

## Cognitive Behavioural Framework of Various Types of Delusions across Psychosis: A Phenomenological Study

Nikita Paliwal and Masroor Jahan

Ranchi Institute of Neuro-Psychiatry and Allied Sciences (RINPAS), Ranchi.

This study, conducted at a tertiary psychiatric hospital, examined the cognitive, behavioral, and phenomenological aspects of delusions, including persecutory, grandiose, nihilistic, and procreative delusions. Nine participants diagnosed with Schizophrenia, Schizoaffective Disorder, Bipolar Disorder with Psychotic Symptoms, and Cannabis-Induced Psychotic Disorder were selected using convenience-purposive sampling. Data were collected through the Brief Psychiatric Rating Scale, Mini-Mental State Examination-2, and semi-structured interviews. Informed consent was obtained from participants in remission or partial remission and from caregivers of those with active delusions. Interviews explored eight domains: worry, mood, cognition, self, interpersonal sensitivity, anomalous experiences, life satisfaction and distressful life events, and attribution or locus of control. Analysis using Giorgi's Descriptive Phenomenological method revealed key themes. Persecutory delusions, commonly seen in paranoid schizophrenia, were associated with poor self-concept and heightened emotional arousal. Individuals with grandiose delusions showed cognitive, behavioral, and perceptual deficits, with worry and sadness preceding onset, and were not disorder-specific. Delusion of procreation, seen primarily in schizophrenia, involved cognitive and behavioral deficits, auditory hallucinations, strained family relationships, restrictive parenting, and negative perceptions of others and the world. The findings highlight the importance of understanding delusional phenomenology to improve diagnosis and therapeutic management.

**Keywords:** delusion of persecution, delusion of grandiose, delusion of procreation, phenomenology, cognitive-behavioral symptoms, diagnosis, therapeutic management.

Despite significant medical advancements, treatment outcomes for major mental disorders have remained relatively stagnant, prompting a shift towards a transdiagnostic approach. Rather than focusing on specific diagnoses, this approach considers biological, psychological, social, cultural, and personal factors for understanding and treating psychopathology. Recently, this approach has proven valuable in studying delusions across psychotic disorders, which seeks common cognitive, emotional, and phenomenological factors contributing to delusional thinking. By examining these shared processes, the goal is to better

understand the factors driving delusional beliefs across psychosis.

Delusions are a central and pervasive symptom of psychosis, characterized as fixed, false beliefs resistant to evidence, indicating a disruption in an individual's perception of reality (Jaspers, 1968). Delusions, when classified by content, include persecutory, grandiose, nihilistic, infidelity-related, and delusional misidentification syndromes such as Capgras syndrome. A recent addition to the delusional spectrum is delusional procreational syndrome, which involves delusions about pregnancy, childbirth, and parental roles (Manjunatha et al., 2010).

Previously, the content of delusions was closely linked to specific psychiatric diagnoses. For instance, bizarre delusions were considered a key criterion for schizophrenia (DSM-IV), guilt-related delusions were associated with psychotic depression, grandiosity with bipolar mania, and persecution with schizophrenia (Picardi et al., 2018). However, these associations are no longer considered diagnostically useful due to their unreliability and lack of specificity.

Over the years, various theoretical frameworks have sought to account for the origins and persistence of delusions. Findings indicate that emotional disturbances, such as anxiety and depression, are linked to persecutory and grandiose delusions (Winters & Neale, 1983). The Jumping to Conclusions bias may contribute to the development of delusions, such as persecutory delusions (Bentall et al., 2001, as cited in Fine et al., 2007) and the Capgras delusion (Young, 2000, as cited in Fine et al., 2007). Deficits in theory of mind are implicated in all delusions, particularly in schizophrenia (Frith, 2015). Kapur (2003) suggested that delusions arise as the brain attempts to make sense of unusual sensory experiences.

Phenomenological studies have shown that low self-esteem and negative self-concept are significant risk factors for persecutory delusions (Kesting & Lincoln, 2013). Grandiose delusions were found to be linked to a lack of relationships or abusive interactions (Strand et al., 2015). Early interpersonal experiences, including victimization, are significantly associated with paranoid delusions (Dickson et al., 2016). Feyaerts et al. (2021) found that delusions reflect a shift in how individuals perceive the world, marked by uncertainty and disconnectedness, while Ritunnano et al. (2022) identified themes of searching for

meaning in delusions. Despite advances in understanding delusions, gaps remain, particularly regarding cultural factors, neurobiological mechanisms, and the role of early trauma.

The present study adopted an exploratory stance and aimed to understand how the lived worlds of persecutory, procreative, and grandiose delusions are phenomenologically structured in terms of self, emotion, body, relationships, and meaning; the cognitive, emotional, biological, and behavioral patterns that co-occur within these experiences; how these configurations manifest across psychotic diagnoses with tentative diagnostic linkages; how gender and socio-cultural context shape delusional content; and the implications for clinical formulation, distress maintenance, and coping.

## **Method**

This cross sectional, hospital based, qualitative study was conducted at a tertiary psychiatric hospital. A phenomenological design was adopted to explore the lived experience of persecutory, procreative, and grandiose delusions across psychotic diagnoses using Giorgi's Descriptive Phenomenological Psychological Method.

### **Participants**

Using convenience-purposive sampling, 33 clinical case records were screened; 15 patients with established delusions (Brief Psychiatric Rating Scale item score  $\geq 6$ ) were assessed in detail. After applying inclusion and exclusion criteria (age 18–60 years, Hindi/English literacy, capacity to consent, no significant cognitive impairment or organic pathology), 10 participants were eligible, of whom 1 was excluded as an unknown police case, resulting in a final sample of 9 participants (6 inpatients, 3 outpatients) with diagnoses of schizophrenia, schizoaffective

disorder, bipolar affective disorder with psychotic symptoms, or cannabis induced psychotic disorder (International Classification of Diseases, Tenth Revision, Diagnostic Criteria for Research).

### Procedure

Sociodemographic and clinical data were collected with a structured proforma. The Mini Mental State Examination 2 (or Hindi MMSE) was used to screen cognitive deficits, and the Brief Psychiatric Rating Scale to rate overall psychopathology and confirm the presence and severity of delusions; the Young Mania Rating Scale was used where indicated. A semi structured interview schedule, developed from prior literature and refined through expert review and pilot testing, covered affect, anomalous experiences, threat anticipation, cognitive biases, social and personal factors (self concept, locus of control, life events, trauma, search for meaning). Interviews (approximately 60 minutes) were audiorecorded and conducted with patients in remission or partial remission; for participants with active delusions, parallel interviews were conducted with key caregivers to obtain second person phenomenological descriptions.

The study adhered to ethical standards for human participant research. Informed consent was obtained from participants in partial remission and from caregivers of those with active psychopathology, after explaining the study's purpose, procedures, voluntary participation, and right to withdraw.

### Data Analysis

Interviews were transcribed verbatim and analysed manually using Giorgi's Descriptive Phenomenological Psychological Method. First, the researcher read each transcript several times to grasp the overall sense of the delusional experience in the person's everyday lifeworld. Second, the researcher adopted phenomenological attitude, diagnostic and theoretical presuppositions were bracketed to focus on how the experience was expressed by participants and informants. Third, transcripts were divided into psychological meaning units whenever a shift in meaning was perceived; these units captured specific aspects of the experience (e.g., threat, guilt, wish fulfillment). Fourth, each meaning unit was transformed into psychologically sensitive statements that made implicit meanings explicit, using imaginative variation while remaining grounded in the original expressions. Fifth, transformed units were synthesised into textural and structural descriptions for each case and then into cross case structures describing the psychological configuration of persecutory, procreative and grandiose delusions; these structures formed the basis for the cross case table and transdiagnostic themes reported in the Results. Throughout analysis, an audit trail of annotated transcripts and analytic memos was maintained to document coding decisions, theme development and reflexive notes, enhancing transparency and trustworthiness.

Table 1: Clinical-Profile of the Participants

Participant	Sex	Age	Diagnosis	Progress	Delusions	Hallucinations
P1	Male	35	Paranoid schizophrenia	Remission	Persecution, Grandiose	None
P2	Male	59	Schizophrenia	Active	Procreation	Auditory
P3	Female	37	Bipolar manic-psychotic	Active	Procreation	Auditory
P4	Female	47	Schizophrenia	Active	Procreation	Auditory
P5	Male	30	Cannabis psychosis	Active	Grandiose	Auditory

P6	Male	23	Cannabis psychosis	Partial remission	Grandiose	Auditory, visual
P7	Male	35	Schizoaffective-manic	Active	Grandiose	Auditory
P8	Male	30	Paranoid schizophrenia	Partial remission	Persecution	None
P9	Female	30	Paranoid schizophrenia	Partial remission	Persecution	Auditory

## Results

A total of 9 cases were analyzed. Due to space limitation here, two case analyses are described each with specific delusion, describing the content of the delusion, the personal context, the themes associated with the delusion further comprising the structural description of how it was experienced and textural description of what was experienced. Later cross case analysis results are summarized. Concluding with generalized findings across delusions irrespective of content.

### Case analysis

#### Case 1

*Participant A – Paranoid Schizophrenia (Delusion of Persecution and Delusion of Grandiosity)*

Mr. P.G., 35 years old, unmarried, Hindi-speaking, Hindu male from a middle socio-economic background, was apparently maintaining well before 2013. However, during his engineering course, he began experiencing adjustment and academic difficulties, which progressively led to paranoid thoughts and delusions. These delusions involved suspicions about his family and bizarre beliefs about aliens and predicting the future. After unsuccessful treatments at specialized psychiatric facilities, he struggled with intermittent employment, managing his condition with medication until his condition worsened again in 2021.

*Phenomenological Account of Participant A's Delusions:* It was understood that Mr. P.G.'s early life was significantly impacted by the loss of his father, which left him emotionally

vulnerable and triggered financial hardship for his family. This loss created a profound sense of inferiority and insecurity within him. He was naturally shy and sensitive, leading to adjustment problems in both social and academic settings. These challenges gradually caused him to struggle with concentration, eventually dropping out of his engineering course. He also had difficulty maintaining consistent employment. Over time, Mr. P.G. started attributing his difficulties to his uncle, whom he became convinced was conspiring against him in an effort to acquire the family's property. This belief led to increased paranoia, social withdrawal, and heightened psychological distress. Despite these challenges, Mr. P.G. was able to pass the CTET exam after multiple attempts, but this achievement did not alleviate his psychological symptoms. His condition worsened further, manifesting in deteriorating appetite, sleep disturbances, and a growing sense that everything around him was collapsing. He began to believe that everyone he cared about would die. These anomalous perceptions marked the onset of delusional thinking. Later, Mr. P.G. started talking to himself, engaging in conversations with deceased loved ones and a higher power. He also developed a belief that he possessed special abilities, specifically as a philosopher who could predict the future.

*Core Delusion (Persecution):* Mr. P.G.'s persecutory delusions involved a belief that his uncle had killed his father and was now conspiring to harm him and his family. He believed that his uncle was spying on him through water, satellite television, and even hearing their conversations.

“My uncle killed my father... they now want to harm me and my family, they are creating problems and are keeping an eye on me through water, they can see me in their television through satellite... can even hear our conversation.”

*Core Delusion (Grandiosity):* Mr. P.G. developed a grandiose delusion in which he believed he was a devoted follower of Lord Krishna and had the ability to predict the future, including foreseeing a global pandemic before the onset of COVID-19.

“I am a devotee of Lord Krishna... he has blessed me. I can see the future... long before corona I predicted some huge infection is going to infect the world and many people will die.”

Personal Context- Poor interpersonal relations, adjustment issues, setback in education

*Phenomenological Themes- Structural Description (How it was Experienced):* A sense of inferiority, sensitive and shy temperament, dependent personality traits, poor interpersonal relationships, negative perception about people, uncertainty about the future, high aspirations but poor self-concept, limited interaction with members of the opposite sex, decreased social interaction, external locus of control, and a belief that life was meaningless.

*Textural Description (What was Experienced):* Anxiety (overthinking, worry), depression (disturbed sleep, appetite, reduced self-esteem, marked loss of libido, constipation, social withdrawal), anomalous experiences, aggression, prediction, rearrangement of internal reality according to unfulfilled desires (wish fulfillment).

## Case 2

*Participant B – Schizophrenia (Delusion of Procreation)* Mr. A.J., 59 years old,

widower, English-speaking, Christian, with intermediate education, belonged to a lower-middle-class socio-economic background and came from a rural area. He was maintaining well until 2022. However, following the death of his wife due to physical abuse by him, Mr. A.J. refused to accept her death. Gradually, his sleep became disturbed, and he began to withdraw socially, talking to himself as if conversing with his deceased wife. His behavior became erratic, fluctuating between aggression and affectionate behavior. Eventually, he asked his niece to sleep with him and made inappropriate comments, leading to his admission to a psychiatric hospital.

*Phenomenological Account of Participant B's Delusions:* Corroborated findings suggest that Mr. A.J. had strained relations with his family, was extremely shy, and was sensitive to criticism, which contributed to poor interpersonal relations. His marital life was also troubled, particularly with his wife, who could not conceive. They later adopted a daughter, but Mr. A.J. struggled to adjust to the workplace, frequently changing jobs. He ultimately stopped working about 20 years ago, claiming he could not work under someone. He became abusive and assaultive behavior toward his wife, often blaming her for everything that went wrong and accusing her of infidelity. Following his wife's death, Mr. A.J. denied it, developing persecutory beliefs and retreating into a fantasy world. He claimed communication with deceased relatives and adopted grandiose identities, including believing he was Christ. His delusional beliefs became more bizarre, and he began to wander into jungles, even though he remembered the routes.

*Core Delusion (Procreation):* Mr. A.J.'s delusion of procreation involved the belief that his deceased wife had been replaced by a woman who looked exactly like her. He

also believed that his current wife had given birth to twins that resembled him.

“The day my first wife Flora was declared dead by doctors... the very next day second Flora came, my second wife, she looked exactly like Flora, though a little shorter, but she signed like her... she was Flora... Flora never died but when I asked her, she said”I am not Flora, try to forget everything’.”

“My third wife Preeti told me on 14 March 2023, she delivered twins (sons) and they look exactly like me.”

*Core Delusion (Infidelity):* Mr. A.J. also had a delusion of infidelity regarding his first wife, believing she was unfaithful and accusing men of being attracted to her.

“I have been married three times, my first wife Flora had multiple relations... men would look at her and smile... why would men be so attracted to her. She must be having relations with them.”

*Core Delusion (Grandiosity):* Mr. A.J. developed a delusion of grandeur in which he believed he had attended Cambridge University, worked as a chartered accountant, received a substantial pension, and could predict the weather.

“I did my bachelors from Cambridge university... I worked as a chartered

accountant... I get a pension of rupees eleven lakh per month... I am protected, I have never been ill in my entire life... whatever I wish, I say comes true... I said it would rain in Jharkhand but the harvest would be poor and it happened.”

Personal Context: Strained relations with family of origin, strained marital relationship, Guilt from his wife’s death

*Phenomenological Themes- Structural Description (How it was Experienced):* Strained familial relations, strained interpersonal relations, poor interpersonal adjustment, strained marital relationships, guilt surrounding his wife’s death, and negative perceptions of people.

*Textural Description (What was Experienced):* Suspiciousness, aggression, social withdrawal, inappropriate behavior, wandering, disturbed sleep, and disturbed appetite.

These phenomenological accounts highlight the complexities of delusional thinking in schizophrenia, with each participant’s delusions being shaped by personal experiences, emotional struggles, and socio-cultural factors.

Table 2a. Biological, Cognitive, and Emotional Domains Across Delusions (cross case analysis)

Domain	Delusion of Procreation	Delusion of Persecution	Delusion of Grandiose
Biological symptoms	Decreased sleep, increased libido	Decreased sleep, decreased appetite and libido	Decreased sleep, decreased appetite, increased libido
Cognitive symptoms	Tangentiality, poor memory, poor insight	Impaired reasoning, poor judgement	Tangentiality, circumstantiality, poor insight
Emotional symptoms	Aggression, sadness, loneliness	Anxiety, worry, fear, loneliness	Sadness, wish fulfillment, fear

Table 2b. Behavioral, Perceptual, and Phenomenological Domains Across Delusions (cross case analysis)

Domain	Delusion of Procreation	Delusion of Persecution	Delusion of Grandiose
Behavioural symptoms	Wandering, poor hygiene, self-talk	Social withdrawal, aggression towards family	Over-religiosity, self-talk, social withdrawal
Perceptual disturbances	Auditory hallucinations	None elicited in some cases	Auditory and visual hallucinations, misidentification
Phenomenological themes	Restrictive parenting, strained marital relations, infertility guilt	Poor self-concept, external locus, negative view of others	Poor self-concept, high aspirations, financial stress, religious preoccupation

Table 3. Commonalities Across All Delusions

Sequence of Development	Key Precipitants	Maintenance Factors
1. Emotional distress (anxiety, fear, sadness, loneliness)	Poor self-concept, interpersonal difficulties	External locus of control
2. Biological disruption (sleep/appetite changes)	Heightened emotions from life stressors	Social withdrawal/aggression
3. Perceptual changes (hallucinations)	Trauma, adjustment failures	Cognitive biases (externalizing)
4. Cognitive/behavioural delusions	Negative world view	Self-reinforcing cycle

Note.\* Transdiagnostic framework from cross-case synthesis (n=9).

### Discussion

This study provides insights into the manifestation and progression of various delusions. The findings suggest that the delusion of procreation was more commonly observed in women, in contrast to Manjunatha & Saddichha (2008), who found it to be equally prevalent in both genders. This difference may point to the influence of gender-specific factors, such as hormonal differences or social roles. Delusions of procreation, infidelity and grandiose (identity) coexisted (3/3 cases). Although Manjunatha et al., 2013, found that all cases with delusions of procreation were diagnosed with schizophrenia (ICD-10). However, the above authors also noted that Delusion of Procreation Syndrome may not be specific to Schizophrenia. The findings are in line

with the past literature as 2/3 cases had schizophrenia as diagnosis (ICD10), however, 2/3 cases also received a differential of schizoaffective disorder, suggesting presence of prominent mood fluctuations might also accompany delusion of procreation. Regardless of the diagnosis, delusion of procreation were often associated with cognitive deficits, including irrelevant speech, thought disturbances (e.g., tangentiality, circumstantiality), impaired reasoning, attention deficits, poor remote memory, impaired judgment, and limited insight. Emotionally, significant aggression towards family members, hostility, and worries about spouses or children, were noted. Auditory hallucinations, which preceded the delusions, were also reported. Behaviorally, all three participants exhibited major deficits,

including wandering, poor hygiene, self-talk, over-religiosity. Phenomenologically, all three participants had histories of strained familial relationships with family of origin, restrictive parenting, marital conflict, and negative perceptions of others. Additionally, the participants external locus of control and difficulties with conceiving children, unfulfilled wish for son (in all cases) could be understood within the socio-cultural context (patriarchal) and as repressed desires for parenthood and thus we can understand delusion of procreation as psychodynamic defense mechanisms addressing emotional concerns as also proposed by Qureshi et al. (2001). The sequence of delusions, with infidelity preceding procreation, further supports the idea that unresolved marital issues contribute to delusional thinking.

The present study found persecutory delusions to be more prevalent in men; this contrasts with earlier findings by Musalek et al. (1989), which indicated a higher prevalence in women. The temporal sequence (in case of polythematic delusions) of persecutory delusions preceding grandiose delusions in paranoid schizophrenia can be understood in the light of earlier research which suggests that persecutory delusions may initially arise in response to feelings of threat or fear, later evolving into grandiose, self-enhancing delusions (Jones et al., 2016). Delusion of persecution was found to be associated with biological symptoms of decreased sleep, appetite, and libido. While cognition remained largely intact; however reasoning and social judgment were impaired. Emotionally, participants experienced sadness, loneliness, worry, overthinking, and apprehension about the future prior to the delusion's onset. During the active phase, aggression became dominant. These findings align with previous studies by Bentall et al. (2009), who found that emotions, particularly worry and sadness, play a

significant role in delusion formation. Also, phenomenologically, very limited interaction with members of the other gender, adjustment issues at workplace and poor interpersonal relations, external locus of control, social withdrawal, poor self-esteem were observed. These findings support Bentall, Kindermann, and Kaney's (1994) theory that persecutory delusions arise from externalizing attributional biases to protect the self-image.

The present findings indicate that grandiose delusions are more prevalent in men and do not appear to be linked to any particular diagnosis. This contrasts with Knowles (2011), who found that grandiose delusions were most common in individuals diagnosed with bipolar disorder, affecting approximately 66.67% of these patients. Grandiose delusions were characterized by biological symptoms like decreased sleep, appetite, increased libido. Cognitive impairments such as impaired memory, reasoning, formal thought disturbances, and worry. Emotional precursors to grandiose delusions included sadness, loneliness, and apprehension. Negative perceptions of people from other religions or sexes were also reflected in participants' delusions. Behavioral disturbances like poor hygiene, social withdrawal, aggression, over-religiosity, and self-talk were observed. Perceptual disturbances, particularly auditory hallucinations, were noted in association with both persecutory and grandiose delusions, indicating that hallucinations play an important role in the formation and maintenance of delusions. Additionally, the relationship between cannabis use and visual hallucinations, including misidentification delusions, suggests that substance use can exacerbate or contribute to the onset of psychotic symptoms in individuals with pre-existing vulnerabilities.

The findings propose that the temporal development of polythematic delusions can aid diagnoses and therapeutic interventions.

Persecutory delusions alone or developing prior to grandiose delusions are suggestive of paranoid schizophrenia, with prominent disturbances in emotions. Delusion of procreation syndrome are suggestive of schizophrenia with prominent disturbances in behavior, although mood symptoms also need careful consideration. Lastly, delusion of grandiose was found to be related to a number of diagnoses with prominent disturbances in emotion and cognition. Finally, the findings support previous research suggesting that delusions function as wish fulfilment and hold significant meaning when viewed phenomenologically. Participants reported less overt emotional distress during the active phase of delusion, implying that delusions may act as protective mechanisms, helping individuals cope with psychological suffering (Roberts, 1991; Gunn & Bortolotti, 2018). The chronological development of delusions in this study followed a predictable pattern: emotional disturbances first, followed by biological disruptions, perceptual changes, and cognitive and behavioral disturbances. Common themes across delusions included an external locus of control, poor self-concept, and interpersonal difficulties, underlining the importance of these factors in delusion formation and maintenance.

This study contributes to the understanding of delusions by examining the sequence of emotional, cognitive, and biological factors involved in their development. Delusions of procreation, persecution, and grandiosity are linked to specific cognitive, emotional, and behavioral disturbances, suggesting the need for tailored interventions such as Cognitive Behavioral Therapy, Dialectical Behavioral Therapy, Interpersonal Social Rhythm Therapy, and Social Skills Training. Despite the study's small sample size and limitations in distinguishing delusional symptoms from broader psychopathology, it provides

important insights into the progression of delusions and their diagnostic significance. Future research with larger samples and longitudinal studies, focusing on gender differences and other socio-cultural factors, will be crucial for refining diagnostic and treatment strategies.

## References

- 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(3), 331–341. [https://doi.org/10.1016/0005-7967\(94\)90131-7](https://doi.org/10.1016/0005-7967(94)90131-7)
- 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. *Archives of General Psychiatry*, 66(3), 236–247. <https://doi.org/10.1001/archgenpsychiatry.2009.1>
- Boyd, T., & Gumley, A. (2007). An experiential perspective on persecutory paranoia: A grounded theory construction. *Psychology and Psychotherapy: Theory, Research and Practice*, 80(1), 1–22. <https://doi.org/10.1348/147608306X100536>
- Dickson, J. M., Barsky, J., Kinderman, P., King, D., & Taylor, P. J. (2016). Early relationships and paranoia: Qualitative investigation of childhood experiences associated with the development of persecutory delusions. *Psychiatry Research*, 238, 40–45. <https://doi.org/10.1016/j.psychres.2016.02.006>
- Feyaerts, J., Kusters, W., Van Duppen, Z., Vanheule, S., Myin-Germeys, I., & Sass, L. (2021). Uncovering the realities of delusional experience in schizophrenia: A qualitative phenomenological study in Belgium. *The Lancet Psychiatry*, 8(9), 784–796. [https://doi.org/10.1016/S2215-0366\(21\)00196-6](https://doi.org/10.1016/S2215-0366(21)00196-6)
- Fine, C., Gardner, M., Craigie, J., & Gold, I. (2007). Hopping, skipping or jumping to conclusions? Clarifying the role of the JTC

- bias in delusions. *Cognitive Neuropsychiatry*, 12(1), 46–77. <https://doi.org/10.1080/13546800600750597>
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state": A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12(3), 189–198.
- Freeman, D., Dunn, G., Fowler, D., Bebbington, P., Kuipers, E., Emsley, R., Jolley, S., & Garety, P. (2012). Current paranoid thinking in patients with delusions: The presence of cognitive-affective biases. *Schizophrenia Bulletin*, 39(6), 1281–1287. <https://doi.org/10.1093/schbul/sbs145>
- Freeman, D., Pugh, K., Antley, A., Slater, M., Bebbington, P., Gittins, M., & Garety, P. (2008). Virtual reality study of paranoid thinking in the general population. *The British Journal of Psychiatry*, 192(4), 258–263.
- Freeman, D., Stahl, D., McManus, S., Meltzer, H., Brugha, T., Wiles, N., & Bebbington, P. (2012). Insomnia, worry, anxiety and depression as predictors of the occurrence and persistence of paranoid thinking. *Social Psychiatry and Psychiatric Epidemiology*, 47(8), 1195–1203. <https://doi.org/10.1007/s00127-011-0433-1>
- Frith, C. D. (2015). *The cognitive neuropsychology of schizophrenia: Classic edition*. Psychology Press.
- Giorgi, A. (2012). The descriptive phenomenological psychological method. *Journal of Phenomenological Psychology*, 43(1), 3–12. <https://doi.org/10.1163/156916212X632438>
- Gunn, R., & Bortolotti, L. (2018). Can delusions play a protective role? *Phenomenology and the Cognitive Sciences*, 17(4), 813–833. <https://doi.org/10.1007/s11097-017-9515-7>
- Jakes, S., Rhodes, J., & Issa, S. (2004). Are the themes of delusional beliefs related to the themes of life-problems and goals? *Journal of Mental Health*, 13(6), 611–619. <https://doi.org/10.1080/09638230400024877>
- Jaspers, K. (1968). The phenomenological approach in psychopathology. *British Journal of Psychiatry*, 114(516), 1313–1323. <https://doi.org/10.1192/bjp.114.516.1313>
- Jones, N., Kelly, T., & Shattell, M. (2016). God in the brain: Experiencing psychosis in the postsecular United States. *Transcultural Psychiatry*, 53(4), 488–505. <https://doi.org/10.1177/1363461516660902>
- Kapur, S. (2003). Psychosis as a state of aberrant salience: A framework linking biology, phenomenology, and pharmacology in schizophrenia. *American Journal of Psychiatry*, 160(1), 13–23. <https://doi.org/10.1176/appi.ajp.160.1.13>
- Kesting, M. L., & Lincoln, T. M. (2013). The relevance of self-esteem and self-schemas to persecutory delusions: A systematic review. *Comprehensive Psychiatry*, 54(7), 766–789. <https://doi.org/10.1016/j.comppsy.2013.03.002>
- Knowles, R., McCarthy-Jones, S., & Rowse, G. (2011). Grandiose delusions: A review and theoretical integration of cognitive and affective perspectives. *Clinical Psychology Review*, 31(4), 684–696. <https://doi.org/10.1016/j.cpr.2011.02.009>
- Maher, B. A. (1974). Delusional thinking and perceptual disorder. *Journal of Individual Psychology*, 30, 98–113.
- Manjunatha, N., & Saddichha, S. (2008). Delusion of pregnancy associated with antipsychotic induced metabolic syndrome. *The World Journal of Biological Psychiatry*, 10(4 Pt 2), 669–670. <https://doi.org/10.1080/15622970802505800>
- Manjunatha, N., Reddy, S. K., Devi, N. R. R., Rawat, V., Bijjal, S., Kumar, N. C., Kumar, K. V. K., Thirthalli, J., & Gangadhar, B. N. (2013). Delusional procreation syndrome: Report from TURUVE CARE community intervention program. *Indian Journal of*

- Psychological Medicine*, 35(2), 214–216. <https://doi.org/10.4103/0253-7176.116261>
- Manjunatha, N., Sarma, P. K., Math, S. B., & Chaturvedi, S. K. (2010). Delusional procreation syndrome: A psychopathology in procreation of human beings. *Asian Journal of Psychiatry*, 3(2), 84–86. <https://doi.org/10.1016/j.ajp.2010.02.001>
- Musalek, M., Berner, P., & Katschnig, H. (1989). Delusional theme, sex and age. *Psychopathology*, 22(5), 260–267. <https://doi.org/10.1159/000284606>
- Picardi, A., Fonzi, L., Pallagrosi, M., Gigantesco, A., & Biondi, M. (2018). Delusional themes across affective and non-affective psychoses. *Frontiers in Psychiatry*, 9, Article 132. <https://doi.org/10.3389/fpsy.2018.00132>
- Pietkiewicz, I. J., K<sup>o</sup>osińska, U., & Tomalski, R. (2021). Delusions of possession and religious coping in schizophrenia: A qualitative study of four cases. *Frontiers in Psychology*, 12, Article 628925. <https://doi.org/10.3389/fpsyg.2021.628925>
- Qureshi, N. A., Al-Habeeb, T. A., Al-Ghamdy, Y. S., Abdelgadir, M. H., & Quinn, J. G. (2001). Delusions of pregnancy in Saudi Arabia: A socio-cultural perspective. *Transcultural Psychiatry*, 38(2), 231–242. <https://doi.org/10.1177/136346150103800206>
- Rhodes, J., & Jakes, S. (2010). Perspectives on the onset of delusions. *Clinical Psychology & Psychotherapy*, 17(2), 136–146. <https://doi.org/10.1002/cpp.675>
- Seeman, M. V. (2014). Pseudocyesis, delusional pregnancy, and psychosis: The birth of a delusion. *World Journal of Clinical Cases*, 2(8), 338–344. <https://doi.org/10.12998/wjcc.v2.i8.338>
- Strand, J., Olin, E., & Tidefors, I. (2013). “I divide life into different dimensions, one mental and one physical, to be able to handle life, you know?” Subjective accounts of the content of psychotic symptoms. *Clinical Psychology & Psychotherapy*, 22(2), 106–115. <https://doi.org/10.1002/cpp.1872>
- Tiwari, S. C., Tripathi, R. K., & Kumar, A. (2009). Applicability of the Mini-mental state examination (MMSE) and the Hindi Mental State Examination (HMSE) to the urban elderly in India: A pilot study. *International Psychogeriatrics*, 21(1), 123–128.
- Winters, K. C., & Neale, J. M. (1983). Delusions and delusional thinking in psychotics: A review of the literature. *Clinical Psychology Review*, 3(2), 227–253. [https://doi.org/10.1016/0272-7358\(83\)90014-4](https://doi.org/10.1016/0272-7358(83)90014-4)
- Yadav, T., Balhara, Y. P. S., & Kataria, D. K. (2012). Pseudocyesis versus delusion of pregnancy: Differential diagnoses to be kept in mind. *Indian Journal of Psychological Medicine*, 34(1), 82–84. <https://doi.org/10.4103/0253-7176.96171>
- Young, R. C., Biggs, J. T., Ziegler, V. E., & Meyer, D. A. (1978). A rating scale for mania: reliability, validity and sensitivity. *The British journal of psychiatry*, 133(5), 429–435.

**Nikita Paliwal**, MPhil Clinical Psychology, Department of Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Sciences (RINPAS), Ranchi.

**Masroor Jahan**, PhD, Additional Professor, Department of Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Sciences (RINPAS), Ranchi.