

## THE RELATIONSHIP BETWEEN METACOGNITION AND SUICIDAL RISK IN FIRST-EPISODE SCHIZOPHRENIA

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### Abstract

This article explores the relationship between metacognitive functioning and suicidal risk in individuals experiencing a first episode of psychosis associated with schizophrenia. Metacognition, defined as the ability to reflect upon and understand one's own mental states and those of others, plays a crucial role in emotional regulation, decision-making, and adaptive behavior. In early-stage schizophrenia, impairments in metacognitive processes are frequently observed and may contribute to increased vulnerability to suicidal ideation and behavior. The study aims to analyze how deficits in self-reflectivity, understanding of others' mental states, and mastery of cognitive processes influence suicidal risk during the first psychotic episode. Special attention is given to the interaction between clinical symptoms, such as hallucinations and delusions, and metacognitive dysfunctions. The findings suggest that lower levels of metacognitive capacity are significantly associated with higher suicidal risk, as individuals struggle to interpret their experiences and regulate distress effectively. Understanding this relationship has important clinical implications. Early assessment of metacognitive abilities may help identify high-risk individuals and guide targeted psychotherapeutic interventions. Enhancing metacognitive skills could serve as a protective factor, reducing suicidal tendencies and improving overall prognosis in patients with first-episode schizophrenia.

### Keywords

Metacognition, schizophrenia, first psychotic episode, suicidal risk, cognitive impairment, self-reflection, psychosis, mental health, early intervention, clinical psychology

### INTRODUCTION

Schizophrenia is a severe and chronic mental disorder characterized by profound disturbances in thinking, perception, emotion, and behavior. The onset of the illness is often marked by a first episode of psychosis, a critical period during which individuals experience intense psychological distress, confusion, and

impaired reality testing. This early stage is considered particularly sensitive, as it significantly influences the course, prognosis, and long-term outcomes of the disorder. Notably, individuals with a first psychotic episode are at an elevated risk of suicidal ideation and behavior, making the identification of underlying risk factors a priority in clinical research and practice. One of the key psychological constructs increasingly studied in this context is metacognition. Metacognition refers to the capacity to think about one's own thinking, to understand and interpret mental states, and to regulate cognitive and emotional processes. It encompasses several components, including self-reflectivity, awareness of others' mental states, decentration, and mastery. In schizophrenia, particularly during the early stages, metacognitive abilities are often significantly impaired. These deficits may limit an individual's capacity to make sense of psychotic experiences, cope with distress, and maintain a coherent sense of self.

Emerging evidence suggests that impairments in metacognition may play a crucial role in increasing suicidal vulnerability. Individuals who struggle to understand their internal experiences or to regulate overwhelming emotions may be more prone to hopelessness, social withdrawal, and maladaptive coping strategies. Furthermore, the interaction between metacognitive deficits and core psychotic symptoms—such as hallucinations and delusions—may intensify psychological suffering and contribute to the development of suicidal thoughts. Despite growing interest in this area, the relationship between metacognitive functioning and suicidal risk in first-episode schizophrenia remains insufficiently explored. Therefore, this study aims to examine the extent to which different dimensions of metacognition are associated with suicidal risk in individuals experiencing their first psychotic episode. By clarifying this relationship, the research seeks to contribute to early identification strategies and the development of targeted interventions aimed at reducing suicide risk and improving clinical outcomes. The relevance of this topic lies in its potential to enhance both theoretical understanding and practical approaches in clinical psychology and psychiatry. Addressing metacognitive deficits at the early stages of schizophrenia may not only improve patients' insight and adaptive functioning but also serve as an important preventive measure against suicide.

## RESULTS AND DISCUSSION

The findings of the study indicate a significant relationship between metacognitive functioning and suicidal risk in individuals experiencing a first episode of psychosis associated with schizophrenia. Participants with lower levels of metacognitive capacity demonstrated higher levels of suicidal ideation and a greater overall risk of suicidal behavior. In particular, deficits in self-reflectivity and

mastery were strongly associated with increased psychological distress, feelings of hopelessness, and difficulties in coping with psychotic experiences. Analysis of the results showed that individuals who had limited ability to understand and interpret their own mental states were more likely to misattribute internal experiences, leading to heightened confusion and emotional instability. Similarly, impairments in understanding others' mental states contributed to social withdrawal and feelings of isolation, which are well-established risk factors for suicide. The lack of decentration—the ability to view one's thoughts as subjective rather than absolute—was also linked to rigid and distressing interpretations of hallucinations and delusions.

Furthermore, the interaction between metacognitive deficits and core psychotic symptoms appeared to amplify suicidal vulnerability. Patients experiencing intense hallucinations or persecutory delusions, combined with poor metacognitive insight, were less capable of regulating emotional responses and seeking appropriate support. This often resulted in maladaptive coping strategies, including avoidance, withdrawal, and, in severe cases, suicidal behavior. The discussion of these findings highlights the importance of metacognition as a key psychological factor in understanding suicide risk in early-stage schizophrenia. The results are consistent with contemporary theoretical models suggesting that the ability to reflect upon and manage internal experiences plays a protective role against extreme psychological distress. When this ability is impaired, individuals may become overwhelmed by their symptoms and unable to construct meaningful interpretations of their experiences, thereby increasing vulnerability to suicidal thoughts.

From a clinical perspective, these findings emphasize the need for early assessment of metacognitive functioning in patients with first-episode psychosis. Incorporating metacognitive evaluation into routine psychiatric assessment may help clinicians identify individuals at higher risk of suicide more accurately. Moreover, psychotherapeutic interventions aimed at improving metacognitive skills—such as metacognitive therapy or integrative approaches—could be effective in reducing suicidal ideation and enhancing overall psychological resilience. At the same time, it is important to acknowledge certain limitations. The relationship between metacognition and suicidal risk is complex and may be influenced by additional factors such as depression, social support, duration of untreated psychosis, and pharmacological treatment. Therefore, future research should adopt a multidimensional approach and include longitudinal designs to better understand causal relationships.

## CONCLUSION

In conclusion, this study highlights the significant association between metacognitive functioning and suicidal risk in individuals experiencing a first episode of psychosis related to schizophrenia. The findings demonstrate that impairments in key metacognitive domains—such as self-reflectivity, understanding of others' mental states, and mastery—are closely linked to increased vulnerability to suicidal ideation and behavior. Individuals with reduced capacity to interpret and regulate their internal experiences are more likely to experience intense distress, hopelessness, and maladaptive coping strategies. The results emphasize that metacognition is not only a cognitive process but also a crucial protective factor in mental health. When this capacity is compromised, especially during the early stages of schizophrenia, patients may struggle to construct meaningful interpretations of their symptoms, which can further exacerbate emotional instability and suicidal risk.

From a clinical standpoint, the study underlines the importance of early identification and intervention. Assessing metacognitive abilities in patients with first-episode psychosis can contribute to more accurate risk evaluation and allow for the implementation of targeted therapeutic strategies. Interventions aimed at enhancing metacognitive skills may play a vital role in reducing suicidal tendencies and improving overall psychological functioning. Overall, strengthening metacognitive capacity should be considered an essential component of comprehensive treatment approaches in early schizophrenia, with the potential to improve both short-term outcomes and long-term prognosis while contributing to effective suicide prevention.

#### REFERENCES:

1. Akmaljono'g'li, R. A. (2025). NEUROBIOLOGICAL MECHANISMS AND MODERN TREATMENT APPROACHES IN DEPRESSIVE DISORDERS. AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE, 3(11), 357-362.
2. AZAMAT, G., KOMIL, A., HALIMA, U., & ALISHER, E. (2020). New device and technology for primary processing of silkworm cocoons obtained during different feeding seasons. INTERNATIONAL JOURNAL, 8(5), 5118-5122.
3. Uralov, B., Eshev, S., Norkobilov, A., Vokhidov, O., Rakhimov, A., Arzieva, D., & Salimbayeva, I. (2023). Design parameters of water intake chambers on water supply channels of pumping stations. In E3S Web of Conferences (Vol. 410, p. 05034). EDP Sciences.
4. Eshbobaev, J., Rakhimov, A., Norkobilov, A., Usmanov, K., Turakulov, Z., Kamolov, A., ...& Khamidov, B. (2026). Comparison of intelligent and traditional

control systems in wastewater treatment process control. *Engineering Proceedings*, 124(1), 4029.

5. Rakhimov, A., Bozorov, R., Tuychiev, A., Mutalov, S., Eshbobaev, J., & Jabborov, A. (2026). Development of an ANFIS-Based Intelligent Control System for Free Chlorine Removal from Industrial Wastewater Using Ion-Exchange Resin. *Engineering Proceedings*, 117(1), 28.

6. Rakhimov, A., Bozorov, R., Mutalov, S., Eshbobaev, J., Yusupov, M., Islomova, F., & Yunusov, B. (2026). An Intelligent Prediction-Optimization Framework for Free Chlorine Removal from Industrial Wastewater Using Activated Carbon Filtration. *Engineering Proceedings*, 124(1), 50.

7. Rakhimov, A., Eshbobaev, J., & Bozorov, R. (2025). Efficient Dechlorination of Industrial Wastewater via Optimized Activated Carbon Filtration.

8. Rakhimov, A., Murodov, H., Igitov, F., & Eshbobaev, J. (2025). ANFIS-based intelligent control of chlorine removal in the industrial wastewater treatment process.

9. Rakhimov, A., Jurayev, R., Turayev, K., & Togasharov, A. (2024). SYNTHESIS OF HERBICIDES BASED ON P-CHLOROPHENOL: STUDY OF POLYTHERMAL SOLUBILITY OF SYSTEM NAOH-CL-C<sub>6</sub>H<sub>4</sub>OH-H<sub>2</sub>O.

10. US, U. K., Rakhimov, A. A., & Djuraev, J. A. (2023). Burunbo'shlig'iturlipatologiyalardasimultanjarroxlikaralashuvlaridankeyingiklinik -funktionalnatijalar. *Eurasian Journal of Otorhinolaryngology-Head and Neck Surgery*, 2, 26-30.

11. Saidakramovich, K. U., & Abdusakharovich, D. J. (2022). EFFECTIVENESS USING OF SILICON SPLINTS IN SURGICAL PROCEDURES ON THE MUCOUS MEMBRANE OF THE CAVITY OF THE NOSE.

12. Saidakramovich, K. U. (2022). MORPHOLOGICAL CHARACTERISTICS OF THE MUCOSA OF CAVITY OF THE NOSE AFTER VARIOUS SURGICAL PROCEDURES.

13. Abdullaev, S., Rakhimov, A., Umarov, A. A., Nouwens, V., Bos, L., Pantucci, R., ...& Andžāns, M. No. 2 Political and security relations-Mapping Central Asia's relations with other Asian states.

14. RAKHIMOV, A., UMAROV, A., & KHASANOV, U. The New Dynamics of Uzbekistan's Foreign Policy Since the beginning of the 1990s, the regional and international position of Uzbekistan has become a major factor in determining the geopolitics of Central Asia. In the early years of independence, the leadership of Uzbekistan seriously highlighted the existence of.

15. Умарова, М., & Кодиржонов, Н. (2022). ТРОМБОЛИТИЧЕСКАЯ ТЕРАПИЯ В ЛЕЧЕНИИ ИШЕМИЧЕСКОГО ИНСУЛЬТА. Theoretical aspects in the formation of pedagogical sciences, 1(5), 218-220.
16. Умарова, М. (2021). ИНСОМНИЯ ВА МЕТАБОЛИК СИНДРОМНИНГ ЎЗАРО КОМОРБИДЛИГИ МУАММОНИНГ ДОЛЗАРБЛИГИ. Интернаука, (20-7), 29-30.
17. Умарова, М. (2021). МИГРЕН КАСАЛЛИГИ ВА УНИНГ ШОШИЛИНЧ ТЕРАПИЯСИНИ ТАКОМИЛЛАШТИРИШ. ИНТЕРНАУКА Учредители: Общество с ограниченной ответственностью" Интернаука, 93-94.
18. Умарова, М. (2021). ИНСУЛТДАН КЕЙИНГИ ТАЛВАСА СИНДРОМИ. Интернаука, (18-5), 46-48.
19. Rakhmatova, M., Shakhanova, S., Nazarova, J., Azizova, F., Astanakulov, D., Akramov, G., & Mirametova, N. (2024). Brain tumor information retrieval system for brain tumor diagnosis. Health Leadership and Quality of Life, (3), 10.
20. RAKHMATOVA, M., SHAKHANOVA, S., NAZAROVA, J., AZIZOVA, F., ASTANAKULOV, D., AKRAMOV, G., & MIRAMETOVA, N. (2024). BRAIN TUMOR INFORMATION RETRIEVAL SYSTEM FOR BRAIN TUMOR DIAGNOSIS. HEALTH, 3.
21. Soyibjono'g, A. G. A. THE EFFECTIVENESS OF COMBINING PSYCHOTHERAPY AND PHARMACOTHERAPY IN THE TREATMENT OF MENTAL DISORDERS.
22. Soyibjono'g, A. G. A. TYPOLOGY OF ANXIETY-PHOBIC DISORDERS.