobban, & Salmon, 2006). In the current sample higher consciousness and spirituality appeared closely related to GDs and beliefs about self as special rather than to other experiences of psychosis.

In line with Rhodes and Jakes (2010) study, most of the narratives featured significant interpersonal difficulties. The findings indicated that it was the emotional impact of these difficulties such as feeling frightened, unloved, not believed and disempowered, which subsequently impacted on participants' self-esteem and sense of self. Furthermore, the participants described searching for healing as they attempted to manage these overwhelming emotions. The search for healing included managing the impact of loss and the pain of responsibility, searching for safety and protection and experiencing unconditional love. The experience of loss and attempts to rebuild and regain what was lost, has been highly significant in other reported first person accounts of psychosis (McCarthy-Jones et al., 2013). Research has also demonstrated that some individuals who experienced psychosis may have had early attachment difficulties and therefore perceive their caregivers as uncaring (Parker, Fairley, Greenwood, Jurd, & Silove, 1982). As a consequence they may lack feelings of love and safety normally developed through a secure attachment (Drayton, Birchwood & Trower, 1998) and have low self-esteem (Luke, Maio, & Carnelley, 2004). Participants in the current study described searching for unconditional love and feelings of safety in the context of higher consciousness, which enabled them to experience these positive feelings.

The existing theories of GDs view emotion and self-esteem as central in the development and maintenance of these beliefs, although they disagree on their exact role. The findings of the current study appear most consistent with the model described by Knowles et al. (2011), which implicates both direct and defensive roles of emotion and self-esteem as relevant in GDs. In line with the direct or emotion-consistent pathway, some participants described events such as a success at work, leading to an

increase in mood and self-esteem, subsequently resulting in the onset of GDs. On the other hand, some participants described negative events and an overwhelming pain leading quickly to higher consciousness and GDs. The processes involved in the second pathway appeared to be less conscious and not under participants' control, therefore more consistent with the defence theory. However, those participants who reported gradual change, more control and a build-up of positive emotion leading to GDs, also described experiencing negative events, distressing emotion and struggling with selfesteem prior to this. They developed coping strategies such as keeping themselves busy, which led to an increase in mood and subsequently to GDs. Therefore, current findings suggest that GDs may reflect individuals' attempt to manage distressing and overwhelming feelings and their search for healing.

The *spiritual emergence* and the *spiritual emergency* were ideas developed to explain different spiritual experiences and the role of spirituality in psychosis (Grof & Grof, 1989; Lukoff, 1998; Menzes & Moreiara-Almeida, 2010). Both processes are thought to occur as a response to trauma and lead to a changed view of self. In contrast to the spiritual emergence, which is a gradual process allowing the individual to retain ability to function in the ordinary reality, the spiritual emergency is defined as fast, chaotic and confusing, resulting in disturbed functioning (Grof & Grof, 1989; Lukoff, 1998). As these two concepts appear to link the state of higher consciousness and the individuals' search for healing, they may be relevant for the participants in the current study. Nevertheless, even those participants who described disturbed functioning viewed GDs as a potential for recovery and healing, provided the environment and people around them were nurturing and accepting.

The current participants described re-gaining control and power during GDs. Feeling in control and empowered led them to experience an expanding sense of self and a view of self as important and special. Research has demonstrated that individuals

with psychosis experience a lack of control and power over their lives (Laugharne, Priebe, Garland, & Clifford, 2011). Current findings suggest that grandiose beliefs may be one way for individuals to manage a lack of control and power. Some participants described less conscious processes leading to increase in strength and power. Others described active coping and learning new skills, which enabled recovery and empowerment. Both pathways led to a view of self as special and important.

The participants also described the importance of being believed and feeling validated, experiences which were found to impact greatly on their growing sense of self as important and special. This was closely related to the participants' reflections that there might be some truth in their experiences. For example, one participant described her relationship with her grandmother, who treated her like a princess and made her feel special. Consistent with these findings, clinical observations have also suggested that GDs may build on a "thread of truth" (Lake et al., 2008, p.1153) and "preserved raised areas of self-esteem" (Smith, N. et al., 2005, p.481). However, two participants described never experiencing positive feelings about self unless experiencing GDs, which again supports the theory of multiple pathways and processes in the formation of these beliefs. The findings also suggest that whilst those individuals lacking any positive feelings about self may be more likely to experience GDs through less conscious processes, individuals with some positive beliefs may be more likely to develop positive coping strategies, increases in mood or feelings of hope, gradually leading to beliefs of self as special.

The meaning placed on metaphors and similes emerged as significant for some individuals consistent with Rhodes and Jakes (2004) and are consistent with their suggestion that real experiences can be transformed by the metaphorical meanings and reflect the content of delusions. The fusion of real and metaphorical meaning could be related to an increased significance and meaning of life in general, as experienced

during the state of higher consciousness. Nevertheless, it could also be related to the meaning that the metaphors may hold for the view of self as important and special, which appeared to be case for the current participants.

The participants in the current study also reported experiencing paranoid delusions, which appeared closely related to GDs. Knowles et al.'s (2011) model implicates self-esteem fluctuations as significant in the close relationship between these two experiences. Although the relationship between paranoid and grandiose delusions was not directly investigated in this study, there was some evidence consistent with this model. Nevertheless, current findings also suggest additional processes which may result in the association between the two experiences. The participants fostered feelings of safety and protection as they attempted to manage an overwhelming fear and panic. For some individuals this was less conscious and in line with the spiritual emergency and the defence theory. For others, the process was more conscious. For example, one participant described fluctuating hope, which was the beginning of her spiritual experience. The use of positive coping strategies such as praying reinforced her feelings of safety, love and validation, which probably also helped her to re-gain a sense of control over her experiences. Feelings of safety and protection appeared to enable individuals to experience self-growth and to develop a view of self as special and worthy.

Study Limitations and Further Research

It is important to consider the limitations of this study, in order to determine the usefulness of its findings. Qualitative research aims to gain rich data and to explore individual accounts in depth. The current theory of expanding self was based on seven participants and it is uncertain whether it would be applicable to other individuals experiencing GDs. As such the study is limited in the degree to which it might be able to influence policy and have a wider impact (McCarthy et al., 2013). However, since the

developed framework is conceptual rather than descriptive, it should account for the variety of individuals' experiences and be applicable in different settings (Glaser, 2004).

The context in which the findings were obtained may impact on the content and the transferability of the developed theory. For example, six participants were recruited through a service-user led organisation. Although individuals more likely to access support of a service-user led organisation may differ from individuals less likely to do so, only four participants attended the service-user led groups. It could be that these participants more readily shared their stories with other individuals with similar experiences, and had already began to develop some common themes and shared language. Nevertheless, the theory was also applicable to the participants who did not attend these groups. Furthermore, it was relevant for the participants who were experiencing grandiose beliefs at a time of the interview, those who experienced them in the past, those who reported feelings of paranoia and low mood, as well as those reporting elated mood. Therefore, the developed framework for understanding GDs is likely to be applicable to other similar individuals. However, six out of seven participants had a diagnosis of bipolar disorder. Although the theory was also applicable to the one participant who had a diagnosis of paranoid schizophrenia, further research should employ a sample where mania is not a feature of the presentation. Furthermore, all the participants were White British. It is hoped that the study would encourage further research and extend the findings to individuals from other ethnic and cultural backgrounds.

There are also limitations of the quality control procedures used in the study. For example, although research supervisors audited a percentage of data, the credibility of the developed theory could have been increased by employing more than one researcher to independently analyse the data.

There are some limitations inherent in the nature of qualitative research and the grounded theory approach in particular. First, although the participants were directly asked what their explanations were for experiencing GDs, the causality and direction of different processes cannot be determined. Experimental and longitudinal designs would be better placed to shed light on this. Nevertheless, the participants' stories, as well as other published research, suggest that some processes may be multidirectional, impacting on each other. Second, according to the epistemological stance adopted by the researcher that meaning is socially constructed, the developed theory of GDs may be influenced by the researcher's interpretations, preconceived ideas and prior knowledge. However, the constant comparison of developed categories with raw data and a reflexive approach ensured that the developed theory was consistent with the participants' stories and minimised researcher influence. Third, the grounded theory approach could also be criticised by the proponents of the first person research as reductionist and not focused on the individuals' meanings and experiences resulting in the richness of the individual lived experience being lost, but this was not the aim of the study. Since this study focused on understanding basic processes in GDs, further research needs to explore each process and can focus more on the meaning individuals bring to the experience.

Future qualitative research should explore the relationship between paranoid and grandiose delusions. It may also be valuable to explore whether pathways leading to the formation of GDs may differ between individuals who report some positive self-beliefs and those who report no positive self-beliefs.

Clinical Implications

The single most important implication of this study for clinical practice is the need for the mental health professionals to recognise and support the potential for healing that may occur during the experience of GDs. This may be through helping

clients to achieve a balance between a state of higher consciousness and their ability to function in the everyday world. In line with the theory of spiritual emergence, it may be beneficial to help individuals develop techniques to slow down the experience and ensure it is more gradual and grounded in everyday life. Mindfulness based approaches may be appropriate and have been used successfully with people with psychosis (Ashcroft, Barrow, Lee & MacKinnon, 2012; Chadwick, Taylor, & Abba, 2005; Jacobsen, Morris, Johns, & Hodkinson, 2011).

This study strongly suggests it is important for psychological therapies to focus on increasing self-esteem and fostering a positive view of self. This should include managing self-esteem fluctuations and developing a more stable self-concept, whilst pursuing opportunities for self-growth. It may be helpful to explore alternative ways of gaining an expanding sense of self such as through developing better relationships, using positive coping strategies and managing overwhelming emotions. Based on the understanding of the importance of relationships and their emotional impact on the onset of GDs, Cognitive Analytic Therapy (CAT) may be a helpful therapy. This therapy could assist clients' understanding of unhelpful relationship patterns and the impact of emotional context of relationships on their self-concept and self-esteem, whilst providing them with strategies to break these patterns and manage the overwhelming emotions.

It is important for mental health professionals to listen to clients' stories of how they make sense of their experiences in order to develop shared meaning of GDs. Although the theory developed may be applicable to other individuals with GDs and implicates a number of shared processes, it also suggests different processes between as well as within individuals. Furthermore, the meaning of the processes such as healing, spirituality, control and safety will be different for each individual and it will be important to explore these with clients.

Finally, attempting to understand a reality different from our own, listening out for the elements of truth and validating these to ensure individuals are heard and believed, will lead to better relationships between clients and professionals. This will help mental health professionals move away from a medical model of GDs towards the notion of multiple truths, as well as address the power imbalance in the therapeutic relationships. Since feeling controlled and disempowered is likely to contribute towards the onset of GDs it is important to support clients to regain control of their lives and become active users and/or providers of mental health services. Acknowledging that the experience of GDs gives the individual a status of an 'expert by experience' would be the first step towards this.

References

- Altman, E. G., Hedeker, D., Janicak, P. G., Peterson, J.L., & Davis, J. M. (1994). The clinician-administered rating scale for mania (CARS-M): Development, reliability and validity. *Biological Psychiatry*, *36*, 124-134. doi:10.1016/0006-3223(94)91193-2
- Altman, E. G., Hedeker, D., Peterson, J. L., & Davis, J. M. (1997). The Altman selfrating mania scale (ASRM). *Biological Psychiatry*, 42, 948-955. doi:10.1016/S0006-3223(96)00548-3
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*, 4th edition. Washington, American Psychiatric Association.
- Appelbaum, P. S., Robbins, P. C., & Roth, L. H. (1999). Dimensional approach to delusions: Comparison across types and diagnoses. *American Journal of Psychiatry*, 156, 1938-1943.
- Ashcroft, K., Barrow, F., Lee, R., & MacKinnon, K. (2012). Mindfulness groups for early psychosis: A qualitative study. *Psychology and Psychotherapy-Theory Research and Practice*, 85(3), 327-334. doi:10.1111/j.2044-8341.2011.02031.x
- Bentall., R. P., Jackson, H. F., & Pilgrim, D. (1988). Abandoning the concept of "schizophrenia": Some implications of validity arguments for psychological research into psychotic phenomena. *British Journal of Clinical Psychology*, 27, 156-69. doi:10.1111/j.2044-8260.1988.tb00795.x
- Breckenridge, G., Jones, D., Elliott, I., & Nicol M. (2012). Choosing a methodological path: Reflections on the Constructivist Turn. *The Grounded Theory Review*, 11, 64-71.
- Chadwick, P. K. (2010) 'On not drinking soup with a fork': From spiritual experience to madness to growth A personal journey. In I. Clarke (Ed), *Psychosis and*

Spirituality: Consolidating the New Paradigm (pp. 65-74). Chichester: John Wiley & Sons Ltd.

- Chadwick, P.K., Taylor, K. N., & Abba, N. (2005). Mindfulness groups for people with psychosis. *Behavioural and Cognitive Psychotherapy*, 33, 351-359. doi:10.1017/S1352465805002158
- Charmaz, K. (1990). "Discovering" chronic illness: Using grounded theory. *Social Science and Medicine*, *30*, 1161-1172. doi:10.1016/0277-9536(90)90256-R
- Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. Sage: London
- Crawford, J. R., Henry, J. D., Crombie, C., & Taylor, E. P. (2001). Normative data for the HADS from a large non-clinical sample. *British Journal of Clinical Psychology*, 40, 429–434. doi:10.1348/014466501163904
- Dey, I. (1999). Grounding Grounded Theory: Guidelines for Qualitative Inquiry. Academic Press: San Diego.
- Drayton, M., Birchwood, M. & Trower, P. (1998). Early attachment experience and recovery from psychosis. *British Journal of Clinical Psychology*, *37*, 269 -284. doi:10.1111/j.2044-8260.1998.tb01385.x
- Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, 38, 215-229. doi:10.1348/014466599162782
- Garety, P. A., Gittins, M., Jolley, S., Bebbington, P., Dunn, G., Kuipers, E., Fowler, D.,
 & Freeman, D. (2012). Differences in Cognitive and Emotional Processes
 Between Persecutory and Grandiose Delusions. *Schizophrenia Bulletin, 39*(3),
 629-639. doi:10.1093/schbul/sbs059
- Glaser, B. G. (2004). Naturalist inquiry and grounded theory. Forum: Qualitative Social Research, 5.

- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory*. Chicago: Aldine.
- Grof, S., & Grof, C. (Eds.). (1989) Spiritual Emergency: When Personal Transformation Becomes a Crisis. Tarcher Putnam: New York.
- Hornstein, (2013). Whose account matters? A challenge to feminist psychologists. *Feminism & Psychology*, *23*, 29-40. doi:10.1177/0959353512467964
- Jacobsen, P., Morris, E., Johns, L., & Hodkinson, K. (2011). Mindfulness groups for psychosis; Key issues for implementation on an inpatient unit. *Behavioural and Cognitive Psychotherapy*, 39, 349-353. doi:10.1017/S1352465810000639
- Jaspers, K. (1913). General Psychopathology (trans. J. Hoenig and M. W. Hamilton, 1959) Manchester University Press.
- Kinderman, P., Setzu, E., Lobban, F., & Salmon, P. (2006). Illness beliefs in schizophrenia. *Social Science and Medicine*, 63, 1900-1911. doi:10.1016/j.socscimed.2006.04.022
- Knowles, R., McCarthy-Jones, S., & Rowse, G. (2011). Grandiose delusions: A review and theoretical integration of cognitive and affective perspectives. *Clinical Psychology Review*, 31, 684-696. doi:10.1016/j.cpr.2011.02.009
- Kraepelin, E. (1899). Dementia praecox and paraphrenia. In G. M. Robertson (Ed.),
 trans. R. M. Bradley, 1919, *Textbook of psychiatry* (8th German edn), Vol. III, Pt.
 II. Livingstone: Edinburgh.

Kuipers, E., Garety, P., Fowler, D., Dunn, G., Bebbington, P., Freeman, D., & Hadley, C. (1997). London-East Anglia randomised controlled trial of cognitive-behavioural therapy for psychosis. I: effects of the treatment phase. *British Journal of Psychiatry*, *171*, 319–327. doi:10.1192/bjp.171.4.319

- Lake, C. R. (2008). Hypothesis: grandiosity and guilt cause paranoia; paranoid schizophrenia is a psychotic mood disorder; a review. *Schizophrenia Bulletin, 34*, 1151-1162. doi:10.1093/schbul/sbm132
- Laugharne, R., Priebe, S., McCabe, R., Garland, N., & Clifford, D. (2011). Trust, choice and power in mental health care: Experiences of patients with psychosis. *International Journal of Social Psychiatry*, *58*, 496-504. doi:10.1177/0020764011408658
- Luke, M. A., Maio, G. R., & Carnelley, K. B. (2004) Attachment models of the self and others: Relations with self-esteem, humanity-esteem, and parental treatment. *Personal Relationships*, 11, 281–303. doi:10.1111/j.1475-6811.2004.00083.x
- Lukoff, D. (1998). From Spiritual Emergency to Spiritual Problem: the transpersonal roots of the new DSM-IV category. *Journal of Humanistic Psychology*, 38, 21-50. doi:10.1177/00221678980382003
- Martin, V. B. (2006). The postmodern turn: Shall classic grounded theory take that detour? *The Grounded Theory Review*, *5*, 119-128.
- McCarthy-Jones, S., Marriott, M., Knowles, R., Rowse, G., & Thompson, A. R. (2013).
 What is psychosis? A meta-synthesis of inductive qualitative studies exploring the experience of psychosis. *Psychological, Social and Integrative Approaches*, *5*, 1-16. doi:10.1080/17522439.2011.647051
- Menzes, A., & Moreiara-Almeida, A. (2010). Religion, spirituality, and psychosis. *Current Psychiatry Reports, 12,* 174–179. doi:10.1007/s11920-010-0117-7
- Neale, J. M. (1988). Defensive functions of manic episodes. In T. F. Oltmanns & B. A. Maher (Ed.), *Delusional Beliefs*, pp.138-156. Wiley: New York.
- Oltmanns, T. F. (1988). Approaches to the definition and study of delusions. In T. F. Oltmanns & B. A. Maher (Eds.), *Delusional Beliefs*, pp.138-156. Wiley: New York.

- Parker, J. G., Fairley, M., Greenwood, J., Jurd, S., & Silove, D. (1982). Parental representations of schizophrenics and their association with onset and course of schizophrenia. *British Journal of Psychiatry*, 141, 573-581. doi:10.1192/bjp.141.6.573
- Peters, E. R., Joseph, S. A., Day, S., & Garety, P. A. (2004). Measuring delusional ideation: the 21-item PDI (Peters et al. Delusions Inventory). *Schizophrenia Bulletin*, 30, 1005-1022. doi:10.1093/oxfordjournals.schbul.a007116
- Peters, E. R., Joseph, S. A., & Garety, P. A. (1999). Measurement of delusional ideation in the normal population: Introducing the PDI (Peters et al. Delusions Inventory). *Schizophrenia Bulletin*, 25, 553–577. doi:10.1093/oxfordjournals.schbul.a033401
- Rhodes, J., & Jakes, S. (2000). Correspondence between delusions and personal goals:
 A qualitative analysis. *British Journal of Medical Psychology*, 73, 211-225.
 doi:10.1348/000711200160435
- Rhodes, J., & Jakes, S. (2004). The contribution of metaphor and metonymy to delusions. *Psychology and Psychotherapy: Theory, Research and Practice*, 77, 1-17. doi:10.1348/147608304322874227
- Rhodes, J., & Jakes, S. (2010). Perspectives on the onset of delusions. *Clinical Psychology and Psychotherapy*, 17, 136-146. doi:10.1002/cpp.675
- Shaw, R. (2010). Embedding reflexivity within experimental qualitative psychology. Qualitative Research in Psychology, 7, 233-243. doi:10.1080/14780880802699092
- Smith, B., Fowler, D. G., Freeman, D., Bebbington, P., Bashforth, H., Garety, P., Dunn, G., & Kuipers, E. (2006). Emotion and psychosis: Links between depression, selfesteem, negative schematic beliefs and delusions and hallucinations. *Schizophrenia Research, 86*, 181-188. doi:10.1016/j.schres.2006.06.018

Smith, N., Freeman, D., & Kuipers, E. (2005). Grandiose Delusions: An experimental investigation of the delusion as defence. *The Journal of Nervous and Mental Disease, 193*, 480-487. doi:10.1097/01.nmd.0000168235.60469.cc

Strauss, J. S. (1969). Hallucinations and delusions as points on continua function. Archives of General Psychiatry, 20, 581-6. doi:10.1001/archpsyc.1969.01740230069010

- Thewissen, V., Bentall, R. P., Lecomte, T., van Os, J., & Myin-Germeys, I. (2008).
 Fluctuations in Self-Esteem and Paranoia in the Context of Daily Life. *Journal of Abnormal Psychology*, 117, 143-153. doi:10.1037/0021-843X.117.1.143
- Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67, 361-370. doi:10.1111/j.1600-0447.1983.tb09716.x

LIST OF APPENDICES

Appendix C. Ethical Approvals

C1. NHS Ethical Approval

C2. University Ethical Approval

Appendix D. *R&D Approval*

Appendix E. *Measures*

E1. Peters Delusion Inventory-21 (PDI-21)

E2. Hospital Anxiety and Depression Scale (HADS)

E3. Altman Self-Rating Mania Scale (AMRS)

E4. Screening Questionnaire

E5. General Information Questionnaire

Appendix F. Participant Information Sheets

F1. Participant Information Sheet – NHS

F2. Participant Information Sheet – non-NHS

Appendix G. Consent Forms

G1. Consent Form – NHS

G2. Consent Form – non-NHS

Appendix H. Interview Schedule

Appendix I. Example of Analysis

I1. Line-by-line coding

I2. Theoretical coding

I3. *Memo-writing*

Appendix C: *Ethical Approvals*

C1: *NHS Ethical Approval*



NRES Committee Yorkshire & The Humber - Sheffield

Yorkshire and the Humber REC Office First Floor, Millside Mill Pond Lane Meanwood Leeds LS6 4RA

> Telephone: 0113 305 0160 Facsimile: 0113 855 6191

17 October 2011

Miss Sanela Grbic Trainee Clinical Psychologist Sheffield Health and Social Care NHS Trust Clinical Psychology Unit 302 Western Bank Sheffield S10 2TP

Dear Miss Grbic

Study title:

REC reference: Protocol number: First person accounts of grandiose beliefs: A grounded theory approach 11/YH/0345 131147

Thank you for your letter of 17 October 2011, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS sites

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to

This Research Ethics Committee is an advisory committee to the Yorkshire and The Humber Strategic Health Authority The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England

the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <u>http://www.rdforum.nhs.uk</u>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Covering Letter		15 August 2011
Covering Letter		04 October 2011
Evidence of insurance or indemnity		18 August 2011
GP/Consultant Information Sheets	1	15 August 2011
Interview Schedules/Topic Guides	1	15 August 2011
Investigator CV		15 August 2011
Letter from Sponsor		07 July 2011
Other: Supervisor's CVs		15 August 2011
Participant Consent Form: NHS Patients	2	04 October 2011
Participant Consent Form: Non-NHS Participants	2	04 October 2011
Participant Information Sheet: NHS Patients	2	04 October 2011
Participant Information Sheet: Non-NHS Participants	2	04 October 2011
Protocol	3	17 October 2011
Questionnaire: Validated		
Questionnaire: Non-validated	1	15 August 2011
REC application		15 August 2011
Referees or other scientific critique report		15 December 2010
Response to Request for Further Information		17 October 2011

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

11/YH/0345 Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

pp. Suc Dr Basil Sharrack Chair

Email: john.robinson7@nhs.net

Enclosures:

"After ethical review – guidance for researchers" [SL-AR2]

Copy to:

Mr Richard Hudson, University of Sheffield Dr Marios Adamou, South West Yorkshire Mental Health Trust Forwarded message -----

From: research ethics application management system Psychology Research Ethics Application Management System <no_reply@psychology>

Date: 31 May 2011 13:38

Subject: Approval of your research proposal

To: R.Knowles@sheffield.ac.uk

Your submission to the Department of Psychology Ethics Sub-Committee (DESC) entitled "First person accounts of grandiose beliefs - A grounded theory approach. " has now been reviewed. The committee believed that your methods and procedures conformed to University and BPS Guidelines.

I am therefore pleased to inform you that the ethics of your research are approved. You may now commence the empirical work.

Yours sincerely,

Prof Paschal Sheeran

Chair, DESC

Appendix D: R&D Approval



South West Yorkshire Partnership

NHS Foundation Trust

24th September 2012

Miss Sanela Grbic Trainee Clinical Psychologist Sheffield Health & Social Care NHS Trust Clinical Psychology Unit 302 Western Bank Sheffield S10 2TP

Research Department Ward 2 **Castleford & Normanton District Hospital** Lumley Street Castleford **WF10 5LT** Tel: 01977 605285 Tel: 01977 605298

Ref: APPROVAL Letter Email address: helen.carter@swyt.nhs.uk research@swyt.nhs.uk

Dear Miss Grbic

Re: First person accounts of Grandiose Beliefs: A grounded theory approach

REC ref: 11/YH/0345

Following the recent review of the above project I am pleased to inform you that the above project complies with Research Governance standards, and NHS Permission has been granted on behalf of Trust management. We now have all the relevant documentation relating to the above project. As such your project may now begin within South West Yorkshire NHS Foundation Trust.

The final list of documents reviewed and approved is as follows:

Document	Version	Date
Interview Schedules/Topic Guides	1	15 August 2011
Investigator CV		August 2012
Supervisor's CV		August 2012
Participant Consent Form: NHS Patients	3	August 2012
Participant Information Sheet: NHS Patients	3	August 2012
Protocol	3	17 October 2011
Questionnaires		15 August 2011

This approval is granted subject to the following conditions:

- You must comply with the terms of your approval. Failure to do this will lead to permission to carry out this project being withdrawn. If you make any substantive changes to your protocol you must inform us immediately.

- You must comply with the procedures on project monitoring and audit¹. You must comply with the guidelines laid out in the Research Governance Framework for Health and Social Care²(RGF). Failure to do this could lead to permission to carry out this research being withdrawn.
- You must comply with any other relevant guidelines including the Data Protection Act, The Health and Safety Act and local Trust Policies and Guidelines.

² Details from:

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/Public cyAndGuidanceArticle/fs/en?CONTENT_ID=4108962&chk=Wde1Tv

- If you encounter any problems during your research you must inform your Sponsor and us immediately to seek appropriate advice or assistance.
- Research projects will be added to any formal Department of Health research register.

Please note that suspected misconduct or fraud should be reported, in the first instance, to local Counter Fraud Specialists for this Trust. R&D staff are also mandated to do this in line with requirements of the RGF.

Adverse incidents relating to the research procedures and/or SUSARs (suspected unexpected serious adverse reactions) should be reported, in line with the protocol requirements, using **Trust incident reporting procedures in the first instance and to the chief investigator**³.

They should **also** be reported to:

- The R&D Department
- the Research Ethics Committee that gave approval for the study (if applicable)
- other related regulatory bodies as appropriate.

You are required to ensure that all information regarding patients or staff remains secure and *strictly confidential* at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (<u>http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf</u>) and the Data Protection Act 1998. Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

Changes to the agreed documents MUST be approved by in line with guidance from the Integrated Research Applications System (IRAS), before any changes in documents can be implemented. Details of changes and copies of revised documents, with appropriate version control, must be provided to the R&D Office. Advice on how to undertake this process can be obtained from R&D.

Projects sponsored by organisations other than the Trusts are reminded of those organisations obligations as defined in the Research Governance Framework, and the requirements to inform all organisations of any non-compliance with that framework or other relevant regulations discovered during the course of the research project.

The research sponsor or the Chief Investigator, or the local Principal Investigator, may take appropriate urgent safety measures in order to protect research participants against any immediate hazard to their health or safety.

The R&D office should be notified that such measures have been taken. The notification should also include the reasons why the measures were taken and the plan for further action.

Note that NHS indemnities only apply within the limitations of the protocol, and the duties undertaken therewith, by research staff with substantive or honorary research contracts with this Trust.

Once you have finished your research you will be required to complete a Project Outcome form. This will be sent to you nearer the end date of your project (Please inform us if the expected end date of your project changes for any reason).

³ SUSARS – this must be within 24 hours of the discovery of the SUSAR incident

We will require a copy of your final report/peer reviewed papers or any other publications relating to this research. Finally we may also request that you provide us with written information relating to your work for dissemination to a variety of audiences including service users and carers, members of staff and members of the general public. You must provide this information on request.

If you have any queries during your research please contact us at any time.

May I take this opportunity to wish you well with the project.

Yours sincerely

N A

Dr Nisreen Booya Medical Director

Appendix E: *Measures*

E1: Peters Delusion Inventory-21 (PDI-21)

Note. For the purpose of the eThesis, this document has been removed for copyright reasons. Copies are available on request by the author of this measure.

E2: Hospital Anxiety and Depression Scale (HADS)

Note. For the purpose of the eThesis, this document has been removed for copyright reasons. Copies are available on request by the author of this measure.
E3: Altman Self-Rating Mania Scale (AMRS)

Note. For the purpose of the eThesis, this document has been removed for copyright reasons. Copies are available on request by the author of this measure.

E4: Screening Questionnaire

Screening Questionnaire

Substance misuse

Do you use alcohol? If yes, what do you use, how frequently, and how much? Do you use drugs? If yes, what do you use, how frequently and how much? Are you currently under the influence of alcohol/drugs?

Risk assessment

Do you have any thoughts about harming yourself? If yes, what are these thoughts? How often do you have these thoughts? Have you got any plans to act on these thoughts? If yes, what are these plans? Have you ever acted on these thoughts in the past? What would stop you from acting on these thoughts?

Do you have any thoughts about harming others? If yes, what are these thoughts? How often do you have these thoughts? Have you got any plans to act on these thoughts? If yes, what are these plans? Have you ever acted on these thoughts in the past? What would stop you from acting on these thoughts?

Psychotic experiences

Do you currently have any beliefs/thoughts or any other symptoms that may be causing you distress or prevent you from concentrating in this interview? If yes, what are these? How much do you believe this? How frequently are you having these thoughts? How distressed are you by these thoughts? How likely are you to act on these thoughts?

Are you currently hearing voices? If yes, what are they saying? How frequent are they? How loud are they? How much distress are they causing you?

General information

Could you please complete this questionnaire to help us gain an understanding of the characteristics that individuals taking part in our research have. Please only answer questions you feel comfortable with answering.

- If you have been given a diagnosis for your difficulties what is this? (Sometimes people have more than one diagnosis. Could you please write down all the diagnoses you were given)
- 2. How long ago did you first experience having unusual thoughts/beliefs/feelings/sensations such as hearing voices, believing you are someone very special or believing that other people were after you?
- 3. How many times have you experienced these? (Some people have episodes of these symptoms, or they sometimes experience these continuously)
- 4. How many of these have included experiences described as grandiose delusions (feeling special/unique, believing you have special powers/wealth/talents/knowledge or believing you are related to someone important/famous)?
- 5. Have you ever/do you currently take any medication for any mental health difficulties? If so, please list these and the dosage if known

For the following questions please tick the box that best describes you

6. What is your age?

<18	
18 – 25	
26 – 35	
36 – 45	
46 – 55	
56 – 65	
>65	

7. What is your gender?

Male	
Female	

8. What is your ethnic background?

White	British
	Irish
	Any other white background
Mixed	White & Black Caribbean
	White & Black African
	White & Asian
	Any other mixed
	background
Asian or	Indian
Asian British	Pakistani
	Bangladeshi
	Any other Asian background
Black or	Caribbean
Black British	African
	Any other Black background
Chinese or	Chinese
other ethnic group	Any other ethnic group
Not stated	

9. What is your marital status?

Single	
Married	
Co-	
habiting	
Divorced	
Separated	
Widowed	
Other	

10. What is your level of education?

None	
Left school without qualification	
School level	
Left college without qualification	
College level (e.g. diploma)	
Left university without qualification	
Bachelor's degree	
Master's degree	
Doctor's degree	
Other	

11. What is your employment status?

Full time employed	
Part time	
employed	
Unemployed	
Other	

Thank you for completing this questionnaire

Appendix F: Participant Information Sheets

F1: Participant Information Sheet – NHS



South West Yorkshire Partnership

Participant Information Sheet

1. Project title

First person accounts of grandiose beliefs.

2. Invitation to participate

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask us if there is anything that is not clear or if you would like more information. Thank you for taking time to read this.

3. What is the project's purpose?

The aim of the project is to investigate an experience known to professionals as grandiose beliefs. Grandiose beliefs could mean believing that you are somebody special and unique, that you have special identity, wealth, knowledge, talents or power or that you are related to somebody very important/famous. We are interested in how grandiose beliefs develop and we are particularly interested in your own understanding of these experiences. We would like to interview individuals who have experienced these beliefs.

4. Why have I been chosen?

You have been given this information letter because you may have experienced grandiose beliefs. If you have never experienced grandiose beliefs you will not be able to take part in this project.

5. Do I have to take part?

Taking part in this research is entirely voluntary and it is up to you whether or not you take part. If you do decide to take part you will be asked to sign a consent form. You can withdraw from the study **at any time** without it affecting your treatment or access to services. We will not ask you to give a reason. If you decide you would like to take part you will be asked to complete some questionnaires, which should take no more than 15 minutes. This is to find out if you will be able to take part in the study. We will discuss this with you.

6. What will happen to me if I take part?

You will be interviewed by Sanela Grbic, a Trainee Clinical Psychologist and a main researcher. The interviews will take approximately 60-90 minutes. Sanela will have some questions for you but these will be open questions and will allow you to talk about your experiences. Sanela will be interested to find out what your feelings and thoughts are about your experiences. You should only share information that you feel comfortable with sharing. All the interviews will be audio recorded and your permission will be sought for this. Your travel expenses to the place of interview will be reimbursed.

7. What are the possible disadvantages and risks of taking part?

If for any reason you become upset during the interview Sanela will ask you how you are feeling and listen to you. She will also ask you whether you wish to continue with the interview. If you still feel upset after the interview you may wish to talk to other people about this. This could be your friends and family, your GP or your care co-ordinator.

8. What are the possible benefits of taking part?

You may feel that talking about your experiences is helpful and that by taking part in the study you may gain further understanding of these experiences. It may be that you do not gain any immediate benefits from taking part. However, it is hoped that this research will increase the understanding of professionals working with people who experience grandiose beliefs and contribute towards developing services.

9. Will my taking part in this project be kept confidential?

All the personal information that we collect from you during the course of the research will be kept strictly confidential and not shared with those who are not involved in the research. You will not be able to be identified in any reports or publications. You will be assigned a code, which will be used by the researchers to anonymise any information gathered from you. The signed consent forms and any questionnaires that you complete will be kept separate from the interview transcripts, and in a locked filing cabinet. The interview tapes will be destroyed after they are transcribed. However, if you tell us something that makes us worried about your safety or the safety of another person we will not be able to keep this information confidential and we will have a duty to share it with others. This is most likely to be your care co-ordinator. We will discuss this with you first.

10. What will happen to the results of the research project?

The main themes will be identified from all the interviews. We hope to publish the findings in an academic journal within two years of interviews. You will not be able to be identified in any publications and only short examples from individual transcripts might be quoted to support the main themes. We would like to share the findings with other professionals and the service users. If you would like to receive the summary of the findings please let Sanela know.

11. Who is organising and funding the research?

This project is organised by the Clinical Psychology Unit at the University of Sheffield and is being conducted as part of a clinical psychology doctoral thesis.

12. Who has ethically reviewed the project?

This project has been approved by the Clinical Psychology Department's research ethics committee as well as the Yorkshire and the Humber Ethics Committee and the NHS Research Governance committee. If you are unhappy about anything regarding this research and you would like to make a complaint you should contact Dr Rebecca Knowles or Professor Gillian Hardy (Project supervisors) at the University of Sheffield. However, if you feel your complaint has not been handled to your satisfaction you can also contact the University Registrar on the following contact details: Philip Harvey (registrar@sheffield.ac.uk), Firth Court, Western Bank, Sheffield, S10 2TN. Tel: 0114 222 21101.

13. Contact for further information

You can contact the research team via e-mail or telephone or letter at any time by the following details:

Sanela Grbic	Dr Rebecca Knowles	Professor Gillian Hardy	Dr Simon Hamilton
Clinical Psychologist in	Clinical Psychologist and	Clinical Psychologist and	Contact for reaching care
training	Academic Supervisor	Academic Supervisor	co-ordinators
Clinical Psychology Unit	Clinical Psychology Unit	Clinical Psychology Unit	South & Dearne Valley
Department of Psychology	Department of Psychology	Department of Psychology	Community Mental Health
Western Bank	Western Bank	Western Bank	Team, Summer Lane,
University of Sheffield	University of Sheffield	University of Sheffield	Wombwell Lane, Barnsley,
S10 2TN	S10 2TN	S10 2TN	S73 8QH
Tel: 0114 222 6650 E-Mail: Pcp09sg@sheffield.ac.uk	Tel: 0114 222 6650 E-Mail: R.Knowles@sheffield.ac.uk	Tel: 0114 222 6650 E-Mail: G.Hardy@sheffield.ac.uk	Tel: 01226 341 374 E-mail: simon.hamilton@swyt.nhs. uk

The telephone number 0114 222 6650 will take you through to the clinical psychology unit research support officer who will be able to relay messages but is unable to answer any queries herself. Once the message has been received, you will be contacted as soon as possible.

If you decide to take part in this project you will be given a copy of this information sheet and a signed consent form. If you have any questions please do not hesitate to contact Sanela. Thank you for taking part in this project



Department Of Psychology. Clinical Psychology

Unit.

Doctor of Clinical Psychology (DClin Psy) Programme Clinical supervision training and NHS research training & consultancy.

Participant Information Sheet

1. Project title

First person accounts of grandiose beliefs.

2. Invitation to participate

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask us if there is anything that is not clear or if you would like more information. Thank you for taking time to read this.

3. What is the project's purpose?

The aim of the project is to investigate an experience known to professionals as grandiose beliefs. Grandiose beliefs could mean believing that you are somebody special and unique, that you have special identity, wealth, knowledge, talents or power or that you are related to somebody very important/famous. We are interested in how grandiose beliefs develop and we are particularly interested in people's own understanding of these experiences. We would like to interview individuals who have experienced these beliefs.

4. Why have I been chosen?

You have been given this information letter because you may have experienced grandiose beliefs. If you have never experienced grandiose beliefs you will not be able to take part in this project.

5. Do I have to take part?

Taking part in this research is entirely voluntary and it is up to you whether or not you take part. If you do decide to take part you will be asked to sign a consent form. You can withdraw from the study **at any time** without it affecting your treatment or access to services. We will not ask you to give a reason. If you decide you would like to take part you will be asked to complete some questionnaires, which should take no more than 15 minutes. This is to find out if you will be able to take part in the study. We will discuss this with you.

6. What will happen to me if I take part?

You will be interviewed by Sanela Grbic, a Trainee Clinical Psychologist and a main researcher. The interviews will take approximately 60-90 minutes. Sanela will have some questions for you but these will be open questions and will allow you to talk about your experiences. Sanela will be interested to find out what your feelings and thoughts are about your experiences. You should only share information that you feel comfortable with sharing. All the interviews will be audio recorded and your permission will be sought for this. Your travel expenses to the place of interview will be reimbursed.

7. What are the possible disadvantages and risks of taking part?

If for any reason you become upset during the interview Sanela will ask you how you are feeling and listen to you. She will also ask you whether you wish to continue with the interview. If you still feel upset after the interview you may wish to talk to other people about this.

8. What are the possible benefits of taking part?

You may feel that talking about your experiences is helpful and that by taking part in the study you may gain further understanding of these experiences. It may be that you do not gain any immediate benefits from taking part. However,

it is hoped that this research will increase the understanding of professionals working with people who experience grandiose beliefs and contribute towards developing services.

9. Will my taking part in this project be kept confidential?

All the personal information that we collect from you during the course of the research will be kept strictly confidential and not shared with those who are not involved in the research. You will not be able to be identified in any reports or publications. You will be assigned a code, which will be used by the researchers to anonymise any information gathered from you. The signed consent forms and any questionnaires that you complete will be kept separate from the interview transcripts, and in a locked filing cabinet. The interview tapes will be destroyed after they are transcribed. However, if you tell us something that makes us worried about your safety or the safety of another person we will not be able to keep this information confidential and we will have a duty to share it with others. This is most likely to be your GP. We will discuss this with you first.

10. What will happen to the results of the research project?

The main themes will be identified from all the interviews. We hope to publish the findings in an academic journal within two years of interviews. You will not be able to be identified in any publications and only short examples from individual transcripts might be quoted to support the main themes. We would like to share the findings with other professionals and the service users. If you would like to receive the summary of the findings please let Sanela know.

11. Who is organising and funding the research?

This project is organised by the Clinical Psychology Unit at the University of Sheffield and is being conducted as part of a clinical psychology doctoral thesis.

12. Who has ethically reviewed the project?

This project has been approved by the Clinical Psychology Department's research ethics committee as well as the Yorkshire and the Humber Ethics Committee and the NHS Research Governance committee. If you are unhappy about anything regarding this research and you would like to make a complaint you should contact Dr Rebecca Knowles or Professor Gillian Hardy (Project supervisors) at the University of Sheffield. However, if you feel your complaint has not been handled to your satisfaction you can also contact the University Registrar on the following contact details: Philip Harvey (registrar@sheffield.ac.uk), Firth Court, Western Bank, Sheffield, S10 2TN. Tel: 0114 222 21101.

13. Contact for further information

You can contact the research team via e-mail or telephone or letter at any time by the following details:

Sanela Grbic	Dr Rebecca Knowles	Professor Gillian Hardy	Dr Simon Hamilton
Clinical Psychologist in	Clinical Psychologist and	Clinical Psychologist and	Contact for reaching care
training	Academic Supervisor	Academic Supervisor	co-ordinators
Clinical Psychology Unit	Clinical Psychology Unit	Clinical Psychology Unit	South & Dearne Valley
Department of Psychology	Department of Psychology	Department of Psychology	Community Mental Health
Western Bank	Western Bank	Western Bank	Team, Summer Lane,
University of Sheffield	University of Sheffield	University of Sheffield	Wombwell Lane, Barnsley,
S10 2TN	S10 2TN	S10 2TN	S73 8QH
Tel: 0114 222 6650	Tel: 0114 222 6650	Tel: 0114 222 6650	Tel: 01226 341 374
E-Mail:	E-Mail:	E-Mail:	E-mail:
Pcp09sg@sheffield.ac.uk	R.Knowles@sheffield.ac.uk	G.Hardy@sheffield.ac.uk	simon.hamilton@swyt.nhs.
			uk

The telephone number 0114 222 6650 will take you through to the clinical psychology unit research support officer who will be able to relay messages but is unable to answer any queries herself. Once the message has been received, you will be contacted as soon as possible.

If you decide to take part in this project you will be given a copy of this information sheet and a signed consent form. If you have any questions please do not hesitate to contact Sanela. Thank you for taking part in this project

Appendix G: Consent Forms

G1: Consent Form – NHS

Consent form. Version 3. August 2012



South West Yorkshire Partnership



Study Number:

Participant Identification Number for this study:

Consent Form

Title of Research Project: First person accounts of grandiose beliefs			
Name of Researcher: Sanela Grbic (Tel: 0114 222 6650; email: pcp09sg@sheffield.ac.uk)			
Pa	rticipant Identification Number for this project:	Please initial box	
1.	I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.		
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In this case my records would be destroyed. In addition, should I not wish to answer any particular question or questions, I am free to decline. If I decide to withdraw from the researc I will contact the researcher on the above number/email or ask my care co-ordinate		
3.	I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.		
4.	I understand that relevant sections of my medical notes and data collected during the looked at by individuals from the research team, from regulatory authorities (gover ensure certain standards of care are maintained) or from the NHS Trust, where it is taking part in this research. I give permission for these individuals to have access the section of the section.	rnment bodies that relevant to my	
5.	I give permission for the interview to be audio recorded. I understand that the recording is solely for the purpose of analysis, and will be destroyed at the end of the project.		
6.	I agree for the researcher to contact my care co-ordinator if they become concerned my safety or safety of others.	l about	
7.	I agree to take part in the above research project.		
Na	me of Participant Date Signature		
	ead Researcher Date Signature be signed and dated in presence of the participant		

Consent form Version 3. September 2012



Study Number:

Participant Identification Number for this study:

Department Of
Psychology.
Clinical
Psychology Unit.
Doctor of Clinical Psychology (DClin Psy) Programme
Clinical supervision training and NHS research
training & consultancy.

Consent Form		
Title of Research Project: First person accounts of grandiose beliefs		
Name of Researcher: Sanela Grbic (Tel: 0114 222 6650; email: pcp09sg@sheffield.ac.uk)		
Participant Identification Number for this project: Please initial box		
1. I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.		
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. If I decide to withdraw from the research I will contact the researcher on the above number.		
3. I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.		
4. I understand that relevant sections of my medical notes and data collected during the study, may be looked at by individuals from the research team, from regulatory authorities (government bodies that ensure certain standards of care are maintained) or from the University of Sheffield, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.		
5. I give permission for the interview to be audio recorded. I understand that the recording is solely for the purpose of analysis, and will be destroyed at the end of the project.		
6. I agree for the researcher to contact my GP if they become concerned about my safety or safety of others.		
7. I agree to take part in the above research project.		
Name of Participant Date Signature		
Lead Researcher Date Signature To be signed and dated in presence of the participant Signature		

Appendix H: Interview Schedule

Semi-Structured Interview Schedule

Please tell me a little bit about your experience of strongly believing that you were very special, unusual or important.

 Aim – to explore the content and the experience of grandiose delusions Question – Please tell me about the last time you experienced feeling that you were very special, unusual or important?

Prompts – Please tell me more about that?

- What did that mean?What did you mean?Can you please give me an example?How were you feeling at the time?What was going through your mind at the time?What did you do when you were thinking that?
- 2. Aim to explore relationships with others

Question - What were your relationships with others like at that time?

- **Prompts** Please tell me more about that?
 - What did that mean? What do you mean? Can you please give me an example? How were you feeling at the time? What was going through your mind at the time? What did you do when you were thinking that?
- 3. **Aim** to explore events/factors preceding the development of grandiose delusions

Question – Can you tell me a little bit about what was happening in your life at that time?

Question – When did you first noticed/started thinking that you were ...?

Prompts - Please tell me more about that?

- What did that mean?
- What do you mean?

Can you please give me an example?

How were you feeling at the time?

What was going through your mind at the time?

What did you do when you were thinking that?

4. **Aim** – to explore participants' explanations for experiencing grandiose delusion

Question – What is your understanding of these experiences?

Question - Has your understanding changed over time and how?

- **Prompts** Please tell me more about that?
 - What did you mean?

Can you please give me an example?

- What are your feelings about that?
- What are your thoughts about that
- What is the impact of your feelings/thoughts on your behaviour?

Where do you think that comes from?

What do significant people in your life think?

Appendix I: Example of Analysis

I1: *Line-by-line coding*

Expenencinc psychosis in summer 476 like it's gonna happen in the winter, I feel less vulnerable. 477 R: So you feel lower in winter? POLIN runerable Yeah I do, I sleep more. So yeah we are just trying this, Sleeping less in sumul tackling this OCD thing again now but I feel a bit, erm, is it sleeping more in winter 478 P: 479 Fear of officing up ocd 480 gonna be alright. Mhm. So what would you say, what is your understanding of 481 R: 482 experiencing these episodes, these feelings and thoughts of 483 being special? Have you got an explanation? unconscious self My feeling is partly, what a friend has said to me and I 484 P: Related to more ossibilities/perspanis agree with him, he was saying that when you're Higher 485 ma in thes Constitiousnoss actually tapping into, like an archetype, this part of u know Shared Consciousless kind of idea of collective consciousness of all people and Interconnecteolness? 486 experiencing these kind of grandiose things that you are 487 488 Spinnaein that there is these kind of thought forms that are part of a 489 Interconnectedness whole ... this kind of idea, yeah and that on some level you 490 491 tap into these archetypes that are kind of classic and a lot of 492 them are classic aren't they, like believing you are god or 493 whatever so there is part of that. But my own feeling about it Feeling disemparated 494 is that it comes from feeling quiet disempowered really, gaininc Ro-495 through your life, being quiet a disempowered individual cophol Tigher consciousos \$96 and then when you enter these altered states of mind that Experience a dered Loanding you kind of become the opposite you know it's a chance to Become the opposite 497 einse et Becoming somethour 498 Self be all these things that you are not normally. And rather elsei 499 than feeling disempowered you feel very powerful. Becchini empavered 500 R: So when you say disempowered what, can you give me 501 some examples? Feeling kind of always giving way to what other people want are needs/weits 502 P: Fear Fear of rejection ? Fear of being self. to do or feeling scared talking about your own point of view 503 Handging 504 or your own feelings about things or so you kind of keep a Bothing / hiding 505 lot of that hidden down because you are scared that other feelings people won't like it or not having confidence, it's hard to 506 esteem ice of Experiencerla identin 507 explain really. Like you are not fully, you are not being your on fidence Not expressive Seif 508 potential and you are not kind of realising, you are not 509 actually being what your potential really is, because of your Not reaching paential

15

I2: Theoretical Coding

These are codes from Interview 1. Initially they were grouped into five categories (control, relationships with self & others, emotion, beliefs and others not sorted) as the researcher attempted to make sense of them. Re-reading of the transcript, asking questions of the data and subsequent interviews enabled categories, properties and links to be formed. The following shows higher order categories beginning to emerge using the process of theoretical coding.

Control/Power

Having urges/compulsions (feeling a need to do rituals) Running naked in public (feeling powerful, expressing self) Becoming obsessed (latching on to an idea) Feeling powerful Experiencing lack of restraint/control (becoming free, expressing herself) Regaining control but also its impact on self-identity, expressing self Feeling disempowered **Becoming powerful** Having power over others Experiencing lack of privacy (being intruded upon) Experiencing mum as cutting (taking away her self-esteem) being cut down not allowed to grow, develop, deflated-small, powerless Urge to be naked in public (exposed, no curtains, lack of privacy, lack of boundaries) Feeling out of control (before experiencing psychosis) immediate trigger Feeling out of control Needing to make things right Thinking she can make things right Being in unwanted situation (lack of choice) Experiencing others as controlling (boyfriend's mum) Feeling controlled/experiencing lack of control Experiencing no control (over changes in perception) Experiencing no control (over arrival of positive feelings) Feeling powerful (when running naked in public) Being compulsive – lack of control Needing things to feel right – needing to be in control Being compulsive Being controlled by OCD Having power to change things/impact on things Working on OCD- not feeling in control- Taking away comfort of OCD and experiencing reality as stressful? Feeling disempowered explanation for GDs Having a chance to be powerful explanation for GDs Being held back (by others) Experiencing school as controlling Feeling oppressed as a woman Going to a strict grammar school

Taking charge of her own healthempowermentFeeling controlled – Not allowed to feel, to be herselfImpact on self-identityLack of control (over experiencing grandiose beliefs)Experiencing psychiatric system as traumatic and spirit breaking notsafe/caring/loving but disempoweringBeing forced to take medsBeing forced go to hospitalNot being allowed to experience altered stateComplying with medicationSense of control

Becoming manipulative (making others upset/angry – pushing people's buttons) Having an impact/Re-gaining control Becoming confrontational Re-gaining control Wanting to get a reaction Re-gaining control Saying things to get a reaction Re-gaining control Having impact on others/being noticed Becoming visible/Re-gaining control Enjoying provoking a reaction (dad's beliefs amusing, feeling in control?) Regaining control Feeling strong/lack of vulnerability Re-gaining strength/power/control Empowerment Wanting to have an impact/cause a reaction Re-gaining control

Causing others to be fearful Re-gaining control

Dimension: From experiencing lack of control and being controlled (disempowered) to becoming powerful and feeling empowered

Properties: Experiencing lack of control

When – traumatic situations, lack of choice, school, throughout life Who (agents of control) – mum, boyfriends' mum, school, psychiatric system, society/other people, organisations, systems, patriarchal society/school What (agents of control) – OCD, grandiose beliefs, urges, feelings, inner drive/impulse

How is she controlled (means of control)– lack of privacy, being intruded upon, being cut down, more subtle (boyfriend's mum), treated differently as a woman, medication, hospitalisation, seclusion

Impact – feeling disempowered, as a woman, patient, daughter, pupil, member of society; doesn't express her needs/wants, lack of confidence, negative feelings kept down

Impact on self-identity – Doesn't express herself, self as unconfident, fearful, unworthy, unimportant, low self-esteem

Properties: Becoming powerful/Re-gaining control

When – altered state, running naked in public Who – in relationships How –being manipulative, confrontational, provoking reaction, causing an impact Impact – feeling great, feeling powerful, feeling visible/strong/confident Impact on self-identity – becoming somebody else, expressing self **High** self-esteem?

Self-identity

Experiencing beliefs about being special Self as special Feeling as if she was someone else Self-identity Thinking she was special Being unconfident person Self-identity Having two opposite sides Self-identity Expressing herself (as a woman) Self-identity Becoming someone else(opposite to who you are explanation Self-identity Not having positive self-beliefs (unless in an episode) Self-identity Becoming the opposite Not reaching potential Self-identity (related to disempowerment) Struggling with self-esteem Self-worth Experiencing lack of confidence Thinking she had special power (she was a faith healer, being able to heal others) Self-identity/Spirituality Thinking she was Mother Nature Self-identity/Spirituality Thinking she was special (an angel) Self-identity Thinking she had special powers (seeing things other people can't) Thinking she had special powers (observing patterns & predicting future) Being scared to express her opinion (Holding back) Fear of rejection? Not expressing own needs/wants Expressing self/self-identity Fear of being herself (fear of being rejected/unloved) Fear of rejection? Selfidentity Feeling too close (to mum) Impact on self-identity Lack of boundaries in relationships (with mum) Impact on self-identity

(feeling intruded upon)

Dimension: From negative self-identity and low self-worth (self as unconfident, unimportant, unworthy) to positive self-identity and high selfworth (self as confident, important and worthy)

Properties: Negative self-identity and low self-worth

When - everyday life (her usual self)

Impact – Not reaching potential, not expressing herself, not being self Why – Related to control and love? Feeling powerless, intruded upon, not allowed to be self, reach potential, grow, lack of praise, not feeling loved

Properties: Positive self-identity and high self-worth When – only during an altered state Impact – Expressing herself, reaching potential, chance to be someone else – her ideal self?

Emotions

Feeling great Being full of energy Feeling good Experiencing strong positive feelings (blissful) Feeling wound up (negative emotions, unsettled, anxious?) Feeling upset Feeling unbearable pain Overwhelming emotion Expressing her anger/being fearless Experiencing a high over seven years Experiencing changes in bodily sensations Experiencing feelings of depression

Managing emotion

Directing negative feelings at close relationships Managing emotion Bottling up feelings Managing feelings Expressing anger (by kicking the table) Managing emotion Being in denial about feeling responsible Managing feelings Moving away from the pain (Moving quickly from feeling pain/rejection to altered state of consciousness fo having positive thoughts/feelings) – Not letting herself experience pain ? Managing distressing emotion Unsure of feelings during changes in perceptions Managing distressing emotion Suggests unconscious processes? Experiencing reality as stressful Managing emotion Seeing OCD as comfort Are grandiose beliefs also comfort/escape from reality? Managing emotion Fear of giving up comfort of OCD Managing emotion Bottling up feelings Managing emotion Potential for healing and dealing with past Managing emotion **explanation**

Dimension: From bottling feelings to expressing feelings

What emotion – positive/high/blissful/great and negative/Guilt, grief, fear (of rejection), anxiety, anger

When is it experienced – positive – only during altered state, negative – trauma/loss, rejection, lack of control, prior to altered state

How she deals with it – bottling up feelings (hiding them, from who – self/others), denial, internalising (depression), not letting herself experience pain, moving quickly to strong positive feelings, expressing i.e anger (kicking the table), becoming opposite, expressing positive emotion

Why – Unbearable pain, self as unlovable, fear of rejection, feeling out of control?

Love

Receiving unconditional love Love Idealising relationships

Developing good relationship with dad (due to psychosis) – relationship changing, getting stronger Eliciting care/love? Feeling loved – not feeling loved before him Experiencing love Idealised love Love Idealised/romantic love- unrequited love Love (idealised love-managing feelings of not feeling loved, looking for love) Seeing mum as accepting,(tolerating, allowing , during an episode, different how she normally sees her? Eliciting care/Idealised care/love Seeing mum as accepting, being good at emotional support (opposite) Eliciting care/Idealised care/love Feeling rejected/unloved – Experiencing fear of being unloved? Love

Safety & Protection

Needing to be protected Feeling unsafe/Safety&Protection Not feeling safe to be herself Safety in relationships Feeling safe around people (other patients), sharing beliefs Safety in relationships Not feeling safe – experiencing world as dangerous Safety&Protection Needing to feel safe Safety&Protection Not feeling safe/secure in relationships Safety&Protection Experiencing panic/anxiety as a child Feeling unsafe/Safety&Protection Thinking she had special powers (protective urine) Safety&Protection Thinking she was abused Safety&Protection

Pain of Responsibility

Ending the relationship Experiencing loss/Pain of responsibility Blaming herself (for the accident- Feeling guilty) Pain of responsibility Feeling responsible ("what if"), feeling guilty Pain of responsibility Thinking she caused the accident Pain of responsibility

Experience of Loss

Experiencing trauma and potential loss Experiencing loss Experiencing potential loss/grief Experiencing loss

Validation

Being told she would be good at something-(Acknowledgement/praise/feeling valued) Validation Experiencing positive feelings when believed- Feeling validated, accepted Validation Experiencing lack of praise/acknowledgementValidation Not feeling respected/listened to (by the society/psychiatric system) Validation Getting confirmation (about beliefs from other people) Being believed/Validation Sharing beliefs (with friends) Being believed (by friends) Getting confirmation from others (friends) Validation Not sharing beliefs with everyone Sharing beliefs (with other patients) Being believed (by other patients) Validation Getting confirmation from others (other patients) Validation Sharing beliefs with those experiencing similar beliefs (on the same level/altered state) Validation

Element of Truth

Being unsure of the truth/reality Element of Truth Continuing to view beliefs as a possible reality Element of Truth Having a sixth sense Intuition/Element of Truth Being uncertain about the reality Element of Truth Believing in past lives Element of Truth Being uncertain about truth/reality Element of Truth Acknowledging different levels of being Element of Truth Believing in multiple realities Element of Truth Grandiose beliefs as a possible reality Element of Truth Seeing grandiose beliefs as a message (about what she should be doing in life) explanation Metaphor/Element of Truth Suggesting a possibility of an alternative reality explanation Multiple realities/Element of Truth Seeing grandiose beliefs as metaphors explanation Metaphor/Element of Truth Grandiose beliefs reflecting some reality explanation Element of Truth Cultural differences in how grandiose beliefs are viewed (reflecting back to society, serving a function) explanation Element of Truth Meaning of grandiose beliefs Element of Truth Seeing grandiose beliefs as metaphors Metaphors/Element of Truth Normality defined by society we live in (Jesus) Element of Truth

Interconnectedness

Being connected to nature Interconnectedness/Spirituality Feeling connected to the planet Interconnectedness/Spirituality Feeling spiritual connection Interconnectedness/Spirituality Believing in shared consciousness – interconnectedness? Spirituality

<u>Spirituality</u>

Having spiritual beliefs (feeling in tune with nature) Spirituality Having spiritual beliefs (energy fields) Spirituality Having spiritual beliefs (about witchcraft) Spirituality Having spiritual beliefs (interest/reading about energy fields) Spirituality Spiritual beliefs in family (dad) – Encouraged to have spiritual beliefs (church every week) Spirituality Grandiose beliefs giving greater understanding/spiritual enlightenment?

Grandiose beliefs giving greater understanding/spiritual enlightenment? explanation Spirituality Supreme being/existence ("maybe somebody somewhere wants to") Spirituality

Altered state as a spiritual journey (not allowed by the society) Spirituality Exploring spiritual beliefs (beliefs about interconnectedness, God, natur) Spirituality

What are the beliefs – spiritual

When – always there but the conviction of and preoccupation with these beliefs varies

How –, reading, talking about them/not talking about them, acting as if Who – sharing (talking about them, not talking about them), response of others (being believed/not being believed)

Why – reading, family background, talking about them

With what consequences – from having spirit to spirit breaking (response of others), spiritual healing/journey, feelings (validated/disempowered)

Other (not sorted) Falling into the altered state of consciousness Altered consciousness/Spirituality Acting and feeling different to normal Altered experience Being in an altered consciousness Experiencing cues in the environment as significant (having a personal message) Looking for meaning Experiencing changes in perception Altered experience Gaining energy (from depression to psychosis) Gaining strength Sleeping less in summer Sleep/Mechanism Believing that medication is causing depression Altered state as a good place to be Wishing to experience altered state (in a safe/caring /loving environment alternative hospitals, retreats) Safety/care/love Grandiose beliefs as a positive experience Having strong relationships Having changeable/volatile relationships (either loving or hostile) Experiencing difficulties in relationships (with dad) Feeling she has a special task (in charge, in control) special mission/purpose Seeing others as special (other patients on the ward) Explanation for why she was there? (said that feelings of being special came when she was at hospital) Finding meaning Acting as if she had special powers (doing rituals) Doing rituals Exploring beliefs about shamanism (reading) Special interest Being horrible to others Expressing emotion or Re-gaining control? Becoming confident Self-identity or Empowerment? Feeling connected to others Interconnectedness/Emotional connection/Love or Spirituality? Fear of feeling disconnected (fear of feeling unloved, alone?) Managing emotion/impact of this-feeling connected/interconnectedness Not expressing own wants/needs Fear of rejection

Expanding Sense of Self

Interview 1

Self as struggling with self-worth. Not having positive self-beliefs. Feeling rejected and unloved (said that her ex was the only person who ever made her feel truly loved). This suggests not experiencing unconditional love and image of self as unlovable. This also leads to fear of being herself. Feeling disempowered/powerless, not wanting to express own wants/needs. Being small and invisible. Idea that altered state gives a chance to be someone else, so positive self-image is not her. Negative self-image in ordinary life. But an exception to that- ex boyfriend made her feel loved. What was her image of self then? Did she feel special, loved, worthy? There seems to be a strong theme of wanting to cause a reaction, impact on others and become visible and noticed

Self as special, powerful, loved, connected, fearless. But exception to this – during one episode thinking she was abused. Does this mean image of self during altered state unstable or defensive? Possibly related to paranoia or the category of Safety & Protection, that is experiencing fear, feeling unsafe prior to experiencing GDs. GDs possibly a strategy of managing fear and other distressing feelings.

Described self in relationships, during altered state, as horrible, confrontational, manipulative, provoking and pushing. Is this reinforcing her positive self-image of powerful, fearless, noticed and worthy whilst experiencing altered state? How she sees others varies between special, idealised, accepting, allowing and loving to controlling, rejecting, abusive, aggressive and dangerous. Similar to how she views self. She moves between different reciprocal roles. Experiencing others as controlling and rejecting can be a trigger for moving into altered state. Control and fear of rejection are important in this narrative and may be separate categories, however, related to self-identity and self-worth. Also there is something about idealising relationships, is this a separate category?

Interview 2

Self as Jesus. "It's not that I am Jesus, it's that I can be Jesus". There is something about being who he wants to be, chance to be someone else? Feeling like there are abilities within him. This is similar to the first interview – reaching potential. Talks about being a joker and others finding him funny. Image of self as funny. Also talks about playing practical jokes and outsmarting others. Image of self as smart/intelligent. Contrary to the first interview this does not seem to be dependent on the altered state (more dependent on mood?). The experiences which he described as spiritual (manic episodes), changing him as a person over time (spiritual growth). Although at times of depression self-image likely to be negative. Does he still see himself as funny and intelligent?

Interview 3

Reported a positive self-image and self-worth. Feels this has come from regaining confidence with the old skills and abilities and learning new skills, making him feel empowered. Similar to interview 1, self-identity and selfworth closely linked with power and sense of control. Some of the abilities present before (ability to talk to people, put himself in others shoes) suggesting positive image prior to GDs but lack of confidence impacting on this. Having a special job (talked a lot about his work role and how important it is.) Loss of job led to a long period of depression. What did loss of job mean? Loss of role/status. He was supporting his family prior to this. Impact on self-identity and self-worth as his role changed. Need to explore selfidentity and self-worth in next interview. What leads to changes? What is the impact?

Interview 4

Many initial codes relating to self-image and self-worth. Is there a fragile sense of self based on appearance, other people, being liked, achievement? Self-esteem appears to fluctuate based on mood. This is related to Interview 2 & 3. Maybe also to Interview 1 – fear of rejection. Is this related to feeling unloved?. Listen out for this in other narratives. She described neglect and feeling abandoned, which is likely to lead the person to feeling unloved and unsecure in relationships, fearing they will be abandoned and rejected. Sense of self as unlovable and unworthy is likely to develop from these experiences.

No sense of self/Self disappearing/Loss of self

Two other themes emerged related to this category Self-Care and Autonomy or Self-sufficiency. Depending on how one views and values themselves, self-care may or may not be important. She moves from neglecting self to looking after self. If haven't had experience of being looked after/cared for when little, person might be searching for special care, love, protection. This might be better placed in the category Experience of unconditional love. This could also be related to Dependency v Autonomy. Moving from being dependent on parents when depressed to not wanting to be looked after them when manic. Not needing to be dependent but being self-sufficient. Being able to care for herself.

"Fragile" sense of self suggests something inherently wrong with the person, something that can't be changed, weak, fragmented. Person may at times have a lack of real sense of self, due to sense of self being so dependent on external world and mood but this is transient. Do not use this term.

Interview 5

Low self-esteem, unworthy, trivial, view of self is dependent on mood, other people. Similar to interview 1, ordinary self is shy, unconfident, low self-worth. Because of having extreme views of self not sure what her personality really is – lack of real sense of self at times. Does the sense of self need to be stable or at least continuous? What is it like to have these two opposite views of self – not sure what her personality is. She talks about her positive sense of self and self-worth during GDs not being real. Although it seems real to her she wonders if it's part of illness, not how she usually is. Similar to interview 4, she talks about disappearing and becoming a shadow.

Interview 7

Maybe expanding sense of self should be moved to self-identity from spiritual journey category. Spiritual journey, validation, interconnectedness, finding meaning all describe the process of change in self-identity/self-worth and how they develop more positive self-identity and different sense of self. An expanding sense of self may also happen for some as part of this. Self that is greater than individual's physical body? Self as part of something bigger i.e. nature, universe, God. There is a spiritual understanding of self and the world. This is achieved through interconnectedness with other, for example Interview 2 described being linked to Christ's spirit, but he did not think he was Christ. Awareness of boundaries although interconnected – Jesus was coming through him. Still he is separate from Jesus so separate from the other. This is unlike interview 1 – she felt interconnected with nature to the point of believing she was Mother Nature. Boundaries blurred. Self not separate from the other.