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Delusion as embodied emotion: a qualitatively driven, multimethod study of first-episode psychosis in the UK

Rosa Ritunnano, Jeannette Littlemore, Barnaby Nelson, Clara S Humpston, Matthew R Broome

Summary

Background Delusions in psychosis involve complex and dynamic experiential, affective, cognitive, behavioural, and interpersonal alterations. Their pattern of emergence during the early stages of illness remains poorly understood and the origin of their thematic content unclear. Phenomenological accounts have emphasised alterations of selfhood and reality experience in delusion formation but have not considered the role of life events and other contextual factors in the development of these disturbances. This study aimed to investigate the relationship between self-experience and the lived world in first-episode psychosis by situating the phenomenological analysis of delusions in the context of the person's life narrative.

Methods In this qualitatively driven study, we recruited individuals with lived experience of delusions receiving care from three Early Intervention in Psychosis (EIP) teams in the UK. People with lived experience were involved in the development of the study design and protocol. Inclusion criteria were that the individual was being treated within an EIP service; past or current experience of clinically significant delusions, assessed by the attending psychiatrist to be at least of moderate severity; aged between 18 and 65 years; and willing and able to give informed consent and able to undertake interviews in English. Exclusion criteria included presence of a psychotic disorder solely related to substance intoxication or withdrawal. We used a novel multi-perspectival design to investigate delusions across three analytical standpoints: standard clinical psychopathology (third person), phenomenological psychopathology (a top-down approach to eliciting first-person data), and narrative inquiry (a bottom-up approach to eliciting first-person data). Delusion content was classified based on the definitions provided by the Scale for the Assessment of Positive Symptoms. Participants completed standardised psychometric scales, a narrative interview (ad-hoc Life Story Interview), and a phenomenological (Examination of Anomalous World Experience [EAWE]) interview. Findings were integrated through meta-inference across analytical frameworks.

Findings Between Jan 4, 2023, and June 14, 2023, 33 interview sessions were completed with ten adults with first-episode psychosis and lived experience of delusions (three men, six women, and one person who was non-binary; median age 24·5 years [IQR 14·8]; eight White, two White and Black Caribbean). The three most common delusion themes were: persecutory (ten [100%]), reference (nine [90%]), and grandiose or religious (nine [90%]). No theme occurred in isolation. The phenomenological component of the analysis revealed a global, qualitative shift in the subjective experience of the lived world, with total EAWE scores ranging from 13 to 48 (mean 26·5 [SD 10·85]). The first narrative theme highlighted the role of early and repeated negative interpersonal emotions (especially shame) and subsequent experiential avoidance or immersion and absorption to understand the embodied phenomenology of delusions emerging in later life: (1) recurrent shame, anger, fear, and feelings of being controlled; and (2) "it really turned my whole life upside down": coping with emotional upheavals before the onset of delusions. The second narrative theme revealed three main patterns of emotional transformation of the world and the self: (1) being under the spotlight: from embodied shame to almighty invincibility; (2) being part of something bigger: from meaninglessness and absence to embodied love, awe, and hope; and (3) being in a simulation: life without a body, cut off from others.

Interpretation The emergence and evolution of delusions reflected a temporally extended, embodied, and cognitive–linguistic process characterised by an emotional transformation of the self and the world as a unified conscious experience. Metonymic thinking and language linked to contiguous bodily experiences appeared to explain some of the apparently incomprehensible or extreme delusional appraisals of self and world, such as being a bad person or being connected to God. Prevention and intervention models for psychosis should consider the role of the lived body for the regulation of emotions, and the effect of the surrounding material and social environments as central affective–regulatory mechanisms, and potential targets for intervention and support.

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Institute for Mental Health, School of Psychology, University of Birmingham, Birmingham, UK (R Ritunnano MD PhD, C S Humpston PhD, Prof M R Broome MBChB PhD); **Centre for Youth Mental Health, The University of Melbourne, Parkville, VIC, Australia** (R Ritunnano, Prof B Nelson PhD); **Department of Linguistics and Communication, University of Birmingham, Birmingham, UK** (Prof J Littlemore PhD); **Orygen, Parkville, VIC, Australia** (Prof B Nelson); **Department of Psychology, University of York, York, UK** (C S Humpston); **Early Intervention in Psychosis Service, Birmingham and Solihull Mental Health NHS Foundation Trust, Birmingham, UK** (R Ritunnano, Prof M R Broome)

Correspondence to: Dr Rosa Ritunnano, Institute for Mental Health, School of Psychology, University of Birmingham, Birmingham B15 2TT, UK **r.ritunnano.3@pgr.bham.ac.uk**

Research in context

Evidence before this study

We conducted a comprehensive literature search including MEDLINE, Embase, PsycINFO, CINAHL, and Web of Science for qualitative studies published in English from database inception to Sept 9, 2021. Search terms included text words and controlled vocabulary to describe the sample of interest (eg, "schizophrenia spectrum and other psychotic disorders"/"bipolar and related disorders"/"psychosis"/"at risk mental state" or "ultrahigh risk" or "clinical high risk") and the phenomenon of interest (eg, "delusion"/"grandios*" or "paranoi*" or "delusional mood" or "delusional belief*" or "delusional idea*" or "delusional experience*"), in combination with methodological terms such as "questionnaire*" OR "survey*" OR "interview*" OR "focus group*" OR "case stud*" OR "observ*" OR "view*" OR "experienc*" OR "opinion*" OR "attitude*" OR "perce*" OR "belie*" OR "feel*" OR "know*" OR "understand*". We manually searched the reference lists of all retrieved full-text articles. Additionally, searches were run on OpenGrey and Google Scholar; relevant journals were searched by hand. The resulting qualitative meta-synthesis provided evidence for the role of alterations of the experience of the lived world (including reality experience), meaning making, and self-understanding in the development of delusions, as part of a broader model of the emergence of meaning in delusions. We updated this search on March 3, 2025. We found two systematic reviews of the literature on the prevalence of delusion themes in adult clinical populations and in psychosis; however, no studies systematically investigated the different aspects of the lived world (eg, spatiality, temporality, or affectivity) in relation to delusions, or the dynamics of emergence of these alterations and their meanings in the context of the person's life narrative.

Added value of this study

To our knowledge, this is the first study using a phenomenologically informed, multi-method approach to situate the investigation of delusions in first-episode psychosis (across different themes and diagnoses) within a life-as-a-whole context. At the phenomenological level, delusions were embedded within a global, qualitative shift in the experience of the world which could fluctuate in intensity over time, variously manifesting as altered experiences of space, time, other people, affect, existential orientation, and, less frequently, language. The narrative findings showed how delusory cognitions were grounded in specific bodily, emotional, and linguistic patterns of activity reflecting the embodiment of positive, negative, and mixed social emotions (eg, shame, pride, love, and threat-awe), disembodied states of unreality, or both. These findings contribute to explaining the recurrence of so-called universal themes as reflecting the phenomenology of universal emotions, within each person's socially and culturally situated life narrative.

Implications of all the available evidence

The clinical assessment of delusions and therapeutic interventions could be improved by attending to and engaging with patients' reports of pleasant or unpleasant bodily feelings and emotions (eg, feelings of being exposed or literally on display, intense feelings of love and connection or conceit and invincibility, or a sense of profound detachment and numbness). A narrative reconstruction of the situation where those feelings were first experienced (eg, bullying, rejection, or loneliness) and the coping strategies used (eg, avoidance, immersion, or imaginative absorption) might aid in the understanding of specific fears, needs, and desires of the person to be addressed and supported. Intervention strategies should be personalised, depending on whether the delusions appear grounded in the partial reactivation (often without object, or partially outside of conscious control) of negative emotions such as shame, or whether the simulation is driven by positive embodied imaginings and hyper-empathic identification with desired identities and goals from fictional or other narratives. Factors (biological, psychological, environmental, etc) maintaining states of hyper-arousal and emotional dysregulation should be addressed (eg, by providing a consistent, emotionally relaxing therapeutic environment). Clinicians should be able to recognise and attend to the use of figurative (especially metonymic) language and narratives as a vehicle for expressing and making sense of complex and profound emotional and bodily experiences.

Introduction

Delusions are enigmatic features of psychosis that are challenging to define, study, and treat. They are central to the conceptualisation of schizophrenia, but the presence of delusions extends across several psychiatric syndromes and the general population.[1] When considered trans-diagnostically, delusions consistently aggregate around a history of trauma, including bullying and physical and sexual abuse.[2] Although increasing evidence has accumulated in support of an affective pathway between childhood adversity and psychosis,[3] questions remain on how early adversity contributes to the formation of delusions. Adverse childhood experiences might prime the development of thematic content associated with distress and the need for care, as opposed to positive meanings[4] or experiences without a need for care.[5] A gap remains in understanding how and why psychotic symptoms arise following early trauma, although researchers have hypothesised the mediating role of emotional dysregulation, dissociation, negative schemata, and post-traumatic stress disorder (PTSD) symptoms such as avoidance, hyperarousal, and numbing.[6] These gaps represent a barrier to the development of effective preventive strategies and treatments for adult survivors of trauma and those with psychosis.

Although most delusion research in psychiatry is quantitative and has been oriented around a single paradigm (ie, the so-called deficit model),[7] qualitative and phenomenological methods are increasingly recognised as a valuable way to obtain otherwise inaccessible knowledge about subjective states. By taking subjectivity seriously, phenomenologically informed research can improve psychological understanding of the lived experience of delusions and generate productive hypotheses about underlying psychological mechanisms and their neurobiological bases.[8]

However, with some exceptions,[9] phenomenologists investigating delusions have predominantly relied on philosophical arguments, re-analysis of historical cases, or clinical anecdotes, mainly focusing on schizophrenia. The validity and generalisability of findings from this research might be limited due to the risks of selection bias and concerns about commitment and rigour, transparency, and sensitivity to context.[10] Phenomenological contributions have also been limited by a tendency to emphasise disturbances in self-experience, with little acknowledgment of the surrounding social and environmental context,[11] and separation between analysis of core alterations in self-experience and investigation of painful affective states.[12] A variety of sources, methods, and disciplines show that painful emotions and negative affect (often rooted in early trauma and stressful life events) play a central role in the development of delusions and other symptoms of psychosis.[13]

There is a need for more empirical phenomenological investigations into the embedded and situated quality of psychopathology, while preserving phenomenology's richness and fidelity to the phenomenon, without excessive reliance on a rigid, top-down, theoretical interpretive framework. Narrative methods are well suited for this purpose, as they contextualise lives in a manner that enables analysis of the extended and situated aspects of the self, such as identity, culture, and history. They are not only focused on the content of stories, but also ask why a given story is told in a particular way, paying attention to those features of linguistic and symbolic thought, such as metaphor, that more closely reflect people's attempts at making sense of and coping with overwhelming emotions.[14,15]

We adopted a novel, qualitatively driven, multi-method design that enabled comparison and integration of third-person classifications of delusional themes with the first-person perspective obtained deductively through a phenomenological checklist and inductively through narrative interviewing. We adopted a maximally broad definition of delusions as experiential states that involve beliefs among other cognitive, perceptual, or affective states, and that have a specific phenomenology—ie, there is a characteristic what-it-is-likeness to be in a certain delusional state. The only fundamental assumption was that this nuance can be investigated in phenomenological terms by gaining access to a person's experience of the self, as situated and embedded within their lived world. By attending to both the experiential world of delusion and the agentive, relational, and sociocultural factors that shape meaning-making processes, we aimed to investigate the relationship between the self and the lived world in the formation of delusions in first-episode psychosis.

Methods

Study design and participants

Participants were recruited across three National Health Service (NHS) Early Intervention in Psychosis (EIP) teams in the UK and selected through purposive homogeneous sampling given their past or current experience of delusions. A small sample was essential to manage the idiographic aspect of our research, indicating a concern for what is particular to the individual case (appendix p 4).[16]

See Online for appendix

Participants were screened by their direct clinical team in consultation with one of the authors (RR) and continued to receive standard NHS care within the EIP team. Service users were eligible if they had past or current clinically significant delusions, assessed by the attending psychiatrist to be of at least moderate severity, were aged between 18 and 65 years, were able to undertake interviews in English, and were willing and able to give informed consent. Exclusion criteria were psychotic disorders solely related to substance intoxication or withdrawal, neurodegenerative disorders, or intellectual disability interfering with the capacity for consent. All participants provided written informed consent, including for the use of anonymised quotes. The presence of delusions was ascertained by the team's consultant psychiatrist in accordance with the definition of delusions in item P1 of the Positive and Negative Syndrome Scale.[17] Clinicians were asked to use this definition and the severity rating of 4 (moderate) as a reference to determine whether patients' current or past delusions corresponded to the study definition of clinically significant delusions.

This study followed APA Style Journal Article Reporting Standards for Qualitative Research.[18] We involved a diverse group of experts with lived experience (Youth Advisory Group, University of Birmingham's Institute for Mental Health) in the development of the study design and protocol. A favourable opinion was obtained from the North-West–Preston NHS Research Ethics Committee for the Meaning Exploration & Language Behind Anomalous Experiences study protocol (REC reference: 22/NW/0375; protocol number: ERN_2022-0325; IRAS project ID: 317572).

Procedures

A formal assessment of patients' decisional capacity for clinical research was undertaken before they provided consent.[19] RR and participants met multiple times to complete sociodemographic and psychometric

questionnaires and qualitative interviews (appendix p 5). A consensus diagnosis was established after review of the clinical records by RR (a consultant psychiatrist with experience of working in EIP) via discussion with the patient's responsible clinician. Where consensus could not be reached (n=1), a generic first-episode psychosis diagnosis was recorded.

Information regarding the historical content of delusions was collected from electronic records and triangulated and integrated with qualitative interview data. Delusion themes from the records were classified using definitions in the Scale for the Assessment of Positive Symptoms (SAPS).[20] Where the researcher could not assign a specific SAPS theme, but there was evidence suggesting the presence of other clinically significant themes, these data were collected from the records, relevant quotes were labelled on the interview transcripts, or both (appendix pp 22–23). To enhance characterisation of the presenting psychopathology, unusual perceptual and ideational experiences were assessed with the Transpersonal Experiences Questionnaire-19 (TEQ-19).[21] The TEQ uses language not strictly linked to that of mental distress or symptoms of mental disorders and was therefore best suited to avoid preconceptions when framing delusional experiences during interviews. Other psychometric measures collected were: the Purpose in Life Test;[22] the Generalized Anxiety Disorder 7-item;[23] and the Birchwood Insight Scale.[24] The Examination of Anomalous World Experience (EAWE)[25] was used to explore subjective alterations in the experience of the lived world during psychosis and in relation to the delusional phenomenology (appendix p 15).

RR, who is trained in narrative and phenomenological interviewing, conducted all face-to-face interview sessions. A flexible, non-prescriptive, interview guide based on the Life Story Interview (LSI; appendix pp 6–9)[26] was developed in advance by an interdisciplinary team of researchers (including two authors with lived experience) in collaboration with the Youth Advisory Group. At the beginning of the interview, participants were invited to create a lifeline drawing to empower them and guide them through the narration of their life story (appendix p 10).[27]

All interviews were transcribed verbatim by a transcription service bound by a confidentiality agreement and pseudo-anonymised. Before study end, participants received an optional and anonymous questionnaire to assess the relative risks and subjective benefits of this research (appendix p 12).

Data analysis

Data analysis followed a multi-method, qualitatively driven design.[28] The phenomenological analysis and narrative analysis proceeded in parallel (appendix p 13). Findings were integrated through meta-inference across the three analytical frameworks (standard clinical psychopathology, phenomenological psychopathology, and narrative inquiry). A joint display was used to illustrate this integration at the interpretation and reporting level, and the contribution of each method was analysed and discussed in detail (appendix p 62). We followed the principles of dialectical pluralism (appendix p 2) to manage tensions between different ontologies and epistemologies arising from the multi-methodology.

Descriptive statistics were used for psychometric measures. Based on the information from clinical records and psychometrics, participants were individually characterised for diagnosis, comorbidities, time in EIP, delusion activity or remission, hospital admissions, antipsychotics treatment, and psychological interventions (appendix pp 17–18).

For the phenomenological analysis, LSI and EAWE transcripts were merged, and the combined qualitative dataset was indexed systematically by RR for relevant segments of text containing descriptions of subjective alteration of the lived world consistent with the description of EAWE items. A deductive coding framework was used that reflected the main 77 items of the EAWE schedule. NVivo software, version 12, was used to manage data. After indexing, quotes were charted in a table collating text relevant for scoring each of the six EAWE domains across each participant. This process followed the initial steps of the Framework Method,[29] a highly systematic method of organising and categorising data. Based on this table, supplemented by the original transcripts, the EAWE was then scored for each participant and endorsed items were tabulated by RR into a matrix showing the number of participants endorsing each item (appendix pp 25–36). For each participant, RR compiled a brief descriptive summary of the main alterations of experience within each domain.

The combined qualitative dataset was also analysed according to narrative thematic analysis.[15] The analysis followed the six main stages detailed in the appendix (pp 14–15). Part of the analysis focused on uncovering aspects of self-understanding and meaning making that operate outside of the participant's awareness and are hidden behind ambiguous or contradictory expressions, or within figurative expressions, including metaphor and metonymy (appendix p 2). We adopted a cognitive linguistic view of metaphor and metonymy as pervasive processes in thought and everyday language, arising from basic bodily and sensorimotor experiences of human beings.[30] Metonymy operates within one cognitive domain or domain matrix and links a given source content (often more concrete or simple) to a less accessible target content (often more abstract and complex). The source content and the target content of a metonymy are linked by conceptual contiguity.[31] A highly inductive contiguity-based analytic strategy (preserving data as much as possible in their original form) was adopted throughout the analysis up to the final stage. During the final stage, researchers shifted to a more deductive approach to generate final themes answering the main research

question, while drawing direct connections with relevant concepts from the literature.

RR analysed all transcripts; JL completed the initial reading and annotation stages of the analysis for 70% of the transcripts, and then regularly met with RR throughout the analysis process to audit subsequent stages and develop the final themes. All other members of the research team met regularly with RR for auditing the analysis and evaluating coherence, trustworthiness, and rigour of the results. Methodological integrity depends on a reflexive process where the analyst carefully considers sources of bias and the influence of their position. Journalling and writing of analysis memos and reflexive memos proceeded in parallel throughout this lengthy phase of the analysis. A reflexivity statement is provided in the appendix (p 16).

Role of the funding source

The funders of the study had no role in study design, data collection, data analysis, data interpretation, or writing of the report.

Results

Between Jan 4, 2023, and June 14, 2023, 33 interview sessions were completed with ten adults (three men, six women, one person who was non-binary; median age 24·5 years [IQR 14·8]) with first-episode psychosis and active (six [60%]) or remitted (four [40%]) polythematic delusions (table; appendix pp 20–21). No delusional theme occurred in isolation. All participants had at least three themes, most commonly persecutory (ten [100%]), reference (nine [90%]), and grandiose or religious (nine [90%]). Other themes included being controlled (five [50%]), somatic (five [50%]), thought broadcasting or mind reading (four [40%]), thought insertion (three [30%]), guilt or sin (one [10%]), and jealousy (one [10%]). Unclassified delusional content was present across all participants (appendix pp 22–23). LSI duration ranged from 31 to 75 min, and total EAWE duration ranged between 75 and 218 min over multiple sessions, in addition to the time needed for the collection of demographic and psychometric data (approximately 30 min; appendix p 11).

Subjective anomalies in participants' experience of the lived world, as measured by the EAWE over the lifetime, were present in all participants (mean 26·5 [SD 10·85]), with a similar average of items endorsed by those with active (mean 28 [SD 13·59]) or remitted delusions (mean 25·25 [SD 0·96]). Total items endorsed (definitely present; highest possible EAWE score 75) ranged from 13 (Jonathan) to 48 (Isla). All participants endorsed at least one item in each domain except for domain four (language [two participants scored 0]). Individual distribution of items and most frequently endorsed items are reported in the appendix (pp 24–42).

The narrative analysis generated two superordinate themes and five subthemes (figure 1) situating

	Number of participants (n=10)
Age, years	24·5 (IQR 14·8])
<25	5 (50%)
25–30	2 (20%)
>30	3 (30%)
Gender	
Female	6 (60%)
Male	3 (30%)
Non-binary	1 (10%)
Ethnicity	
White	8 (80%)
White and Black Caribbean	2 (20%)
Religion	
Christian	2 (20%)
No religion	6 (60%)
Other	2 (20%)
Highest educational attainment	
Secondary school	2 (20%)
Sixth form or college	6 (60%)
University degree	2 (20%)
Relationship status	
Single, never married	8 (80%)
In a relationship	1 (10%)
Separated, divorced, or widowed	1 (10%)
Living arrangement	
Lives with family	8 (80%)
Supported accommodation	2 (20%)
Employment status	
Works full time or part time	3 (30%)
On leave but employed	1 (10%)
Unemployed, looking for work	1 (10%)
Receiving or awaiting disability payments	1 (10%)
Wanting to work but unemployed (health reasons)	3 (30%)
Other	1 (10%)
DSM-5 diagnosis	
Schizophrenia-spectrum	6 (60%)
Bipolar I disorder	1 (10%)
First-episode psychosis	1 (10%)
Brief psychotic disorder	1 (10%)
Major depression with psychotic features	1 (10%)
Comorbidity	
Autistic spectrum disorder	1 (10%)
Alcohol use disorder	1 (10%)
Substance use disorder	2 (20%)
Multiple comorbidities	1 (10%)
None	5 (50%)
Delusions	
Active	6 (60%)
Remitted	4 (40%)

Table: **Sociodemographic and clinical information**

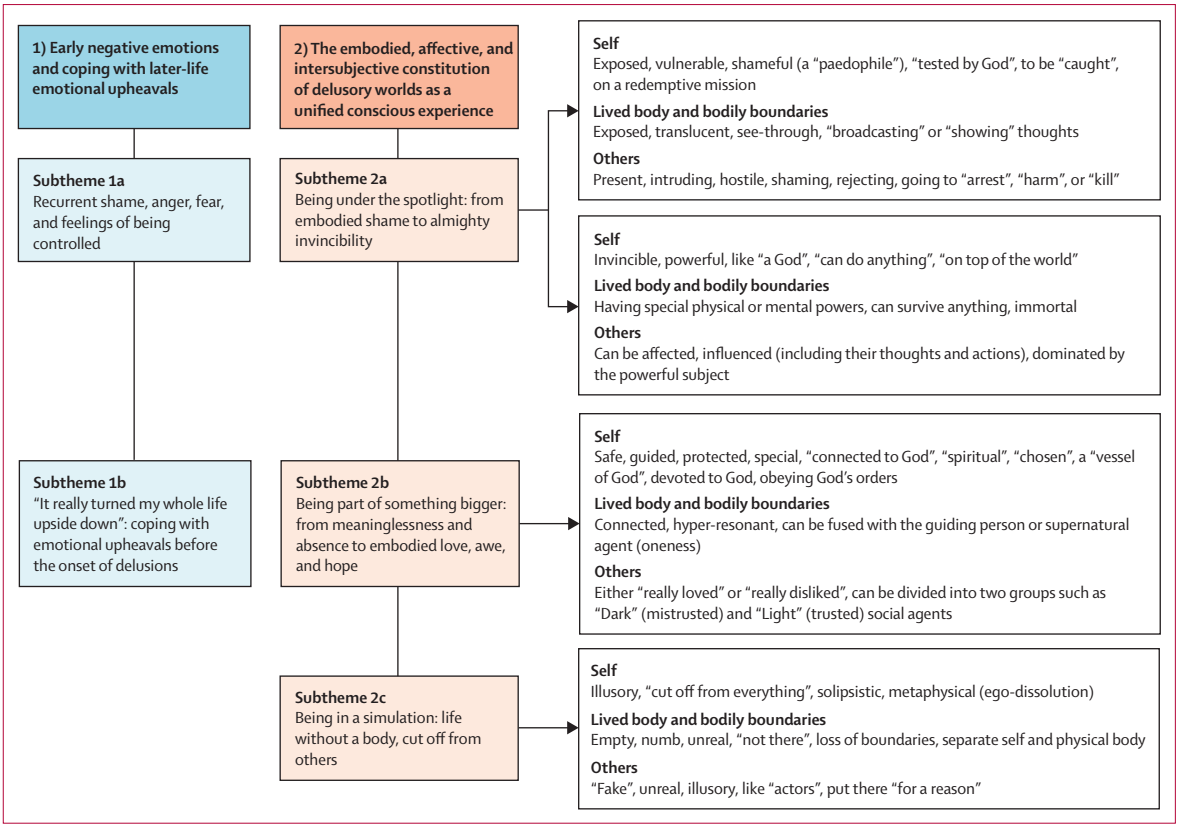

Figure 1: **Overview of narrative themes and subthemes with a brief summary of contents**

experiential changes affecting the relationship between self and world within a life-as-a-whole context. Themes were fully developed in line with reporting standards (appendix pp 43–54) and additional quotations are in the appendix (pp 55–57). A joint display of the main findings from each methodological component can be found in the panel.

The first superordinate theme—early negative emotions and coping with later-life emotional upheavals—focused on the period of the life narrative preceding the onset of delusions, including interpersonal events during childhood and adolescence. This theme specified how the early and repeated experience of intense, negative emotions (recurrent shame, anger, fear, and feeling controlled in early years; subtheme 1A) shaped enduring affective dispositions that delimit the kinds of situations one learns to instinctively fear, desire, and seek in life. These dispositions and sensitivities to certain emotional cues were key to understanding the specific content of many delusions described by participants.

For many participants, the emotional struggles began or intensified during their school years, as they started interacting more closely with their peers, often becoming the target of social put-downs within a broader atmosphere of exclusion. Adam, for instance, recalled severe and constant bullying, endured in complete loneliness. The bullying played out as an ongoing "shame experience", defined as a series of interpersonal events typically recruiting "emotions of anxiety, anger and disgust" and "associated with perceptions of being criticised, devalued and disapproved of by others for actions or attributes of self that others find undesirable or unattractive".[32]

> "[They would pick on me about] Just anything and everything. The way I looked, the way I acted. I admit I wasn't the best person myself either. I'm not very proud of the person I was [...] I was very annoying, a bit weird, a bit of an outcast, but I feel like I made myself that way, and then obviously, I got bullied, and I took that anger, and I took it out on some people myself."
>
> *Adam*

Here, Adam became the object of relentless negative scrutiny and surveillance by more dominant others, who were constantly present in his lived world. They criticised "anything and everything" about him, inducing strong feelings of anger (alongside shame and fear), followed by a sense of helplessness and loss of agency as he was unable to change his situation. For Adam, this period marked the beginning of what he calls his "depression" and the first appearance of unwanted cognitive-embodied content (a felt sense of wanting to hurt others), later described as ego-dystonic thoughts "implanted" by unseen agents running the "simulation".

***Panel*: Joint display of the main findings from each methodological component**

Component 1: Standardised assessment of themes of delusion based on widely used operational definitions

Purpose

To systematically describe (past or present) delusional content from the third-person perspective.

Analysis

Content gathered from the clinical records and interview data was classified using the definitions provided by the SAPS.

Findings

No theme occurred in isolation. The most common co-occurring delusion themes were:

- Persecutory (n=10)
- Reference (n=9)
- Grandiose, religious, or both (n=9)

Component 2: Phenomenological examination of anomalous world experiences in and outside of delusional states during psychosis

Purpose

To systematically investigate, in a qualitatively rich manner, the subjective alterations in a person's perception of the world when in psychosis and how it relates to their delusions.

Analysis

A deductive coding framework that reflected the main 77 items of the EAWE schedule was applied to the full qualitative dataset and used to thematically categorise the alterations of a person's world experience both in and outside of delusional states into experiential domains and score them. Descriptive summaries were also generated for each participant to avoid losing contextual information.

Findings

Delusions are associated with a global, qualitative shift in the subjective experience of the lived world. Especially common (≥70% participants) alterations were:

- Domain 1: Space and objects
  - 1.1 Abnormal intensity or persistence of visual perceptions
  - 1.10 Disturbances involving the accuracy of auditory perceptions
- Domain 2: Time and events
  - 2.5 Disturbed awareness of the expected future
  - 2.6 Disturbed experience of memories or of the past
- Domain 3: Other people
  - 3.4 Sense of inferiority, criticism, or mistrust in relation to others
  - 3.7 Disturbance of self–other demarcation
  - 3.12 Changes in quality or tone of others' appearance
  - 3.13 People seem as if communicating something special or unusual (beyond the obvious)
- Domain 5: Atmosphere
  - 5.14 Revelatory or pseudorevelatory (apophanous) mood
  - 5.17 Anomalies of mood or affect
- Domain 6: Existential orientation
  - 6.5 Feeling of being special or superior
  - 6.9 Existential or intellectual change

Component 3: Narrative exploration of the personal, interpersonal, and social dimensions of the experience of delusion and meaning making

Purpose

To explore how delusional content and meaning emerge in the context of the person's own life and how this content is created, made sense of, and articulated linguistically.

Analysis

A case-centred analysis (narrative thematic analysis) of each participant's life narrative and delusion content following six main stages where the unique context of each case is retained and analysed with minimal segmentation or fragmentation of the text and of the overarching narrative configuration.

Findings

In the context of the person's life, the emergence and evolution of delusions reflected a temporally extended, embodied, and cognitive-linguistic process characterised by an emotional transformation of the self and the world. Through their feeling component, emotions contributed to how participants understood and represented their own self (including their past, present, and future selves) during delusional states, and to how they perceived other people and their intentions. These effects persisted even when the feelings or the emotions were not recognised or attended to as an object of conscious awareness, or when the stimuli for the emotional response were no longer active. Through their action-readiness component, emotions induced a sense of being urged to act in a certain way in the context of delusions, and these feelings could vary along dimensions of valence, arousal, and sense of control.

In some cases, negative emotions that were repeatedly experienced in a person's early years (eg, shame, anger, fear [including a fear of death], and feeling controlled) seemed to be reactivated (partly out of control) in later life in the context of life upheavals—generating an overlapping bodily phenomenology and triggering a search for the object of the emotion. In other cases, preceded by a state of meaninglessness and absence, participants described the embodied and intercorporeal enactment of positive emotions, such as love, awe, and pride. This appeared partly driven by a state of immersion and absorption in fictional, spiritual, and religious narratives inducing positive feelings and empathic identification.

EAWE=Examination of Anomalous World Experience. SAPS=Scale for Assessment of Positive Symptoms.

Coupled with the subjectively unexplained and intrusive appearance of this same mental content later in life (which Adam calls "homicidal thoughts") is a sense of being mentally and physically pushed to act violently towards others ("I get really hot and sweaty sometimes, for some reason that makes me feel angry"). Despite telling the interviewer that he feels "angry" during these episodes, Adam did not explicitly label this sudden state of bodily activation as "anger", possibly because it appeared out of nowhere; he could find a reason for it (ie, a suitable object for the emotion) in his present world. At a young age, and in the context of bullying, this mental content was felt as his own and was not as strong and intrusive as he describes it currently as part of his delusions:

> "They weren't as strong [the thoughts], though, when I was younger. I think the first one I actually had was back in school when I was being bullied. It was, you know, 'I wanna hurt these people that are hurting me', sort of thing. And then they completely stopped until probably when I got kicked out of the house I was living in with my ex. But then again it was, sort of, underlying, you know, not really serious. It's only gotten bad these past few months. Like when I first started coming here, just before that, and then it's just, sort of, getting worse and worse, if that makes sense."
>
> *Adam*

As Adam later found himself in a stressful interpersonal situation, he re-experienced the same embodied-conative component of anger and the associated cognition (ie, the desire to approach and confront). This time, however, the activation of anger appeared partly out of conscious control and without object. Adam's felt, intrusive experience of bodily arousal (negatively valenced feelings of heat, explosiveness, and readiness for aggression) provided the embodied grounding for the thought, articulated metonymically (appendix p 2), of having a "bad mission" which he cannot quite figure out.

> "I feel like I'm sort of being sent a mission. So going back to like feeling like I'm getting messages through the TV and stuff like that, I feel like that's sort of telling me like a mission to do and I have to do something. I haven't like figured out what it is yet though. But it doesn't feel like a good one. It feels like a bad mission. And I feel like that sort of links to my homicidal thoughts and that's why I get so like scared about it [...] Yeah, it just feels like it has like a commanding atmosphere. Like there's nothing specific saying, 'this is a mission', it just has a feel to it. And I think I have a mission to do, I just don't know what it is and I feel like I have to figure it out."
>
> *Adam*

Besides shame experiences (especially prevalent, and associated with fear of a so-called generic other linked to the perceived danger of being "seen" or "found out"), other early negative emotions (usually interpersonal, such as fear directed towards a particular person [eg, perpetrator of abuse]) gave rise to similar bodily and psychological dynamics linked with participants' delusions and other psychiatric symptoms in later life (appendix pp 43–45).

The second subtheme ("It really turned my whole life upside down": coping with emotional upheavals before delusion onset; subtheme 1B) illustrated the affective-regulatory struggles that participants faced later in life, especially in adolescence and early adulthood, when stressful interpersonal events reactivated profound feelings of shame or brought about a sense of despair or loss of control. These later-life events were key to understanding how self-protective coping strategies (eg, experiential avoidance or imaginative immersion and absorption) shaped the content and phenomenology of participants' delusions and associated behaviours.

Many participants during their adolescence and young adulthood (eg, during their first romantic relationship, job experience, or move away from home) found themselves involved in relationships that initially appeared as a solution to their earlier shame, loneliness, and desire for social affirmation and meaning in life (eg, "Maybe she can fix me", Sally), but then became either abusive (causing further shame, anger, and anxiety—eg, Andy, Adam, and Isla), rejecting (eg, Sally), or both. These experiences, both in adolescence and in later life (eg, during marriage and motherhood), created a radical fracture (a so-called turning point) in their life narratives that brought about intense negative emotions accompanied by a sense of no longer seeing a future for themselves. Such emotions were profound (appendix p 2) and drastically affected key aspects of the person's identity.

Andy, for instance, found himself involved in an abusive relationship, doing "things that I regret", with someone who lies about their age, and was overwhelmed by profound feelings of shame:

> "I was [age] when this started [...] Yeah so he'd get me drunk and then we'd have—and then I did some things that I regret. So I regret everything about that relationship but yeah he'd get me drunk. And then when I turned [a year later] he revealed that he was in fact [younger age] and that really messed my head up so I started doing a shit ton of drugs like hard drugs in college because I wanted to just escape that feeling that I was like—I felt like an actual sex offender at the time. Like because he'd always threatened to kill himself. He's like if you try to leave me I'm going to kill myself, I was like alright we're breaking up then [...]"
>
> *Andy*

Other turning points in participants' lives involved, for instance, unrequited love (eg, Sally) or the break-up of a marriage or long-term relationship under degrading or life-threatening circumstances (eg, Tracey and Amelia). Differently from the avoidant coping described in shame, Sally, Amelia, and Jonathan described actively engaging with imagined or fictional (usually religious or spiritual)

narratives, often trying to restore the (subjectively lost) possibilities for love, truth, and salvation.

This engagement was described as increasingly engrossing and self-perpetuating, taking control over the person's behaviour (described by participants as "becoming obsessed" with particular ideas—eg, the idea of "manifestation" for Sally or "mark of the beast" for Jonathan). Although the intensity of this state of absorption seemed to fluctuate depending on other concurrent factors (eg, sleep or drugs), the imaginative engagement was described as fully embodied, giving rise to positive emotions of love, awe, and connectedness literally felt in the body (theme 2; figure 1). These states were then enacted, leading to partial or full motivational and behavioural engagement with the imagined role of a spiritual figure (eg, a God, vessel, or disciple of God obeying their commands), in a way that appeared partly outside of conscious control:

> "I was a spiritual person, but when the break-up happened I turned to it completely. Because it was such a difficult thing for me to do, I'd never gone through any kind of break-up before, my family weren't really there, I didn't feel like I could talk to them about it, and I didn't feel like they'd understand, and they wouldn't. But I turned to this idea of spirituality, and it made me feel happier and safer thinking that I had spirit guides. If you don't know what they are like, just like, say, like my ancestors or whatever it is, like an idea of God looking out for me. And I started to believe in God, and I started to believe that I was like a vessel of God, if you will. So I was walking along all happy, like barefoot. But it just got to the point where it was, like, dangerous."
>
> *Sally*

The second superordinate theme—the embodied, affective, and intersubjective constitution of delusory worlds as a unified conscious experience—involved exploration of participants' emotional lives as they transitioned from a situation where they were attempting to cope with overwhelming emotions (without access to adaptive resources for interpersonal affective regulation) to a situation where their state of emotional and motivational engagement with the world as a whole changed, signalling the onset of delusions. The transition led to a reconfiguration of the pragmatic relationship between self and world, reflected in a coordinated pattern of changes felt at the level of the lived body (appendix p 2). These changes affected both the way in which relevant objects, people, and events were disclosed to a particular subject (ie, their significance or meaning for the subject; the world-directed aspect of emotional intentionality), and the way in which the self was apprehended and projected towards the past and future (ie, the self-directed aspect of emotional intentionality).

The rearranged lived world was characterised by a certain way of understanding and representing the embodied-social self (eg, as blameworthy and vulnerable, loved and cared for, invincible, or the chosen one) and a corresponding way of perceiving others (eg, as ill-intentioned, caring, loving, to be dominated, to be helped). Each reconfiguration meant that the subject directly registered certain things in the world as significant or salient in a good or bad way, depending on the logic of that particular emotion and particular goals or concerns of the person (which could be more or less egosyntonic with the present situation).

Across participants, we found evidence of three prevalent experiential patterns, characterised by a unified conscious experience of self and other as mutually interdependent and intertwined elements of the same (delusional) reality (subthemes 2A Being under the spotlight: from embodied shame to almighty invincibility; 2B Being part of something bigger: from meaninglessness and absence to embodied love, awe, and hope; and 2C Being in a simulation: life without a body, cut off from others; figures 1, 2).

A common experiential shift (subtheme 2A), which seemed driven by the activation of shame, entailed a negative dialectical transformation of the self into a shameful identity, their lived world into a hostile and rejecting social world, and their lived body into a vulnerable and translucent medium (exposing or projecting internal thoughts, feelings, or actions). Shame here was not merely a proposition or belief about the self or a previous misdemeanour, but rather manifested as an all-encompassing mode of affective consciousness that transformed the perception of reality. Alongside the emergence into awareness of this self–world transformation, the body of the person (and that of the object of the interpersonal emotion) also participates in this unified felt-perception. Conversely, other people were represented as "watching", "following", "talking" about the person, or "taunting"; the subject's body was "being talked about" or "seen into" along a gradient of intensity that, at its extreme, rendered the person's lived body (appendix p 2) literally translucent and publicly exposed to others' scrutiny.

> "I feel more that they were hearing my thoughts and everything that I was saying people knew, more so than being able to enter my thoughts more. So like I felt as if what I was thinking was like painted on like a picture that I was holding. That's what it felt like to me. […] like broadcasting to other people instead of people being able to be inside my head and changing and challenging my thoughts. It was more like whatever I was thinking, whatever I was doing was just out for people to see."
>
> *Sandra*

For Sandra, this experiential configuration was fixed and stable, translating into the co-occurrence of themes of persecution, reference, guilt, and thought broadcasting. Others described fluctuations into a state characterised by opposing feelings of almighty power and invincibility. This invincibility state was variously described as associated with feelings of conceit, anger, euphoria, or

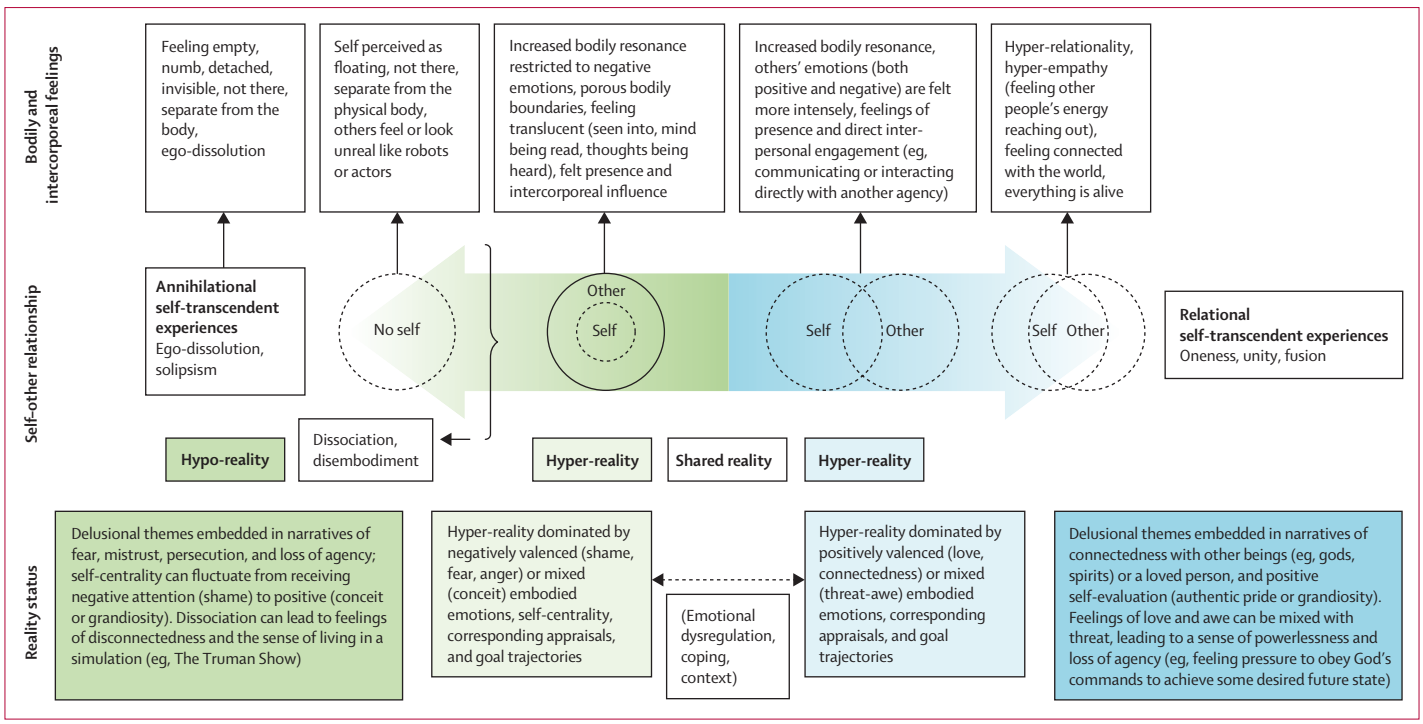

Figure 2: **Integrative model illustrating how delusional content (green and blue boxes) relates to underlying embodied and intercorporeal phenomenology and the corresponding experience of reality**

On the left (green) is the global transformation (driven by shame) of the lived world into a hostile and rejecting social world, and the lived body into a vulnerable and translucent medium that does not have privacy over the intrusion of the omnipresent gaze of the other (subtheme 2A). On the right (blue) is the predominantly positive transformation of the world driven by awe, love, and hope (subtheme 2B). In our study, some participants described dynamic, sometimes rapid, shifts between different emotions and world experiences, moving back and forth across the spectrum. These fluctuations were characterised by varying degrees of emotional instability shaped by factors such as coping strategies (eg, avoidance *vs* immersion or absorption), substance use, not getting enough sleep, and the affective character of the social and material environment. Because feelings of threat could be had both in relation to shame and awe (as in threat-awe), persecutory ideas were present at either side, but the representation of the self was negative on the left (eg, perceive themselves to be a "paedophile", "monster", or "bad person") and positive on the right (eg, a spiritual person, the "chosen one", or connected to God.). At the extreme ends are high-intensity self-transcendent experiences, which were described as positive (eg, similarly to peak and mystical experiences) when immersed in positive emotions, or negative when resulting from disembodiment in the context of predominantly negative embodied emotions (such as shame, fear, anger, and hubristic pride).

creativity (partly overlapping with standard grandiose or religious themes). Isla described these two opposing states as rapidly alternating, eventually leading into a delusory state characterised by dissociation (subtheme 2C). As feelings of euphoria took hold (and her perception of time and space changed), her self-assessment was also transformed. This was articulated, metonymically, through the concept of "being a god" (appendix pp 58–59):

> "It felt good at the time because I felt really euphoric. I felt really on top of the world, like I could do anything, anything that I wanted, I could go and get it. I felt, like, unstoppable. And everything felt really fast. [...] And I was really agitated. Everything really made me quite angry. But also, I felt really inspired. And I started all these new projects. I was feeling really creative. [...] But that's when also, I started to think things that probably aren't true. Like I used to think that I was a god, which now I look back on and I know that's not true, but at the time, it was 100% true. That's exactly what I was believing at the time. And there was no doubting it. I really felt I was a god. I could do anything. All I had to do was think about what I wanted, and everything would work out, and I could control anything. And I was, like, blessed and things like that, which obviously aren't true now, but [...] I felt like I could just do anything, anything that I put my mind to. I could change things, like in the real world, like I could change what people were thinking or [...] I just felt like I had power over everything. I also felt really invincible."
>
> *Isla*

For Isla, the unified conscious and embodied experience of being a god rapidly vanished following the prolonged ingestion of alcohol, as the state of bodily and mental arousal subsided, leading into feelings of despair and suicidality:

> "So, they went down again because we had another massive argument, and it made me feel really low again like I didn't want to be here. And then before, it just kind of switched, and I went back up to feeling elevated and feeling like a god and productive again. But it didn't last as long because I went to university and because it was, like, freshers' week and I hadn't really drunk much before, but I started to drink more, and I realised that it was helping slow things down in my brain. So, I just drank a lot, and I didn't stop drinking for a long time. I was drinking [...] Well, I'd wake up and drink a whole

> bottle of vodka. [...] And it did work because, as you can see, it went down. But it went down too much."
>
> *Isla*

In response to an aversive state of meaninglessness, hopelessness, and absence (subtheme 2B), some participants (especially Sally, Amelia, and Jonathan) described emerging mixed but predominantly positively valenced delusory worlds, characterised by a redemptive future-oriented narrative. This narrative was organised around a happily-ever-after plot entailing a mission, challenge, test, or good-versus-evil battle, culminating in the long-sought-after reward (eg, the object of unrequited love, immortality, justice).

The experience of being a subject in this world was characterised by feelings of being emotionally (and often physically) connected with and devoted to another expressive being or consciousness by whom they felt guided, loved, and protected. Most often, these feelings were mixed and coexisted with a sense of loss of agency as some, like Jonathan, also felt controlled or pushed by the same entity to do something in exchange for salvation or to have their desires satisfied (eg, "having a wife" and "going to heaven").

For Amelia, two entities were present, a benevolent God (also called "Light") and a fearsome agent ("Dark"), both described in the theories she learned from an online spiritual community. Within her delusory narrative, the two entities embodied and enacted the agentic source of a "profound loving feeling" and a "fear-based emotion". She felt both emotions being activated in her body, even when no one was around (with no apparent object):

> "I had to go into meetings with doctors and psychiatrists and I was still insisting... I respected their medical training and said, 'I understand you say psychosis but, again, I've experienced it and there's more to it than that.' I felt things around me. You can't explain how your body feels while that's happening. It's not just your brain creating something in my experience anyway. [...] It was a profound loving feeling and then a fear-based emotion."
>
> *Amelia*

Differently from the negative evaluation associated with the embodiment of shame, here the self was represented by appeal to adjectives, metaphors, or metonyms (eg, "pure" or "a vessel of God") that convey a positive evaluation:

> "But I felt like really, really pure, like completely, like there was nothing bad about me, and that's why I think I felt like I was connected to God [...]"
>
> *Sally*

At the bodily level, participants described a valued and welcomed sense of connectedness and hyper-relationality with all living beings. Often welcomed in other contexts such as psychedelic-assisted psychotherapy, this experience was, in Sally's case, felt to be discouraged by her doctors and dampened by antipsychotic medications:

> "I felt a lot more connected to everything, including inanimate objects and energy and electricity and whatever, but the medications that I'm on now, like, stop me from seeing that. I think that's something that if I was to say to my doctor or something, like, 'They seem alive', he'd be very concerned, probably. So it's not encouraged. But yeah, I have felt that way for about, um [...] I think, especially when I was [...] because I felt like everything holds energy, to a different extent. Like everything is alive, whether it's, like, conscious or not. I do believe that, like, especially nature and stuff, it feels like everything has energy, basically."
>
> *Sally*

Alongside persecutory themes stemming from embodied shame and intertwined with states of invincibility, some participants (especially Isla, Adam, and Andy) described a distinctive sense of living in a simulation, giving rise to delusions of unreality (subtheme 2C). Rather than being a constant feature of their delusory world, being in a simulation was described as either a transient phase of their psychosis or a more stable characteristic of later phases. Here the bodily self was usually described as "invisible" or "not there" (eg, Adam) or in a different reality, cut off and "really isolated from everything" (eg, Isla). Conversely, the lived body was characterised by a loss of bodily resonance resulting in the subjective feeling of emptiness and inability to feel one's own and others' emotions.

> "Yeah, I do feel like I'm sort of cut off from everything. Sometimes I feel like I'm in my own bubble and no one else can get through, like illusory as well. Sometimes if I look hard enough I can see other things. Like an example was I was at my old job and I was outside and I was looking down and I could see like a corridor in my mind. And I thought, 'Is that the real world?' Because sometimes I feel like I can see the real world through like this fake world, if I look hard enough. So everything looks like an illusion to me. I think it also happened on Saturday, I was out with some friends. I didn't get dizzy, it was like the feeling of getting dizzy without feeling dizzy, if that makes sense? It's kind of a weird way to describe it."
>
> *Adam*

At the bodily level, Adam described it as a sense of being empty and numb, unable to connect with other people and resonate with their bodies, unable to actually "express" his emotions in and through the body (note the difficulties of articulation as he says "I love my friends", "I'm not saying I don't feel anything for them" to indicate that he is not being "moved" by what he knows he should be feeling in the body). Here, what seems to be at stake is not the abstract sense in which he has knowledge of his love for them, but rather his bodily participation in a process of inter-bodily resonance ("I can't connect with people").

> "I have felt love before. I have felt happiness before and obviously I've got negative emotions like sadness and anger. I used to feel sadness quite a lot last year, two years ago maybe. But recently I've just started feeling completely like empty and numb. I find myself faking emotions a lot. So like I said in an earlier session, I feel like I can't connect with people. Like I'm faking a lot of emotions with my friends. Like I love my friends. I'm not saying I don't feel anything for them. [...]. Yeah, there's a lot of emptiness that I'm feeling. Or someone will tell a joke and I'll laugh and then as soon as they turn around I'm like straight-faced, like it wasn't even funny."
>
> *Adam*

In this unified conscious experience of reality, people appeared either fake, transparent, or like actors "put there for a reason" (eg, Adam). In the background, the sense of being under surveillance also persisted as the encounter with others continued to trigger fear of shameful exposure:

> "I have, like, fear of being acknowledged. Like, I get really, really anxious about, like, the world, and, like, people, or anything, not just people, like even if there's no people, like, just being seen. Like, I wish I was invisible. I hate [...] I really can't leave my house, because it feels like [...] it's like, in my house there's like a little shield, and I'm protected, and as soon as I leave my house, even if there's nobody there, I feel like I'm on show, and everything is watching me."
>
> *Isla*

Discussion

Our study integrated three different perspectives on delusions in first-episode psychosis—clinical, phenomenological, and narrative—generating a rich, nuanced understanding that accounts for the extended and situated nature of these phenomena. We found that, within an individual, delusional themes never occurred in isolation. Different themes were embedded within deeply personal and relational narratives, dynamically interweaving emotional representations of the self (eg, as a shameful or powerful person thinking they are a paedophile or God), other agents (eg, as dominant and punitive *vs* caring and comforting), bodily feelings (eg, feelings of exposure and vulnerability *vs* connection and togetherness), and goal trajectories (eg, delusory situations where participants felt pulled towards a goal or forced to carry out a mission).

This insight is relevant to dominant cognitive frameworks for investigating delusions,[33] which tend to segregate themes (eg, persecutory *vs* grandiose *vs* control), developing different theoretical and explanatory frameworks for each subtype. Our findings suggest that what is currently called a delusional theme corresponds to just one aspect of the person's broader, situated self-narrative (usually involving the interaction between the self and other social agents[34]), having both a synchronic and diachronic dimension. At the phenomenological level, this narrative expressed a global transformation of the relationship between self and world, seemingly mediated by either the emotional hyper-activation of the body or by disembodiment and ego dissolution. The emotional activation of the body was usually described as happening out of context, without object, or as being disproportionate relative to the situational context, and reflected the phenomenology of specific and sustained emotions such as shame (often alongside fear, anger, and hubristic pride), love (alongside authentic pride), and threat-awe. The idiographic analysis of each narrative showed that these two broader experiential profiles (ie, hyper-embodiment and disembodiment) could alternate (rapidly or over time), with a disembodied state often appearing as an attempt to cope with overwhelming emotions.

The grounding of delusory cognition in bodily and emotional patterns of activity could contribute to explaining the so-called fixity or evidence-resistance of a delusional belief. These fixity features do not simply reflect one's inability to correctly appraise evidence or a deficit in reasoning that could be corrected, for instance, by giving appropriate weight to one's list of achievements (eg, in the case of shame). Rather, evaluative pre-reflective cognitions about others (eg, as threatening, to be dominated, to be trusted) seem to be inflexibly coupled with specific bodily feelings (eg, feeling exposed or "on display", feeling powerful, feeling connected), corresponding conative states of action-readiness (eg, an urge to hide, to conquer, or to be committed to helping others), and evaluative representation of the self in relation to others (eg, as a bad person deserving rejection, a powerful agent with influence over others, or a valued and loved member of a community).

Our findings enrich previous phenomenologically informed and enactive approaches to delusions.[35–38] Enactive models stress the intersubjectivity of delusions based on the observation that our experience of the world is not a solitary achievement; rather, it emerges from coordinated, embodied, and interpersonal processes of sense making that require mutual understanding, negotiation of meanings, and alignment of perspectives.[35,39] As emotional responses are embedded and rely upon certain background frameworks[40] intimately linked with one's identity and life structure, circumstances of upheaval, such as those described by many participants as preceding the onset of delusions, will result in a lack of regulatory resources which were once available and the "need for exceptional forms of [emotional] regulation".[41]

Regarding classical phenomenological models of delusion formation (eg, distinguishing primary incomprehensible delusions as qualitatively different from secondary or delusion-like phenomena),[42] we found some thematic-experiential overlap across delusions in people with a first-episode psychosis who were diagnosed with schizophrenia and people with a first-episode psychosis who were diagnosed with other disorders

(bipolar affective disorder, brief psychotic disorder, etc). Invariant across delusory and non-delusory states of mind, irrespective of diagnosis, was a shift in mode of consciousness characterised by a distinctive evaluative, action-oriented, and bidirectional intentionality grounded in certain embodied and relational emotions—each having a specific intersubjective phenomenology. In our model, disembodied states (qualitatively more similar to the classical schizophrenia phenotype [ie, a loss or deficiency of self-presence and diminished attunement or immersion in the world]) seemed related to a later illness stage following periods of heightened arousal and compensatory attempts to detach (either voluntarily or automatically) from overwhelming emotional and bodily states. Larger samples are needed to enable a differential cross-diagnostic phenomenological characterisation and provide an empirically sound response to such questions.

Future interdisciplinary work should address the mechanisms whereby recurring and intense experiences of shame or other emotions lead to the pervasive and global shift in (social) reality experience, as evidenced by our EAWE findings. In our participants, while some emotions (eg, shame) were initially experienced as an appropriate response to specific life events (eg, bullying), they appeared to be sustained over time (after the cessation of the relevant stimuli) or disproportionally reactivated later on in life. This reactivation often occurred outside of conscious awareness, without an external object (which the person often appeared to be looking for; eg, in delusions of reference, individuals were looking for the hidden "camera" as the source of the feeling of being seen). Given participants' reliance on avoidant coping strategies (for negatively valenced emotions) or immersion-absorption (for positively valenced emotions having a strongly desired object),[13] these strategies might lead to (self-)sustaining patterns of embodied emotion simulation[43,44] affecting the basic sense of self and intersubjective reality. It has been suggested that bodily selfhood has a dual function: constituting the basic sense of self and shaping our "perception and pre-reflective conception of others as other selves incarnated in a motorly capable physical body with capacities and experiences similar to ours".[45]

Given the phenomenological centrality of the lived body in constituting delusional experiences and realities, our findings suggest mechanisms of embodied simulation of emotion[43,44] as a unifying and translational framework for understanding delusions and possibly other unusual experiences such as hallucinations.[46] This idea is supported by our findings of specific felt changes described by participants as pertaining to the affective dimension of intercorporeal interactions, the sense of bodily resonance, and the bodily experience of both real and fictional emotions. Future interdisciplinary work on delusions and psychosis could benefit from engaging more specifically with the neuroscience of empathy[47] and the puzzle of emotional consciousness.[48]

The emphasis on the lived body is consistent with the substantial role that metonymy seems to play in explaining the content of delusional narratives. A 2025 cognitive linguistics study has suggested that metonymy is more relevant than metaphor in understanding the links between basic bodily experiences and cognitive appraisals.[49] Similarly, Panther and Thornburg argued that primary metonymy is more adequate than primary metaphor to capture basic correlations between sense experience and emotions (eg, between the early experience of parental warmth and the emotion of parental love).[50] These claims align with findings in social psychology that reveal enduring symbolic connections between basic bodily experiences and social–cognitive judgements[51]—for example, between the early physical experience of parental warmth and feelings of trust towards others, or between smelling something foul and being mistrustful of individuals who smell fishy. Studies have shown that immoral acts can lead to reports of increased subjective bodyweight compared to control conditions, and that heightened feelings of guilt—rather than disgust, pride, or sadness—account for this sense of heaviness.[52] The experience of perceived translucent or transparent bodily boundaries in psychosis might also be related to feeling exposed or ashamed. Similarly, feelings of centrality might lead the person to feel like they are a spectacle (as in delusions of reference, where an imagined audience is constantly felt to be watching).

Clinically, our findings suggest that the structure of the social–affective environment has an important role in modulating the experiential character and thematic content of delusions. Familiar food, a soothing environment adapted to reduce the state of autonomic activation, and meaningful activities could alleviate some of the symptoms through a reduction of arousal (which some individuals in our study seemed to spontaneously attempt through dissociation). This idea is supported by studies that show the efficacy of the Soteria paradigm in supporting people with schizophrenia spectrum disorders using minimal medication.[53] A consistent, emotionally relaxing therapeutic environment has been suggested as a possible explanation for the effects attained through the Soteria approach.[54] This observation is particularly important in the context of low adherence, treatment resistance, and adverse effects.

Other potentially beneficial approaches are those targeting other components of affective systems, such as embodiment (eg, through movement-based interventions),[55,56] and biobehaviour synchrony in social interactions.[57] Given the intense metonymic activity we observed, psychological treatments for delusions could be enhanced by including elements whereby metonymic thought processes are gradually made explicit and discussed as a way to explore emotive content that the

person is unable to access or articulate.[58] This hypothesis could be explored in future work.

This study has limitations. Due to its exploratory nature and idiographic commitments, our project does not enable universal generalisations beyond the context and conditions of this study. Our sample included a high proportion of White participants, mostly female, who were able to engage in lengthy interviews requiring a degree of articulacy. The limitations of approaches that rely on verbal accounts should be acknowledged. Future phenomenological research should consider possibilities for integrating creative methods to broaden research participation and promote alternative ways of attending to lived experience.

Our research shows that unpacking the complexities of delusions requires rejecting their conceptualisation as purely cognitive, mental, or disembodied phenomena that are separate from perception, action, or affect and recognition of their embodied and intercorporeal character. Addressing the subjectivity of delusions and their rootedness in affective consciousness and in embodied processes of emotional regulation and intercorporeal attunement is key for advancing our understanding and treatment of delusions.

Contributors

RR led the conceptualisation, research design, data collection, data management, data analysis, and manuscript preparation. JL, BN, CSH, and MRB supervised the work and contributed to the design, theoretical interpretation, review, and editing of the manuscript. JL supervised the qualitative data analyses and conducted part of the analyses. MRB, BN, and CSH supported aspects of the analyses. All authors had full access to all the data in the study. MRB and BN acquired the financial support for the project leading to this publication. All authors read and approved the final manuscript. On agreement with all co-authors, RR had final responsibility for the decision to submit for publication. JL and MRB accessed and verified the data underlying the study.

Declaration of interests

We declare no competing interests.

Data sharing

The datasets presented in this Article are not readily available because of ethical reasons. Please contact the corresponding author to see any other data that are not included in the Article or the appendix.

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