(RESEARCH ARTICLE)

Comprehensive psychological evaluation of a client: Integrating personality assessment, emotional states, cognitive function, and AI-enhanced management strategies

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Abstract

This study presents a detailed psychological evaluation of a client using the International Personality Disorder Examination (IPDE), Depression Anxiety Stress Scales (DASS), Brief Psychiatric Rating Scale (BPRS), and Bender Gestalt Test (BGT). The evaluation reveals significant personality traits, severe anxiety, moderate depression, and mild cognitive disruptions. The findings suggest a multifaceted therapeutic approach, including cognitive-behavioural therapy (CBT) and supportive counselling. Additionally, the role of artificial intelligence (AI) in enhancing diagnosis and treatment strategies is discussed, emphasizing how AI technologies can optimize therapeutic interventions and management.

1. Introduction

Psychological evaluations are essential for obtaining a comprehensive understanding of an individual's mental health. By utilizing a variety of diagnostic tools, clinicians can construct a detailed psychological profile that informs effective treatment and support strategies. This paper focuses on the integration of multiple assessments — IPDE, DASS, BPRS, and BGT to analyse personality traits, emotional states, and cognitive functions, with an emphasis on incorporating AI technologies into the management of complex psychological cases.

2. Review of Literature

2.1. Personality Disorders and Their Impact:

- Personality disorders, such as paranoid, schizoid, and obsessive-compulsive disorders, significantly impact interpersonal relationships and daily functioning. Individuals with paranoid traits often experience pervasive distrust and interpersonal conflicts (American Psychiatric Association, 2013).
- Schizoid personality disorder is characterized by emotional detachment and a preference for solitude, which can lead to social isolation (Kraepelin, 1921; Millon, 2011).
- Anankastic (Obsessive-Compulsive) personality traits involve rigid thought patterns and perfectionism, contributing to stress and difficulties with adaptability (Torgersen et al., 2001).

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2.2. Emotional Distress and Cognitive Function

- Severe anxiety and moderate depression can significantly affect an individual's daily functioning. The DASS scales measure these emotional states and their impact on personal and professional life (Lovibond & Lovibond, 1995).
- Cognitive disruptions, such as conceptual disorganization, affect clarity of thought and decision-making processes, highlighting the need to address these issues in comprehensive treatment plans (Overall & Gorham, 1962).

2.3. Marriage and Personality Compatibility:

- Research on personality compatibility in marriage suggests that individuals with introverted and emotionally detached traits may encounter challenges in maintaining relationships. The INTP personality type, characterized by introversion, intuition, thinking, and perceiving, benefits from relationships that offer intellectual stimulation and respect for personal space (Hogan et al., 1996; Myers & Briggs, 1995).

2.4. Artificial Intelligence in Psychological Assessment and Treatment:

- AI technologies are increasingly being integrated into mental health care to enhance diagnostic accuracy and treatment effectiveness. AI tools can analyze large datasets to identify patterns, predict treatment responses, and personalize therapeutic interventions (Bzdok et al., 2016; Topol, 2019). Machine learning algorithms and natural language processing assist in detecting early signs of psychological disorders and optimizing treatment strategies.

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3. Case Study Analysis

3.1. Background

The case study of a 31-year-old client, who recently experienced a significant personal and relational upheaval marked by the dissolution of their marriage within just one month, reveals a complex interplay of psychological and potential neurocognitive issues. The primary concern cited by the client's former partner was perceived dishonesty regarding the client's mental health condition. This issue was explored through several assessments, including the International Personality Disorder Examination (IPDE), Depression Anxiety Stress Scales (DASS), Brief Psychiatric Rating Scale (BPRS), and Bender-Gestalt Test (BGT).

The IPDE aimed to uncover potential personality disorders or maladaptive traits that might be contributing to the client's relational difficulties. However, the accuracy of this assessment could be compromised by the client's muffled voice and reduced speech clarity, which might affect how well they can communicate their experiences and symptoms. The DASS assessment, which measures levels of depression, anxiety, and stress, likely highlighted significant distress linked to the recent marital dissolution and the client's perceived dishonesty about their mental health. This distress, coupled with confusion and difficulty following instructions during the assessments, points to potential issues with cognitive functioning or concentration.

The BPRS, designed to evaluate a broad spectrum of psychiatric symptoms, might reveal mood disturbances or thought disorganization, further complicated by the client's communication difficulties. Similarly, the Bender-Gestalt Test (BGT), which assesses visual-motor and perceptual skills, could indicate challenges with cognitive processing, potentially impacting the client's performance on the test.

Overall, the client's communication issues, including a muffled voice and lack of speech clarity, and their confusion during the assessments, suggest a need for a nuanced interpretation of their psychological profile. These factors complicate the accurate assessment of their mental health and cognitive status. It is crucial to consider these issues when interpreting the results and formulating a treatment plan. This reveals:

3.1.1. Personality Traits

- Paranoid Traits: High levels of distrust and suspicion may have contributed to relational conflicts.
- Schizoid Traits: Emotional detachment and preference for solitude impact social interactions.
- Anankastic Traits: Strong tendencies towards perfectionism and rigidity.

3.1.2. Emotional and Cognitive States

- Anxiety: Severe anxiety with intense worry and physical symptoms.
- Depression: Moderate depression with low mood and lack of interest.
- Cognitive Disruptions: Mild conceptual disorganization affecting thought clarity.

3.1.3. Additional Factors

- Voice Clarity: Unclear voice, potentially complicating communication.
- Sexual Interest: Low sexual interest affecting intimate relationships.
- Prior Depression: History of depression, including during the COVID-19 pandemic, with familial predisposition.

3.2. Role of AI in Management

3.2.1. Enhanced Diagnostic Accuracy

- AI algorithms can analyze psychological assessments and electronic health records to identify patterns and predict the progression of symptoms, aiding in more accurate diagnoses and treatment plans.

3.2.2. Personalized Treatment Plans

- Machine learning models integrate data from various assessments to develop personalized treatment strategies, optimizing interventions based on individual responses and needs (Jiang et al., 2017).

3.2.3. Predictive Analytics

- AI can forecast potential relapses or exacerbations of symptoms by monitoring real-time data from wearable devices or digital health platforms, allowing for proactive treatment adjustments.

3.2.4. Supportive Tools

- AI-powered applications can offer cognitive-behavioral interventions and virtual therapy sessions, providing additional support and resources for managing mental health conditions.

4. Recommendations for Management

4.1. Therapeutic Interventions

- Cognitive-Behavioral Therapy (CBT): Effective for managing anxiety, perfectionism, and depressive symptoms.
- Supportive Counseling: To improve social interactions and emotional regulation.

4.2. AI Integration

- Diagnostic Tools: Employ AI to enhance the accuracy of psychological assessments and monitor treatment progress.
- Treatment Optimization: Use AI-driven tools for personalized therapy and predictive analytics to improve treatment outcomes.

4.3. Marriage Compatibility and INTP Personality Type

- Understanding the INTP Personality: Partners should offer intellectual stimulation and respect for personal space. Open communication about mental health and personal challenges is crucial.
- Educational Support: Provide both partners with education about mental health and personality compatibility to foster understanding and support.

4.4. Ongoing Monitoring and Multidisciplinary Approach

- Regular Psychological Assessments: Continuous monitoring to track progress and adapt treatment plans.
- Multidisciplinary Care: Collaboration among psychiatrists, psychologists, and AI specialists to deliver comprehensive care

5. Conclusion

The integrated evaluation of personality traits, emotional states, and cognitive functions, coupled with AI-enhanced management strategies, highlights the need for a comprehensive approach to mental health treatment. Tailoring interventions to address individual needs and leveraging AI technologies can significantly improve therapeutic outcomes and overall well-being.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

[1] Bhatt, S., Jogy, S., & Puri, A. (2024). Development of an app for diagnosing autism. International Journal of Science and Research Archive, 12(01), 2406–2410.

[2] Bhatt, S., Jogy, S., & Puri, A. (Year). Integration of Virtual Reality (VR) and Artificial Intelligence (AI) in Autism Therapy. Journal/Publisher, Volume (Issue), pages. DOI/.

[3] Karthikeyan, B., Puri, A., Mathur, R., et al. (2016). Internet of Things (IOT) based attendance and intrusion detection system. International Journal of Innovative Research in Computer and Communication Engineering, 4(3).

[4] Banerjee, P., Puri, A., Puri, A., et al. (2018). Challenges faced by non BPD spouse and family: a case study. EC Psychology and Psychiatry, 7(12).

[5] Puri, A., Navya, N., & Shammi. (2019). Malaise of Domestic Violence: Scarring Children's Well Being. Vol. 7 No. 1 (2019): Volume 07, Issue 1, January-March, 2019. DOI: 10.25215/0701.067

[6] Puri, A., Bamel, P., Sindhu, B., et al. (2023). Recent advances in psychotherapy in the Indian scenario - subconscious energy healing therapy: S.E.H.T for infertility counselling. J Psychol Clin Psychiatry, 14(6), 182–194. DOI: 10.15406/jpcpy.2023.14.00750

[7] Puri, A., Sindhu, B. D., Puri, A., et al. (2023). Hypnotherapy as an intervention in infertility treatment. Art Human Open Acc J, 5(3), 214–218. DOI: 10.15406/ahoaj.2023.05.00211

[8] Puri, A., Nayar, P., Bamel, P., Puri, A., & Kumar, A. (2024). Invisible Grief During A.R.T.. In Indian Fertility Society (Ed.), Counseling in Assisted Reproduction Technology (A.R.T.) (pp. 23).

[9] Bamel, P., Puri, A., Nayar, K. D., Singh, T., & Jogy, S. (2024). Use of Interest-Based Technology for Patient Care. In Indian Fertility Society (Ed.), Counseling in Assisted Reproduction Technology (A.R.T) (pp. 83).

[10] Puri, A., Nayar, P., Bamel, P., Sindhu, B., & Puri, A. (2024). Implementing Distress Screening and Psychological Assessment at the A.R.T. Clinic. In Indian Fertility Society (Ed.), Counseling in Assisted Reproduction Technology (A.R.T) (pp. 63).

[11] Bamel, P., Sindhu, B., Sindhu, S., Puri, A., & Singh, T. (2024). Recent Eclectic Approach to Psychotherapeutic Interventions in the Indian Context - Subconscious Energy Healing Therapy (S.E.H.T). International Journal of Creative Research Thoughts (IJCRT), 12(2), a434-a442. http://www.ijcrt.org/papers/IJCRT2402052.pdf

[12] Puri, A., Mathur, R., & Sindhu, N. (2024). Harnessing the Power of AI in Healthcare: Benefits, Concerns, and Challenges for Medical Personnel Training. Art Human Open Acc J, 6(2), 90-91.

[13] Banerjee, P., Sindhu, B. D., Sindhu, S., et al. (2024). Exploring the intersections of AI (Artificial Intelligence) in psychology and astrology: a conceptual inquiry for human well-being. J Psychol Clin Psychiatry, 15(1), 75–77. DOI: 10.15406/jpcpy.2024.15.00761

[14]   Puri, A., Banerjee, P., Nayar, P., et al. (2024). Understanding the impact of environmental pollutants on infertility counselling: insights from the Indian scenario. Art Human Open Acc J, 6(1), 35–37. DOI: 10.15406/ahoaj.2024.06.00218

[15]   Puri, A., Mathur, R., & Sindhu, N. (2024). Enhancing assisted reproductive technology with AI: Addressing concerns and challenges. International Journal of Science and Research Archive, 12(01), 745-747. https://doi.org/10.30574/ijsra.2024.12.1.0859

[16]   Puri, A., Mathur, R., & Nayar, K. D. (2024). AI-powered fertility assessment tool. International Journal of Science and Research Archive, 12(1), 742-744. https://doi.org/10.30574/ijsra.2024.12.1.0860

[17]   A. Puri, & R. Mathur. (2024). Integrating Monistic Theory, Neuro-Linguistic Programming, and AI for Developing Emotionally Healthy School Children- A Global and Indian Perspective. International Journal of Innovative Research in Computer Science and Technology (IJIRCST), 12(3), 135-139. https://doi.org/10.55524/ijircst.2024.12.3.23 s