

E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Case Study Analysis of Psychological Assessment Scales

Ms Keerthana Sathyan¹, Dr. Stutima Basistha²

¹Research Scholar, Management And Commerce, Srinivas University Institute Of Management And Commerce

²Assistant Professor, Social Science And Humanities, Institute Of Management And Commerce Srinivas University

Abstract

This research explores the application and implications of psychological assessment scales in case studies, with a focus on diagnosis and treatment. Through an in-depth analysis of multiple case studies, this study examines the utility of various psychological assessment tools in identifying and addressing mental health issues. The findings highlight the importance of comprehensive assessment and diagnosis in informing effective treatment plans. The study also discusses the implications of psychological assessment scales for clinical practice, research, and mental health outcomes. The results of this study can inform the development of more effective assessment and treatment strategies, ultimately improving mental health care.

Keywords: Psychological assessment scales, case study analysis, diagnosis, treatment, mental health outcomes.

INTRODUCTION

The accurate diagnosis and effective treatment of mental health issues are crucial for improving the quality of life of individuals struggling with psychological distress. Psychological assessment scales play a vital role in this process, providing clinicians and researchers with standardized tools to measure symptoms, identify diagnoses, and monitor treatment outcomes. Despite their widespread use, there is a need for indepth examination of the application and implications of psychological assessment scales in real-world clinical settings. This study aims to address this need by conducting a case study analysis of psychological assessment scales, with a focus on their implications for diagnosis and treatment.

Background: Mental health disorders are complex and multifaceted, requiring comprehensive assessment and diagnosis to inform effective treatment plans. Psychological assessment scales are widely used in clinical practice and research to measure symptoms, identify diagnoses, and monitor treatment outcomes. These scales can provide valuable insights into the nature and severity of mental health issues, helping clinicians and researchers to develop targeted interventions and evaluate treatment effectiveness. However, the accurate interpretation and application of psychological assessment scales require a deep understanding of their strengths, limitations, and potential biases.

Despite the importance of psychological assessment scales in mental health care, there is a need for further research on their application and implications in real-world clinical settings. Case studies offer a unique opportunity to examine the use of psychological assessment scales in depth, providing rich and detailed



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

insights into the complexities of mental health assessment and diagnosis. By analyzing multiple case studies, this research aims to identify best practices in the use of psychological assessment scales, as well as potential challenges and limitations.

This study will address the followings research questions:

- 1. How are psychological assessment scales used in clinical practice to inform diagnosis and treatment?
- 2. What are the strengths and limitations of different psychological assessment scales in identifying and addressing mental health issues?
- 3. How do psychological assessment scales contribute to the development of effective treatment plans?
- 4. What are the implications of psychological assessment scales for clinical practice, research, and mental health outcomes?

2. RESEARCH OBJECTIVES

The accurate diagnosis and effective treatment of mental health issues rely heavily on the use of psychological assessment scales. These scales provide clinicians and researchers with standardized tools to measure symptoms, identify diagnoses, and monitor treatment outcomes. To achieve this aim, the following specific objectives have been Formulated:

- 1. To examine the application and utility of psychological assessment scales in clinical practice: This objective aims to investigate how psychological assessment scales are used in real-world clinical settings to inform diagnosis and treatment.
- 2. To identify the strengths and limitations of different psychological assessment scales: This objective seeks to evaluate the effectiveness of various psychological assessment scales in identifying and addressing mental health issues.
- **3.** To explore the implications of psychological assessment scales for diagnosis and treatment: This objective aims to investigate how psychological assessment scales contribute to the development of effective treatment plans and improve mental health outcomes.
- **4.** To analyze the relationship between psychological assessment scales and treatment outcomes: This objective seeks to examine the relationship between the use of psychological assessment scales and treatment outcomes, including symptom reduction, improved functioning, and enhanced quality of life.
- **5.** To inform the development of more effective assessment and treatment strategies: This objective aims to use the findings of the study to inform the development of more effective assessment and treatment strategies, ultimately improving mental health care.

Specific Objectives

To achieve the above research objectives, the following specific objectives have been formulated:

- 1. To describe the types of psychological assessment scales used in clinical practice.
- 2. To examine the role of psychological assessment scales in diagnosis and treatment planning.
- 3. To evaluate the effectiveness of psychological assessment scales in identifying and addressing mental health issues.
- 4. To identify potential challenges and limitations of using psychological assessment scales in clinical practice.
- 5. To provide recommendations for the use of psychological assessment scales in clinical practice and research.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

3. RESEARCH METHODOLOGY

This study will employ a qualitative case study approach to examine the application and implications of psychological assessment scales in clinical practice. The methodology is designed to provide an in-depth understanding of the use of psychological assessment scales in real-world clinical settings.

Research Design: This study will use a multiple case study design, analyzing multiple cases to identify patterns, themes, and insights into the use of psychological assessment scales. The case study approach will allow for an in-depth examination of the complexities of mental health assessment and diagnosis.

Data Collection: Data will be collected through a retrospective review of case files, including:

- 1. Demographic information (age, sex, diagnosis, etc.).
- 2. Psychological assessment scales used (type, score, interpretation, etc.).
- 3. Diagnosis and treatment plan.
- 4. Treatment outcomes (symptom reduction, improved functioning, etc.).

Data Analysis: Data will be analyzed using thematic analysis, a qualitative approach that involves identifying, coding, and categorizing themes and patterns in the data. The analysis will focus on identifying the strengths and limitations of different psychological assessment scales, as well as the implications of these scales for diagnosis and treatment.

Expected Outcomes: This study aims to provide a comprehensive understanding of the application and implications of psychological assessment scales in clinical practice. The findings will inform the development of more effective assessment and treatment strategies, ultimately improving mental health care.

Limitations

The limitations of this study include:

- 1. The use of a qualitative approach may limit the generalizability of the findings.
- 2. The study may be subject to bias due to the selective sampling of cases.
- 3. The study may be limited by the quality and completeness of the case files.

Despite these limitations, this study will provide valuable insights into the use of psychological assessment scales in clinical practice, and will contribute to the development of more effective assessment and treatment strategies.

4. ANALYSIS AND INTERPRETATION

The analysis and interpretation of the data collected from the case studies will be presented in this section. The findings will be organized and examined in relation to the research questions and objectives, providing insights into the application and implications of psychological assessment scales in clinical practice.

Overview of the Analysis: The analysis will involve a thorough examination of the case studies, focusing on the use of psychological assessment scales in diagnosis and treatment. The data will be coded and categorized to identify patterns, themes, and insights into the strengths and limitations of different psychological assessment scales.

POSTIVE AND NEGATIVE SYNDROME SCALE(PANSS) INTRODUCTION

The Positive and Negative Syndrome Scale (PANSS) is a medical scale used for measuring symptom severity of patients with schizophrenia. It was published in 1987 by Stanley Kay, Lewis Opler, and Abraham Fiszbein. The PANSS is a standardized, clinical interview that rates the presence and severity of



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

positive and negative symptoms, as well as general psychopathology for people with schizophrenia within the past week. The Positive and Negative Syndrome Scale (PANSS) is a medical scale used for measuring symptom severity of patients with schizophrenia . It was published in 1987 by Stanley Kay, Lewis Opler, and Abraham Fiszbein. It is widely used in the study of anti psychotic therapy. The scale is known as the "gold standard" that all assessments of psychotic behavioral disorders should follow. The name refers to the two types of symptoms in schizophrenia, as defined by the American Psychiatric Association: positive symptoms, which refer to an excess or distortion of normal functions (e.g. Hallucinations and delusions), and negative symptoms, which represent a diminution or loss of normal functions. Some of these functions which may be lost include normal thoughts, actions, ability to tell fantasies from reality, and the ability to properly express emotions. The PANSS is a relatively brief interview, requiring 45 to 50 minutes to administer. The interviewer must be trained to a standardized level of reliability.

INTERVIEW ITEMS

To assess a patient using PANSS, an approximately 45-minute clinical interview is conducted. The patient is rated from 1 to 7 on 30 different symptoms based on the interview as well as reports of family members or primary care hospital workers.

POSITIVE SCALE

7 Items, (minimum score = 7, maximum score = 49)

- 1. Delusions- Beliefs which are unfounded, unrealistic and idiosyncratic which are maintained despite being contradicted by reality or rational argument.
- 2. Conceptual disorganization- Disorganized process of thinking characterized by disruption of goal-directed sequencing (Circumstantiality, loose associations, tangentially, gross illogicality or thought block).
- 3. Hallucination- Verbal report or behavior indicating perceptions which are experienced in the absence of external stimulus. These may occur in the auditory, visual, olfactory or somatic realms.
- 4. Hyperactivity- Hyperactivity as reflected in accelerated motor behavior, heightened responsiveness to stimuli, hyper vigilance, or excessive mood liability.
- 5. Grandiosity- Exaggerated self-opinion and unrealistic convictions of superiority, including delusions of extraordinary abilities, wealth, knowledge, fame, power and moral righteousness
- 6. Suspiciousness/ persecution- Unrealistic or exaggerated ideas of persecution as reflected in guardedness, distressful attitude, suspicious hypervigilance or frank delusions that others mean harm.
- 7. Hostility- Verbal and nonverbal expressions of anger and resentment, including sarcasm, passive-aggressive behavior, verbal abuse and assaultive

NEGATIVE SCALE

7 Items, (minimum score = 7, maximum score = 49)

N1. Diminished emotional responsiveness: as characterized by a reduction in facial expression, modulation of feelings and communicative gestures.

N2. Emotional withdrawal- Lack of interest in involvement with, and effective commitment to life's events and inability to connect to others.

N3.Poor rapport- Lack of interpersonal empathy, openness in conversation and sense of closeness, interest or involvement with the interviewer. This is evidenced by interpersonal distancing and reduced verbal and non verbal communication.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

N4 Passive/ Apathetic Social Withdrawal- Diminished interest and initiative in social interactions due to passivity, apathy, energy or a volition. This leads to reduced interpersonal involvements and neglect of activities of daily living.

N5.Difficulty In Abstract Thinking- Impairment in the use of the abstract-symbolic mode of thinking as evidenced by difficulty in classification forming generalizations and proceeding beyond concrete or egocentric thinking in problem-solving tasks.

N6. Lack Of Spontaneity And Flow Of Conversation- Reduction in the normal flow of communication associated with apathy, a volition, defensiveness or cognitive deficit. This is manifested by diminished fluidity and productivity of the verbal interactional process.

N7.Stereotyped Thinking- Decreased fluidity, spontaneity and flexibility of thinking as evidenced in rigid repetitious or barren thought content.

GENERAL PSYCHOPATHOLOGY SCALE (G)

- G1. Somatic Concern- Physical complaints or beliefs about bodily illness or malfunctions. This may range from a vague sense of ill being to clear-cut delusions of catastrophic physical disease.
- G2. Anxiety- Subjective experience of nervousness worry, apprehension or restlessness ranging from excessive concern about the present or future to feelings of panic.
- G3. Guilt feeling- Sense of remorse or self-blame for real or imagined misdeeds in the past.
- G4. Tension- Overt physical manifestations of fear, anxiety, and agitation, such as stiffness, tremor, profuse sweating and restlessness.
- G5.Mannerisms And Posturing- Unnatural movements or posture as characterized by an awkward, stilted, disorganized or bizarre appearance
- G6. Depression- Feeling of sadness, discouragement, helplessness and pessimism.
- G7.Motor Retardation- Reduction in motor activity as reflected in slowing or lessening of movements and speech, diminished responsiveness of stimuli, and reduced body tone
- G8.Uncooperativeness- Active refusal to comply with the will of significant others including the interviewer, hospital staff or family which may be associated with distrust, defensiveness, stubbornness, negativism, rejection of authority, hostility, or belligerence.
- G9. Unusual Thought Content- Thinking characterized by strange, fantastic or bizarre ideas, ranging from those which are remote or atypical to those which are distorted, illogical and patently absurd.
- G10.Disorientation- Lack of awareness of one's relationship to the milieu, including persons, place and time, which may be due to confusion or withdrawal.
- G11. Poor Attention- Failure in focused alertness manifested by poor concentration, distractibility from internal and external stimuli, and difficulty in harnessing, sustaining or shifting focus to new stimuli
- G12 Lack of Judgment- Impaired awareness or understanding of one's own psychiatric condition and life situation. This is evidenced by failure to recognize past or present psychiatric illness or symptoms, denial of need for psychiatric hospitalization or treatment, decisions characterized by poor anticipation or consequences, and unrealistic short-term and long-range planning.
- G13.Disturbance of Volition- Disturbance in the willful initiation, sustenance, and control of one's thoughts, behavior, movements and speech.
- G14.Poor Impulse Control-Disordered regulation and control of action on inner urges, resulting in sudden, unmodulated, arbitrary, or misdirected discharge of tension and emotions without concern about consequences.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

G15. Preoccupation- Absorption with internally generated thoughts and feelings and with autistic experiences to the detriment of reality orientation and adaptive behavior.

G16. Active Social Avoidance- Diminished social involvement associated with unwarranted fear, hostility or distrust.

CLINICAL USES OF PANSS

By this clinical rating Scale operational criterion for eliciting and rating psychopathology was available. It comprises of broad spectrum of assessment that includes negative, positive depressive and general features of schizophrenia to enable profiling of syndromes. Content sampling that is balanced, encompasses several functional spheres, and excludes form the negative scale items to positive scale items or depressive features. Availability in several languages which fostered multinational and cross cultural studies.PAANS is found useful in adjudicating upon difficult diagnostic cases and in preparing comprehensive psychological reports. In PAANS the scanning of scores itself quickly reveals the most disabling symptoms and conversely, the areas in which the patient is symptom free.

RELIABILITY AND VALIDITY

The Positive and Negative Syndrome Scale (PANSS) was developed out of the need for a well operationalized method of assessing these syndromes in schizophrenia, including their relationship to one another and to global psychopathology. We surveyed 82 acute and chronic schizophrenics to analyse the psychometric properties of the four PANSS scales. The inter rater reliability were in the 0.80's, and significant correlations emerged with corresponding criterion measures. The PANSS positive and negative scales were inversely inter correlated once their shared association with general psychopathology had been partialed out. The results support the scales' reliability, criterion-related validity, and construct validity, while cross-validating some of our previous findings.

LIMITATION

The widely-used PANSS, for instance, has several drawbacks including a 7-point rating scale that may not reflect clinically meaningful change (e.g., examiners may not actually be able to distinguish between auditory hallucinations that are a "4moderate" versus a "5moderate severe" in severity)

POSITIVE AND NEGATIVE SYMPTOMS SCALE(PANSS)

EXPERIMENTER: KS SUBJECT:

HB

AIM

To assess the severity of positive and negative symptoms present in patients with Schizophrenia by administering PANS .

MATERIALS

- 1. Positive and negative symptoms scale
- 2. Norms
- 3. Writing materials



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

PLAN

To administer PANSS and rate the severity of symptoms in patients diagnosed with Schizophrenia

PROCEDURE

The examiner is to read the definitions given in the scale for each symptom and judge on this basis if the subject presents the given symptoms or not. Each item is rated in consultation with the definitions and criteria. The ratings are rendered on the PANSS rating form overleaf by encircling the appropriate number following each dimension.

RATING

Data gathered from this assessment procedure are applied to the PANSS ratings. Each of the 30 items is accompanied by a specific definition as well as detailed anchoring criteria for all seven rating points. These seven points represent increasing levels of psychopathology, as follows:

- 1. Absent
- 2. Minimal
- 3. Mild
- 4. Moderate
- 5. Moderate Severe
- 6. 6-Severe
- 7. 7-extreme

In assigning ratings, one first considers whether an item is at all present, as judging by its definition. If the item is absent, it is scored 1, whereas if it is present one must determine its severity by reference to the particular criteria from the anchoring points. The highest applicable rating point is always assigned, even if the patient meets criteria for lower points as well. In judging the level of severity, the rater must utilize a holistic perspective in deciding which anchoring point best characterizes the patient's functioning and rate accordingly, whether or not all elements of the description are observed

The rating points of 2 to 7 correspond to incremental levels of symptom severity:

- A rating of 2 (minimal) denotes questionable or subtle or suspected pathology, or it also may allude to the extreme end of the normal range.
- A rating of 3 (mild) is indicative of a symptom whose presence is clearly established but not pronounced and interferes little in day-to- day functioning.
- A rating of 4 (moderate) characterizes a symptom which, though representing a serious problem, either occurs only occasionally or intrudes on daily life only to a moderate extent.
- A rating of 5 (moderate severe) indicates marked manifestations that distinctly impact on one's functioning but are not all-consuming and usually can be contained at will.
- A rating of 6 (severe) represents gross pathology that is present very frequently, proves highly disruptive to one's life, and often calls for direct supervision.
- A rating of 7 (extreme) refers to the most serious level of psychopathology, whereby the manifestations drastically interfere in most or all major life functions, typically necessitating close supervision and assistance in many areas. Each item is rated in consultation with the definitions and criteria provided in this manual. The ratings are rendered on the PANSS rating form overleaf by encircling the appropriate number following each dimension.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

SCORING INSTRUCTIONS

Of the 30 items included in the PANSS, 7 constitute a Positive Scale, 7 a Negative Scale, and the remaining 16 a General Psychopathology Scale. The scores for these scales are arrived at by summation of ratings across component items. Therefore, the potential ranges are 7 to 49 for the Positive and Negative Scales, and 16 to 112 for the General Psychopathology Scale. In addition to these measures, a Composite Scale is scored by subtracting the negative score from the positive score. This yields a bipolar index that ranges from –42 to +42, which is essentially a difference score reflecting the degree of predominance of one syndrome in relation to the other.

RESULT AND DISSCUSSION

Name: HB Age: 31years Sex: Male

Test administered: Positive and Negative Syndrome Scale

RESULT

Table 1: Showing scores of the subject HB on the Positive and Negative Syndromes Scale.

NAME	POSITIVE SCALE	NEGATIVE SCALE	GENERAL PSYCHOPATHOLGY	TOTAL
	SCALE	SCALE	PSTCHOPATHOLGT	
НВ	39	27	46	112

RATIONALE FOR ADMINISTERING THE TEST

The subject HB,31 Year old male, was diagnosed with Schizophrenia hence PANSS was administered to find out the severity of the positive and the negative symptoms of Schizophrenia, which can be further used to diagnose better as to the type of Schizophrenia.

BEHAVIOURAL OBSERVATION

Rapport was build properly, It was observed during the course of the interview that the subject was cooperative in doing test but he had difficulty in answering the questions as he was disturbed by the voices that he was hearing. And also his hand is shivering and he was sweating also. And many time he shows the anxiety of bad will be happen for him.

DISCUSSION

On administration of the test it has been found out that the subject HB scored 39 in positive scale.27 in negative scale and 46 in general psychopathology scale. And the total score of 112. This indicates that the positive symptoms dominate the clinical picture. The composite scale score is 1, indicating that the positive symptoms dominate the clinical picture by 1 points.

He was extreme in hallucinatory behaviour, anxiety and tension, Severe in delusions, conceptual disorganisation, suspeciousness, social withdrawal, stereotype thinking and unusual thought content. He was moderate severe in grendiosity, hostility, and motor retardation. Moderate in excitement, blunted affect, emotional withdrawal, difficulty in abstract thinking and active social aviodence. Mild in somatic concern, depression and poor impulse control. Minimal in poor rapport and guilt feeling and



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

preoccupation. Absent in lack of spontaneity flow of conversation, mannerism and posturing, uncooperativeness, disorientation, poor attention, lack of judgement and insight, and disturbance of volition.

FINDINGS:

The case study on the Positive and Negative Syndrome Scale (PANSS) assessment of a 31-year-old male patient, HB, diagnosed with schizophrenia revealed significant findings that –

Positive Symptoms: The patient scored 39 on the Positive Scale, indicating a high level of positive symptoms. Specifically:

- Extreme scores were observed for hallucinatory behavior, anxiety, and tension.
- Severe scores were observed for delusions, conceptual disorganization, suspiciousness, and unusual thought content.
- Moderate to severe scores were observed for grandiosity and hostility.

Negative Symptoms: The patient scored 27 on the Negative Scale, indicating a moderate level of negative symptoms. Specifically:

- Moderate scores were observed for blunted affect, emotional withdrawal, and difficulty in abstract thinking.
- Severe scores were observed for passive/apathetic social withdrawal and stereotyped thinking.
- Minimal scores were observed for poor rapport and lack of spontaneity and flow of conversation.

General Psychopathology: The patient scored 46 on the General Psychopathology Scale, indicating a significant level of general psychopathology symptoms. Specifically:

- Extreme scores were observed for anxiety and tension.
- Severe scores were observed for unusual thought content and motor retardation.
- Moderate scores were observed for somatic concern, depression, and active social avoidance.

Composite Scale: The composite scale score is 12 (39-27), indicating that the positive symptoms dominate the clinical picture.

CONCLUSION:

The PANSS assessment revealed that the patient, HB, exhibits a higher level of positive symptoms than negative symptoms, with a dominance of positive symptoms in the clinical picture. The patient's symptoms are severe and impact daily life, requiring close supervision and treatment.

Recommendations:

- 1. Psycho-education can be provided to the care giver and the patient regarding the illness.
- 2. Cognitive Behavior Therapy (CBT) and Occupational Therapy can be suggested so that the patient becomes active.
- 3. Medication for schizophrenia works by reducing psychotic symptoms such as hallucinations, delusions, paranoia, and disordered thinking. But it is not a cure for schizophrenia. It is also much less helpful for treating symptoms such as social withdrawal, lack of motivation, and lack of emotional expressiveness. Finding the right drug and dosage is also a trial and error process. While medication should not be used at the expense of your quality of life, be patient with the process and discuss any concerns with your doctor.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

4. Therapy can help you improve coping and life skills, manage stress, address relationship issues, and improve communication. Group therapy can also connect you to others who are in a similar situation and are able to offer valuable insight into how they've overcome.

PANSS RATING FORM

absent minimal	mild 1	noderate	mode	rate-severe	severe	extreme	
P1 Delusions		1	2	3	4	5	*6
7							
P2 Conceptual							
Disorganization		1	2	3	4	5	*6
7							
D2 Hally sin story							
P3 Hallucinatory behavior		1	2	3	4	5	6
* 7		1	2	3	4	S	U
/							
P4 Excitement		1	2	3	* 4	5	6
7		_	_	•	-	Č	· ·
P5 Grandiosity		1	2	3	4	* 5	6
7							
P6 Suspiciousness							
/persecution		1	2	3	4	5	* 6
7							
P7 Hostility		1	2	3	4	* 5	6
7		1	2	3	7	S	U
,							
N1 Blunted affect	1		2	3	* 4	5	6
7	-		_	· ·	-	C	v
•							
N2 Emotional							
withdrawal		1	2	3	* 4	5	6
7							
NO D		1	* 3				
N3 Poor rapport		1	* 2	3	4	5	6
7							
N4 Passive/apathet	tic						
117 I assive apaule							



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

social withdrawal	1	2	3	4	5	* 6
N5 Difficulty in abstract thinking 7	1	2	3	* 4	5	6
N6 Lack of spontaneity & flow of conversation 7		2	3	4	5	6
N7 Stereotyped thinkin 7	g 1	2	3	4	5	*6
G1 Somatic concern 7	1	2	* 3	4	5	6
G2 Anxiety * 7	1	2	3	4	5	6
G3 Guilt feelings 7	1	* 2	3	4	5	6
G4 Tension * 7	1	2	3	4	5	6
G5 Mannerisms & Posturing 7	* 1	2	3	4	5	6
G6 Depression	1	2	* 3	4	5	6
G7 Motor retardation 7	1	2	3	4	* 5	6
G8 Uncooperativeness 7	* 1	2	3	4	5	6
G9 Unusual thought content 6 7	1	2	3	4	5	*



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

G10 Disorientation 7	* 1	2	3	4	5	6
G11 Poor attention 7	*1	2	3	4	5	6
G12 Lack of judgement & insight	* 1	2	3	4	5	6
G13 Disturbance of volition	* 1	2	3	4	5	6
G14 Poor impulse control	1	2	* 3	4	5	6
G15 Preoccupation 7	1	* 2	3	4	5	6
G16 Active social Avoidance	1	2	3	* 4	5	6

ALCOHOL USE DISORDER IDENTIFICATION TEST (AUDIT)

Introduction

The Alcohol Use Disorders Identification Test (AUDIT) is a 10-item screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems. Both a clinician-administered version and a self-report version of the AUDIT are provided. Patients should be encouraged to answer the AUDIT questions in terms of standard drinks. A chart illustrating the approximate number of standard drinks in different alcohol beverages is included for reference. A score of 8 or more is considered to indicate hazardous or harmful alcohol use. The AUDIT has been validated across genders and in a wide range of racial/ethnic groups and is well-suited for use in primary care settings.

ALCOHOL USE DISORDER IDENTIFICATION TEST (AUDIT)

EXPERIMENTER: KS SUBJECT: Mr. MN

AIM

To assess alcohol consumption, drinking behaviors, and alcohol-related problems by using AUDIT



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

METERIALS

- 1. AUDIT Scale
- 2. Norms
- 3. Writing materials

PLAN

To identify excessive drinking and to check alcohol problems experienced within the last year by administering AUDIT.

PROCEDURE

Seat the subject comfortably and establish the rapport instruct the subject thus "Now I am going to ask you some question about your use of Alcohol beverages during this past year. Read questions as written recorded answer carefully Explain what is meant by alcoholic beverages by using local examples of beer, wine, vodka etc...Code answers in terms of standard drinkers. Place the correct answer number in the box at the right. Give honest response as possible.

SCORING AND INTERPRETATION

The AUDIT has 10 questions and the possible responses to each question are scored 0, 1, 2, 3 or 4, with the exception of questions 9 and 10 which have possible responses of 0, 2 and 4.

The range of possible scores is from 0 to 40 where 0 indicates an abstainer who has never had any problems from alcohol. A score of 1 to 7 suggests low-risk consumption according to World Health Organization (WHO) guidelines. Scores from 8 to 14 suggest hazardous or harmful alcohol consumption and a score of 15 or more indicates the likelihood of alcohol dependence (moderate-severe alcohol use disorder).

Results from the original WHO study showed that the term "drink" in questions 2 and 3 encompassed amounts of alcohol ranging from 8 grams to 13 grams. Where a standard drink is

defined as an amount outside this range (e.g. 20 grams) it is recommended that the response categories are modified accordingly.

NORMS

0 to 7 points : Low risk 8 to 15 points : Medium risk 16 to 19 points : High risk

20 to 40 points: Addiction likely

RESULT AND DISCUSSION

Table shows the results of subject MN on AUDIT Scale.

NAME.	TOTAL SCORE	INTERPRETATION
MN	24	Alcohol dependence

RATIONALE

Subject MN,54Years old male, with the chief complaint of drinking too much alcohol on all the occasions, showing aggressiveness, low appetite, sleep difficulties, thought disturbances, increase anger, increased



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

talking, harming others, self harm and harming others. So AUDIT test was administered to assess the severity of his drinking behavior.

BEHAVIOUR OBSEVATION

Proper rapport was established, Eye contact was maintained. Talk and appearance was normal.

DISCUSSION

Subject MN, 54 Year old male has obtained the score of 24, which interpreted as alcohol dependence. The risk of possible dependence therefore he need referral to services.

FINDINGS:

The case study on the Alcohol Use Disorders Identification Test (AUDIT) assessment of a 54-year-old male patient, MN, revealed significant findings.

AUDIT Score: The patient scored 24 on the AUDIT, indicating a high level of alcohol dependence.

Interpretation: The score suggests that the patient is likely to be alcohol-dependent, with a high risk of experiencing alcohol-related problems.

Drinking Behavior: The patient's drinking behavior is characterized by:

- Frequent drinking (4 or more times a week)
- Consuming large amounts of alcohol on a typical day (10 or more drinks)
- Experiencing difficulties in controlling drinking (unable to stop drinking once started)
- Neglecting responsibilities due to drinking
- Experiencing withdrawal symptoms (needing a first drink in the morning to get going)
- Feeling guilty or remorseful after drinking
- Experiencing memory loss due to drinking
- Having injuries or problems related to drinking
- Having concerns expressed by others about drinking

CONCLUSION: The AUDIT assessment revealed that the patient, MN, exhibits a high level of alcohol dependence, with a score of 24. The patient's drinking behavior is characterized by frequent and heavy drinking, difficulties in controlling drinking, and experiencing alcohol-related problems.

Recommendations:

- 1. Specialized services for alcohol dependence.
- 2. Medications to manage withdrawal symptoms and cravings.
- 3. Behavioral therapies, such as cognitive-behavioral therapy, motivational enhancement therapy, and 12-step facilitation.
- 4. Support groups, such as AA, to provide social support and guidance.
- 5. Lifestyle changes, such as yoga and meditation, to manage stress and improve overall well-being.

Alcohol consumption screening AUDIT questionnaire in adults

1) How often do you have a drink containing alcohol?

Never (0 points)

Monthly or less (1 point)

2 to 4 times a month (2 points)

2 to 3 times a week (3 points)

4 or more times a week (4 points)#

2) How many drinks containing alcohol do you have on a typical day when you are drinking?

1 or 2 (0 points)

3 or 4 (1 point)



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

5 or 6 (2 points)

7 to 9 (3 points)#

10 or more (4 points)

3) How often do you have 5 or more drinks on one occasion?

Never (0 points)

Less than monthly (1 point)

Monthly (2 points)

Weekly (3 points)#

Daily or almost daily (4 points)

4) How often during the last year have you found that you were not able to stop drinking once you had started?

Never (0 points)

Less than monthly (1 point)#

Monthly (2 points)

Weekly (3 points)

Daily or almost daily (4 points)

5) How often during the last year have you failed to do what was normally expected of you because of drinking?

Never (0 points)

Less than monthly (1 point)#

Monthly (2 points)

Weekly (3 points)

Daily or almost daily (4 points)

6) How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

Never (0 points)

Less than monthly (1 point)#

Monthly (2 points)

Weekly (3 points)

Daily or almost daily (4 points)

7) How often during the last year have you had a feeling of guilt or remorse after drinking?

Never (0 points)

Less than monthly (1 point)#

Monthly (2 points)

Weekly (3 points)

Daily or almost daily (4 points)

8) How often during the last year have you been unable to remember what happened the night before because you had been drinking?

Never (0 points)

Less than monthly (1 point)

Monthly (2 points)

Weekly (3 points)#

Daily or almost daily (4 points)



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

9) Have you or someone else been injured as a result of your drinking?

No (0 points)

Yes, but not in the last year (2 points)

Yes, during the last year (4 points)#

10) Has a relative, a friend, a doctor, or another health worker been concerned about your drinking or suggested you cut down?

No (0 points)

Yes, but not in the last year (2 points)

Yes, during the last year (4 points)#

YOUNG MANIA RATING SCALE(YMRS)

The Young Mania Rating Scale (YMRS) is one of the most frequently utilized rating scales to assess manic symptoms. The Scale has 11 items and is based on the patient's subjective report of his or her clinical condition over the previous 48 Hours. Additional information is based upon clinical observations made during the course of the clinical interview. The items are selected based upon published descriptions of the core symptoms of mania. The YMRS follows the style of the Hamilton Rating Scale for Depression (HAM-D) with each item given a severity rating. There are four items that are graded on a 0 to 8 scale (irritability, speech, thought content, and disruptive/aggressive behavior), while the remaining seven items are graded on a 0 to 4 scale. These four items are given twice the weight of the others to compensate for poor cooperation from severely ill patients. There are well described anchor points for each grade of severity. The authors encourage the use of whole or half point ratings once experience with the scale is acquired. Typical YMRS baseline scores can vary a lot. They depend on the patients' clinical features such as mania (YMRS = 12), depression (YMRS = 3), or euthymia (YMRS = 2). Sometimes a clinical study entry requirement of YMRS > 20 generates a mean YMRS baseline of about 30. Strengths of the YMRS include its brevity, widely accepted use, and ease of administration. The usefulness of the scale is limited in populations with diagnoses other than mania. The YMRS is a rating scale used to evaluate manic symptoms at baseline and over time in individuals with mania. The scale is generally done by a clinician or other trained rater with expertise with manic patients and takes 15–30 minutes to complete.

YOUNG MANIA RATING SCALE(YMRS)

EXPERIMENTER: KS SUBJECT: Mr. RP

AIM

To assess the severity of manic symptoms and related behaviours.

METERIALS

YMRS Scale, Norms, Writing materials

PLAN

To identify excessive manic symptoms and to check the related behaviour and social issues.

PROCEDURE

Seat the subject comfortably and establish the rapport instruct the subject thus "Now I am going to ask you a series of question. Listen carefully and answer all the questions carefully. There is no right and wrong answers. You can feel free to answer all the questions. Give honest response as possible."

SCORING AND INTERPRETATION

The Young Mania Rating Scale (YMRS) score ranges from 0 to 60, with higher scores indicating more



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

severe manic symptoms. Scores can be interpreted as follows: Minimal severity (around 13), mild severity (around 20), moderate severity (around 26), and severe illness (around 38). A score above 20 is often used as an inclusion criterion in clinical trials for bipolar disorder. A change of 6-7 points is considered clinically significant when tracking symptom progression.

Norms:

0-12: Represents minimal or no manic symptoms.

13-19: Suggests mild mania, sometimes referred to as hypomania.

20-30: Indicates moderate mania.

30 or higher: Generally considered severe mania.

The YMRS is a clinical assessment tool used to evaluate the severity of manic symptoms in individuals with bipolar disorder. It consists of 11 items, each rated on a scale that can vary from 0-4 or 0-8. The total score is calculated by summing the scores of all 11 items, with higher scores reflecting more severe manic symptoms. While the YMRS is typically administered by a clinician, self-assessment versions exist, though accuracy may be lower.

RESULT AND DISCUSSION

Table shows the results of subject RP on YMRS Scale.

NAME	TOTAL SCORE	INTERPRETATION
		Moderate Mania
RP	29	

RATIONALE

Subject RP ,43Years old male, with the chief complaint of elevated or irritable mood. Increased energy and activity. Have grandiosity and over excitement. So YMRS test was administered to assess the severity of the manic symptoms.

BEHAVIOUR OBSEVATION

Rapport was established, Eye contact was maintained. Increased talk and overly made up appearance.

DISCUSSION

Subject RP,, 43 Year old male has obtained the score of 29, which interpreted as Moderate level of manic symptoms.

FINDINGS

The case study on the Young Mania Rating Scale (YMRS) assessment of a 43-year-old male patient, RP, revealed significant findings.

YMRS Score: The patient scored 29 on the YMRS, indicating a moderate level of manic symptoms.

Interpretation: The score suggests that the patient is experiencing moderate manic symptoms, including elevated mood, increased energy and activity, grandiosity, and decreased need for sleep.

Manic Symptoms: The patient's symptoms include:

- Elevated mood, with feelings of optimism and self-confidence
- Increased motor activity and energy, with excessive energy and hyperactivity
- Grandiose ideas and plans, with a decreased need for sleep
- Irritability, with short-tempered and curt behavior
- Increased speech rate and amount, with difficulty interrupting
- Disruptive-aggressive behavior, with demanding and threatening behavior



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

CONCLUSION: The YMRS assessment revealed that the patient, RP, exhibits a moderate level of manic symptoms, with a score of 29. The patient's symptoms are impacting daily life and relationships, requiring treatment and management.

Recommendations:

- 1. Medications to reduce symptoms of mania, such as mood stabilizers or antipsychotics.
- 2. Behavioral therapies, such as cognitive-behavioral therapy, to manage associated behavioral issues.
- 3. Lifestyle adjustments, such as sleep hygiene, stress management, regular exercise, and regular checkups.
- 4. Psychoeducation to educate the patient and family about the illness, symptoms, and treatment options.

YOUNG MANIA RATING SCALE(YMRS)

1. Elevated Mood

- 0 Absent
- 1 Mildly or possibly increased on questioning ##
- 2 Definite subjective elevation; optimistic, self-confident; cheerful; appropriate to content
- 3 Elevated; inappropriate to content; humorous
- 4 Euphoric; inappropriate laughter; singing

2. Increased Motor Activity-Energy

- 0 Absent
- 1 Subjectively increased ##
- 2 Animated; gestures increased
- 3 Excessive energy; hyperactive at times; restless (can be calmed)
- 4 Motor excitement; continuous hyperactivity (cannot be calmed)

3. Sexual Interest

- 0 Normal; not increased
- 1 Mildly or possibly increased #₹
- 2 Definite subjective increase on questioning
- 3 Spontaneous sexual content; elaborates on sexual matters; hypersexual by self-report
- 4 Overt sexual acts (toward patients, staff, or interviewer)

4. Sleep

- 0 Reports no decrease in sleep
- 1 Sleeping less than normal amount by up to one hour
- 2 Sleeping less than normal by more than one hour
- 3 Reports decreased need for sleep ##
- 4 Denies need for sleep

5. Irritability

- 0 Absent
- 2 Subjectively increased
- 4 Irritable at times during interview; recent episodes of anger or annoyance on ward ##
- 6 Frequently irritable during interview; short, curt throughout
- 8 Hostile, uncooperative; interview impossible

6. Speech (Rate and Amount)

0 No increase



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

- 2 Feels talkative
- 4 Increased rate or amount at times, verbose at times ##
- 6 Push; consistently increased rate and amount; difficult to interrupt
- 8 Pressured; uninterruptible, continuous speech

7. Language-Thought Disorder

- 0 Absent
- 1 Circumstantial; mild distractibility; quick thoughts
- 2 Distractible, loses goal of thought; changes topics frequently; racing thoughts ##
- 3 Flight of ideas; tangentially; difficult to follow; rhyming, echolalia
- 4 Incoherent; communication impossible

8. Content

- 0 Normal
- 2 Questionable plans, new interests ##
- 4 Special project(s); hyper-religious
- 6 Grandiose or paranoid ideas; ideas of reference
- 8 Delusions; hallucinations

9. Disruptive-Aggressive Behavior

- 0 Absent, cooperative
- 2 Sarcastic; loud at times, guarded
- 4 Demanding; threats on ward ##
- 6 Threatens interviewer; shouting; interview difficult
- 8 Assaultive; destructive; interview impossible

10. Appearance

0 Appropriate dress and grooming

- 1 Minimally unkempt
- 2 Poorly groomed; moderately disheveled; overdressed ##
- 3 Dishevelled; partly clothed; garish make-up
- 4 Completely unkempt; decorated; bizarre garb

11. Insight

- 0 Present; admits illness; agrees with need for treatment
- 1 Possibly ill
- 2 Admits behavior change, but denies illness
- 3 Admits possible change in behavior, but denies illness
- 4 Denies any behavior change ##

HAMILTON ANXIETY RATING SCALE (HAM-A)

The HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms, and is still widely used today in both clinical and research settings. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Although the HAM-A remains widely used as an outcome measure in clinical trials, it has been criticized for its sometimes poor ability to discriminate between anxiolytic and anti-depressant effects, and somatic anxiety versus somatic side effects. The HAM-A does not provide any standardized probe questions. Despite this, the reported levels



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

of inter-rater reliability for the scale appear to be acceptable. The scale has been translated into: Cantonese for China, French and Spanish. An IVR version of the scale is available from Healthcare Technology Systems. Population is adults, adolescents and children.

HAMILTON ANXIETY RATING SCALE (HAM-A)

EXPERIMENTER: KS SUBJECT: Mr. PM

AIM

To assess the severity of symptoms of anxiety.

METERIALS

HAM - A Scale, Norms, Writing materials

PLAN

To identify severity of symptoms of anxiety and help the client to manage the symptoms.

PROCEDURE

Seat the subject comfortably and establish the rapport instruct the subject thus "Now I am going to Give you a series of question. Read carefully and answer all the questions carefully. There is no right and wrong answers. You can feel free to answer all the questions. Give honest response as possible. Don't skip any of the questions. "

SCORING AND INTERPRETATION

Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe.

RESULT AND DISCUSSION

Table shows the results of subject PM on HAM - A Scale.

NAME	TOTAL SCORE	INTERPRETATION
PM	20	Mild to moderate severity

RATIONALE

Subject PM ,27Years old Female, with the chief complaint of excessive worry amd fear, feeling, restless, difficulty concentrate, increasing heart beats frequently without any reason, increasing muscle ache or soreness, disturbed sleep and decreased concentration. So HAM - A was administered to assess the severity of the anxiety symptoms.

BEHAVIOUR OBSEVATION

Rapport was established, Eye contact was maintained. Patient was restless and sweaty hands.

DISCUSSION

Subject PM, 27 Year old Female has obtained the score of 20, which interpreted as patient has mild to moderate severity of the symptoms of anxiety.

FINDINGS: The case study on the Hamilton Anxiety Rating Scale (HAM-A) assessment of a 27-year-old female patient, PM.

HAM-A Score: The patient scored 20 on the HAM-A, indicating mild to moderate severity of anxiety symptoms.

Interpretation: The score suggests that the patient is experiencing mild to moderate anxiety symptoms, including anxious mood, tension, fears, insomnia and somatic symptoms.

Anxiety Symptoms:



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

The patient's symptoms include:

- Excessive worry and fear
- Restlessness and difficulty concentrating
- Increased heart rate and muscle aches
- Disturbed sleep and decreased concentration
- Fidgeting and restlessness during the interview

CONCLUSION: The HAM-A assessment revealed that the patient, PM, exhibits mild to moderate severity of anxiety symptoms, with a score of 20. The patient's symptoms are impacting daily life and functioning, requiring treatment and management.

Recommendations:

- 1. Medications to reduce symptoms of anxiety.
- 2. Psychotherapies, such as cognitive-behavioral therapy (CBT) and mindfulness, to manage anxiety symptoms.
- 3. Lifestyle adjustments, such as sleep hygiene, stress management, regular exercise, and regular checkups, Limiting caffeine and maintaining a healthy diet to reduce anxiety symptoms.

Hamilton Anxiety Rating Scale (HAM-A)

1 Anxious mood	
(Worries, anticipation of the worst, fearful anticipation, irritability.)	

[0] [1] [2] [3] [4]

2 Tension

(Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax.)

[0] [1] [2] [3] **[4**]

3 Fears

(Of dark, of strangers, of being left alone, of animals, of traffic, of Crowds.)

[0] [1] [2] [3] [4

4 Insomnia

(Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue On waking, dreams, nightmares, night terrors.)

[0] [1] **[2]** [3] [4]

5 Intellectual

(Difficulty in concentration, poor memory.)

[0] [1] [2] [3] [4]

6 Depressed mood

(Loss of interest, lack of pleasure in hobbies, depression, early waking, Diurnal swing.)

[0] [1] [2] [3] [4]

7 Somatic (muscular)

(Pains and aches, twitching, stiffness, myoclonic jerks, grinding of Teeth, unsteady voice, increased muscular tone.)

[0] [1] **[2]** [3] [4]

8 Somatic (sensory)

(Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, Pricking sensation.)

[0] [1] [2] [3] [4]



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

9 Cardiovascular symptoms

(Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting Feelings, missing beat.)

[0] [1] **[2]** [3] [4]

10 Respiratory symptoms

(Pressure or constriction in chest, choking feelings, sighing, dyspnea.)

[0] [1] [2] [3] [4]

11 Gastrointestinal symptoms

(Difficulty in swallowing, wind abdominal pain, burning sensations, Abdominal fullness, nausea, vomiting, borborygmi, looseness of Bowels, loss of weight, constipation.)

[0] [1] [2] [3] [4

12 Genitourinary symptoms

(Frequency of micturition, urgency of micturition, amenorrhea, Menorrhagia, development of frigidity, premature ejaculation, loss of Libido, impotence.

[0] [1] [2] [3] [4]

13 Autonomic symptoms

(Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension Headache, raising of hair.)

[0] [1] [2] [3] [4]

14 Behavior at interview

(Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, Strained face, sighing or rapid respiration, facial pallor, swallowing,)

[0] [1] **[2]** [3] [4]

5. RESEARCH FINDINGS

The case study analysis of psychological assessment scales revealed several key findings that shed light on the application and implications of these scales in clinical practice.

- 1. Utility of Psychological Assessment Scales: The study demonstrated that psychological assessment scales, such as the Positive and Negative Syndrome Scale (PANSS), Alcohol Use Disorder Identification Test (AUDIT), Young Mania Rating Scale (YMRS), and Hamilton Anxiety Rating Scale (HAM-A), are useful tools for assessing the severity of symptoms and diagnosing mental health disorders.
- 2. Strengths and Limitations of Different Scales: Each scale has its strengths and limitations. For example, the PANSS is a comprehensive scale that assesses both positive and negative symptoms of schizophrenia, while the AUDIT is a brief screening tool that identifies individuals with hazardous or harmful alcohol use. However, the study also highlighted the limitations of these scales, such as the potential for bias and the need for careful interpretation of results.
- 3. Implications for Diagnosis and Treatment: The study found that psychological assessment scales have significant implications for diagnosis and treatment. For instance, the PANSS can help clinicians identify the severity of symptoms and develop targeted treatment plans, while the YMRS can help assess the effectiveness of treatment for manic symptoms.
- 4. Relationship between Psychological Assessment Scales and Treatment Outcomes: The study revealed a significant relationship between psychological assessment scales and treatment outcomes. For example, the HAM-A can help clinicians assess the severity of anxiety symptoms and monitor



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

treatment response, while the AUDIT can identify individuals who may benefit from interventions aimed at reducing hazardous or harmful alcohol use.

Clinical Implications

- The importance of using standardized assessment tools to ensure accurate diagnosis and treatment planning.
- The need for clinicians to be aware of the strengths and limitations of different psychological assessment scales.
- The potential for psychological assessment scales to inform treatment decisions and improve treatment outcomes.

CONCLUSION

The research findings highlight the importance of psychological assessment scales in clinical practice, including their utility, strengths, and limitations. The study demonstrates the potential for these scales to inform diagnosis, treatment planning, and treatment outcomes, and underscores the need for clinicians to be aware of the clinical implications of these scales.

REFERANCE

- 1. Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). AUDIT: The Alcohol Use Disorders Identification Test: guidelines for use in primary care (2nd ed.). World Health Organization. WHO/MSD/MSB/01.6a.
- 2. Borkovec, T. D., & Costello, E. (1993). Efficacy of applied relaxation and cognitive-behavioral therapy in the treatment of generalized anxiety disorder. Journal of Consulting and Clinical Psychology, 61(4), 611-619.
- 3. Hamilton, M. (1959). The assessment of anxiety states by rating. British Journal of Medical Psychology, 32(1), 50-55.
- 4. Kay, S. R., Fiszbein, A., & Opler, L. A. (1987). The positive and negative syndrome scale (PANSS) for schizophrenia. Schizophrenia Bulletin, 13(2), 261-276.
- 5. Maier, W., Buller, R., Philipp, M., & Heuser, I. (1988). The Hamilton Anxiety Scale: Reliability, validity and sensitivity to change in anxiety and depressive disorders. Journal of Affective Disorders, 14(1), 61-68. Doi: 10.1016/0165-0327(88)90072-9
- 6. McIntyre, R. S., Mancini, D. A., Srinivasan, J., McCann, S., Konarski, J. Z., & Kennedy, S. H. (2004). The antidepressant effects of risperidone and olanzapine in bipolar disorder. Canadian Journal of Clinical Pharmacology, 11(2), e218-e226.
- 7. Opler, et.al. (2017). Positive and Negative Syndrome Scale (PANSS) Training. Innovations in Clinical Neuroscience.
- 8. Young, R. C., Biggs, J. T., Ziegler, V. E., & Meyer, D. A. (1978). A rating scale for mania: Reliability, validity, and sensitivity. British Journal of Psychiatry, 133, 429-435.
- 9. Young, R. C., Biggs, J. T., Ziegler, V. E., & Meyer, D. A. (2000). Young Mania Rating Scale. In Handbook of psychiatric measures (pp. 540-542). American Psychiatric Association.