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Introduction to the Psychological Assessment of Disordered Thought and Perception

Definitions and Concepts

Irving B. Weiner and James H. Kleiger

Disordered thinking and perception are cognitive dysfunctions that often constitute the basis for referrals for psychological assessment. The presence and severity of these dysfunctions have broad implications for how best to respond to referral questions concerning differential diagnosis, treatment planning, educational programming, personnel selection, and forensic determinations. Information about the psychological assessment of disturbances in thinking and perception has until now been widely scattered in the literature. Books, book chapters, and journal articles addressing this topic have, for the most part, been narrowly focused on the use of one particular instrument or the assessment of a single diagnostic category. Psychologists seeking information about multiple methods of assessing disordered thinking and perception, as well as its manifestations in diverse populations, have had to examine multiple books and articles to find it.

With regard to seeking answers to such questions, the use of multiple methods is widely accepted as a standard of practice for conducting psychological evaluations. Experienced practitioners and students learning about assessment recognize the importance of utilizing a range of empirically valid instruments to identify psychological functions.

The present book on *Psychological Assessment of Disordered Thinking and Perception* is designed to fill this void in the literature. The text emphasizes a multimethod approach to psychological assessment, and the chapters provide up-to-date information about identifying disordered thinking and atypical

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perception with well-known assessment methods, including their conceptual basis, psychometric properties, empirical support, key interpretive elements, and ability to detect malingered presentations of thought and perceptual disturbances. The chapter authors are prominent assessment psychologists, all of whom are recognized for their expertise and contributions in developing and researching specific assessment instruments or topics.

METHODS OF PSYCHOLOGICAL ASSESSMENT

The psychological assessment of personal characteristics draws on information obtained from three types of measures: *clinical interviews* (in which examiners inquire about the nature of any psychological problems a person may be having and about such matters as their developmental and family history, education and work experience, medical condition, and current life circumstances); *self-report measures* (which consist of asking people about themselves and their experiences with inventories and rating scales); and *performance-based measures* (which involve observing how people manage various kinds of assigned tasks).

Clinical interviews are typically unstructured and open-ended. This allows examiners to request elaborations and clarifications of what is being said and to pursue whatever lines of inquiry seem relevant to the purpose of the interview. As elaborated in Chapter 2 of this book, clinical interviews can accordingly provide considerable information about a person's current condition and personality characteristics.

However, the information obtained in interviews is limited to what people are able and willing to say about themselves. What is learned from an interview may consequently leave uncertain a person's diagnostic status and treatment needs. Hence, an adequate assessment may also require formal psychological testing with self-report and performance-based measures, both of which bring some advantages and disadvantages to the assessment process. Self-report inventories and rating scales are relatively structured measures in which people describe themselves by replying "true" or "false" to a fixed number of specific statements (e.g., "I am a very sociable person") or by selecting an answer from a prescribed list of alternative responses to a question (e.g., Question: "Do you feel unhappy?" Alternative answers: "most of the time," "occasionally," "hardly ever").

Like the content of interviews, responses on inventories and rating scales have, on the one hand, the disadvantage of being limited to what people recognize in themselves and are agreeable to reporting. As advantages, on the other hand, self-report measures are relatively easy to administer and score, especially with computer technology; cooperative respondents complete all of the items on the test; and the test results bear directly on an individual's personality characteristics. If they are self-aware and being truthful, for example, people who say that they are very sociable are in all probability very sociable. Chapters 2 through 7 discuss the identification of disordered thinking and perception with rating scales and four widely used self-report inventories.

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Performance-based measures are relatively unstructured procedures that present people with somewhat ambiguous test stimuli and give them only sketchy guidance in what they are expected to say about or do with them (e.g., shown a picture of a boy with a violin and told to make up a story about it). These measures have the potential advantage of identifying underlying personality characteristics of which people are unaware or that they would prefer not to report if asked directly about them. Their disadvantages, however, are that performance-based measures are relatively time-consuming to administer and score; their relationship to personality characteristics is often indirect and more likely to be suggestive than definitive; and respondents who are superficially cooperative may give brief and bland responses that have little interpretive significance. Chapters 8 through 11 discuss the diagnostic utility in identifying disordered thinking and perception of four notable performance-based measures.

Examiners can maximize the advantages and minimize the disadvantages of these three types of psychological assessment measures by including all of them in their personality assessments. Chapter 1 elaborates the nature and utility of such multimethod assessment.

Performance measures also look specifically at the neurocognitive aspects of disordered thought and perception (DTP). Chapters 12 and 13, in Part IV, provide perspectives on the impact and assessment of disturbances in thinking and perception on intellectual and neurocognitive functioning. Chapter 12, which examines the effects of DTP on intellectual functioning, serves as a bridge to Chapter 13's focus on the neuropsychological assessment of DTP.

Part V focuses on Special Topics, including detection and understanding of DTP in the contexts of forensic, child and adolescent developmental and cross-cultural evaluations. Chapter 14 provides a detailed look at the nexus between criminal responsibility and disturbances in thinking and perception, whereas Chapters 15 and 16 examine these phenomena from developmental and cross-cultural perspectives.

CENTRALITY OF THINKING AND PERCEPTION IN PSYCHOLOGICAL ASSESSMENT

Evaluating characteristics of thinking and perception is a central concern for assessment psychologists. As key aspects of mental functioning and experience, qualities of thinking and perception have major implications for adaptation or dysfunction. Fundamentally, perceptual processes and thinking-related variables help people understand their experience and determine their reactions to the events in the world. Thinking and perception affect judgment and decision making and ultimately influence the direction of behavior. Disturbances in thinking and distortions in perception of reality not only affect adaptation but often lead to symptom formation and may be among the criteria for making certain clinical diagnoses.

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In some cases, disturbances in thinking and perception are associated with severe forms of psychopathology, most notably disorders within the psychotic spectrum. However, despite the centrality of disturbances in thinking and perception in assessing psychosis, confusion about the nature of these concepts can muddy the waters lead to imprecise or, in some instances, inaccurate, diagnostic conclusions. For this reason, sharpening our definitions of relevant concepts and processes, such as reality, perception, reality testing, thought processes, and psychosis, is a critical starting point in our examination of multimethod assessment of these psychological functions for diagnostic and treatment-planning purposes.

Conceptual Definitions

The concept of "reality" exists objectively, materially, and independently of acts of consciousness (Kleiger, 2017; Parnas, 2015). As a construct, one's relationship to objective reality can be understood in terms of two separate, but related, processes: the sense of reality and the perception of reality. The "sense of reality" reflects immediate, "bottom-up" sensory experience of the world. In general, sensory awareness of objective reality mirrors shared and consensually valid features of the external world. In contrast, "perception of reality" involves a "top-down" organization, judgment, and interpretation of these sensory inputs. Judgments about the meaning of sensory data may vary from one person to another and can be influenced by a host of intraindividual factors, including past experience, expectation, motivation, beliefs, and prejudices, to name a few.

It goes without saying that individuals may interpret their sensory experiences differently. One's perception and interpretation of an experience may also be at odds with objective aspects of the sensory stimulus. Thus, people may vary in terms of how accurately they perceive or interpret sensory experiences. One component of perceiving or interpreting sensory experience is determining the locus of that experience. In other words, does what one senses, sees, touches, or hears emanate from the external world outside or does it originate in one's mind? Making such a judgment is a critical component of perception, and it can affect whether an individual perceives external stimuli accurately or misperceives them and forms distorted impressions of external reality. Judging the accuracy of one's perception is often referred to as the process of "reality testing." Typically, reality testing involves an implicit judgment about the fit between our sensory experience, on the one hand, and our cognitive interpretation of external reality on the other. Weiner (1966) contrasted reality sense with reality testing, linking impaired reality sense to perceptual disturbances in self or ego boundaries.

For definitional clarity, we employ the term *perception* in describing the cognitive judgment or interpretation individuals make about their experiences. Perception relates to measurable psychological function, whereas reality testing is a more experience-distant clinical construct. The experience of

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reality may be impaired while, at the same time, one's reality testing remains intact. For example, one may see other figures in a room or hear voices when no one else is present yet judge correctly that their experience of reality is inaccurate (i.e., that these are hallucinatory experiences). Conversely, one may perceive reality correctly but interpret its source or meaning incorrectly (Kleiger, 2017).

Thinking is a broad-based term referring to multiple cognitive processes related to analyzing and interpreting one's experiences. However, it is difficult to conceptualize "thinking" in a vacuum without drawing on related cognitive operations, such as attention, language processing, and executive functioning. Although in-depth examination of the role each plays in what we refer to as "thinking" or "thought processes" is beyond the scope of our present discussion, for the sake of clarity, we define some of the cognitive components that characterize adaptive thought processes. Although our list is not exhaustive, we include (a) focusing on relevant and filtering irrelevant details, (b) organizing and synthesizing information, (c) linking and sequencing ideas in a conventional manner that can be followed and understood, (d) using words in standard and appropriate ways, (e) identifying and forming concepts, and (f) reasoning and drawing conclusions that are logical and based in consensual reality.

More restrictive definitions of *thought disorder* have focused on the first of the five components (i.e., those pertaining to the formal processes of thinking and language, hence the traditional term *formal thought disorder* or FTD). However, Taylor (1981) specified that disordered thinking can present itself either in the content of speech or the processes of speech. On the basis of this broader definition of disordered thinking, Kleiger and Khadivi (2015) distinguished between disturbances in terms of *how* things are said (formal thought processes) versus *what* is said (bizarre or illogical beliefs). Kleiger (2017) offered a simple integrated model of disordered thinking that included three categories: (a) disorganization, (b) illogicality, and (c) impoverished speech and thinking capacities. The first two, pertaining to how things are said (characterized primarily by disorganization) and what is said (characterized primarily by illogicality), are of essential interest as we examine multimethod assessment of disordered thinking.

Finally, there is the concept of psychosis, a mental state incompatible with the tenets of reality. The term *psychosis* is used descriptively to define acute, episodic, and sometimes enduring states that are characterized by the presence of hallmark features. The positive hallmark symptoms include hallucinations, delusions, disordered thinking, severely disturbed behavior. In some cases, the negative symptoms of restricted emotional expressiveness, anhedonia, social withdrawal, and loss of motivation also appear. Psychosis also represents a class of severe mental disorders, which is based on clinical descriptions of signs and symptoms. Psychosis implies the loss of reality testing, where one is unable to discriminate between what is "inside" and what is "outside" one's own mind.

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However, poor reality testing, by itself, does not automatically constitute psychosis. Many individuals have difficulties establishing an objective frame of reference. They imbue their experiences with too much subjectivity and fail to distinguish between their own thoughts and feelings and those of others. It is only when the capacity to make this distinction becomes sufficiently impaired, when the individual fails to distinguish between what is "real" and what is "imagined," that we speak of psychosis. Because psychosis, like most psychopathological conditions, occurs along a continuum of severity, we employ the term *psychotic phenomena* to describe a broader range of psychotic-like symptoms that might not meet formal diagnostic criteria (Kleiger, 2017).

Conceptual Distinctions

Before turning to the psychological methods for assessing disturbances in perceptual processes and thought-related variables, which are reviewed in the ensuing chapters, it is important to make a series of conceptual distinctions to illuminate the path and avoid common pitfalls that lead to confusion. We identify four conceptual issues that form essential standards of practice in conducting psychological evaluations, in general, and in the assessment of disordered thought and perception, in particular. These include (a) distinguishing between assessing psychological functions versus clinical symptoms, (b) understanding different levels of inference making, (c) differentiating dimensional versus categorical approaches in assessing disturbances in thinking and perception, and (d) clarifying commonly used and misused terminology.

Psychological Functions Versus Clinical Symptoms

Some assessment methods are primarily function based, whereas others are primarily symptom based. These two foci are related but not identical. Psychological assessment involves both assessment of underlying psychological functions, referred to as "ego functions," and inferences about clinical symptoms and how they might converge to meet criteria for making clinical diagnoses. However, clinicians may err by confusing the functions they assess with the presence of clinical symptoms or disorders, which may sometimes, but not always, be true. Function-based assessment seeks to identify underlying psychological functions or processes (i.e., cognitive abilities, executive functions, affective experiences, thought processes, perception, representations of self and others, and nature of relationship capacities). In contrast, symptom-based assessment seeks to identify the presence of clinical symptoms (i.e., anxiety, depression, mania, anger, disruptive behavior, disorganized speech, hallucinations, delusions, and cognitive impairment) that are commonly listed as criteria for assigning clinical diagnoses. The distinction between assessment of functions and assessment of symptoms and disorders is linked to the different kinds of inferences we make from the assessment findings.

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Levels of Inference Making

In general, psychological assessment methods are not "diagnostic tests." They are empirically based data-gathering methods that help organize and direct a clinician's diagnostic understanding. Data from assessment methods elucidated in this volume provide inferences concerning disordered thinking and perception, which may or may not relate to specific symptoms or clinical diagnoses.

In terms of inference making, one needs to distinguish between different types of inferences and the levels of confidence assigned to them (Weiner, 1977). Representative, or first-order, inferences are closely tied to test responses and exemplify the psychological functions we seek to assess. Such inferences are lean because the test response itself is emblematic or representative of the function or clinical symptoms we are interested in assessing.

In contrast, symbolic, or second-order, inferences involve inferential steps beyond those made with representational examples. Typically, they involve stepping beyond the response itself and employing other concepts or theories to elaborate or extend the original inference. Higher order inferences integrate test findings and enable assessors to make inferences about the presence and severity of clinical symptoms and the disorders to which they may be linked. Representative inferences form the scaffolding on which higher order, diagnostic inferences may be made.

As psychological functions, thought organization and perception differ in their relationship to symptom dimensions and associated clinical disorders. Disturbances in thinking, as represented in a test taker's responses on performance-based assessment instruments, are themselves closely tied to the phenomenon we are assessing. As Kleiger (2017) and Kleiger and Khadivi (2015) have argued, thinking disturbances are multidimensional, including degree of (a) disorganization in speech and communication, (b) illogicality, and (c) impoverishment in conceptual and communication processes. Disorganized thinking may, in particular, be concretely represented in an individual's test responses. For example, responses on performance-based methods, like the Rorschach, TAT, or subtests of Wechsler tests, provide samples of disorganized communication and thinking. Thus, test responses, as verbal samples, might themselves be disorganized and related closely the clinical symptom of "disorganized speech."

However, the same cannot be assumed with respect to illogicality or impoverishment. In other words, illogical reasoning in a test response may or may not reflect the presence of a clinical symptom (e.g., magical thinking, delusions). Similarly, impoverished test responses are nonspecific in nature and may reflect a range of situational variables or clinical symptom features (e.g., test taking or characterological, defensiveness, depression, cognitive impairment or negative symptoms) and require additional information to ascertain the clinical or diagnostic significance of impoverished test responses.

Assessment-based disturbances in perception suggest weaknesses in an aspect of psychological functioning; however, unlike disorganized thinking, they are not necessarily representative of a clinical symptom. For example,

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test indications of distorted perception do not demonstrate the presence of pseudoperceptions, such as hallucinations or illusions. Typically, making such a leap from test findings (i.e., signs of distorted perception) to the presence or risk for hallucinatory symptoms is inappropriate. Unlike disorganization present in actual test responses, misperception and misinterpretation of testing stimuli do not necessarily align with the presence of clinical symptoms. Although it may support such an inference, by itself it is not sufficient for inferring such a clinical symptom.

Dimensionality

Psychological functions and the clinical symptoms and possible diagnoses with which they may be associated exist along a dimension of severity. Dimensional approaches to diagnosis have largely replaced outdated categorical concepts. Dimensionality pertains to assessment-based signs of disordered thinking and perception and moves us away from static concepts that have confused clinicians for decades. Nowhere is this confusion more evident that in the use of the term *thought disorder*. As a clinical term, thought disorder is a well-established part of the psychological and psychiatric lexicon. However, the term itself ignores the dimensional nature of the phenomena and instead contributes to its reification and status as a pathognomonic sign.

Similarly, problems in perception occur along a continuum that includes normative shifts in perceptual accuracy (occurring under certain conditions) to more severe and pervasive distortions of the perception of external reality. Linking the occurrence of both disturbances in thinking and perception to specific internal or external conditions is what distinguishes psychological assessment from other types of evaluative procedures. Significant in this regard is the relation of disturbed perception and disordered thinking to diagnostic conclusions about psychosis, which we consider next.

As previously noted, diagnosing a disorder should not be confused with identifying disordered psychological processes or functions. Furthermore, psychosis itself should be thought of dimensionally, as a spectrum of different forms and levels of disturbance in psychological functions. When our assessment instruments identify signs of disturbed thinking and perception, it is important to not foreclose too quickly and assume the presence of psychosis. Instead, psychological assessment enables the practitioner to identify the nature and severity of these difficulties, as well as the conditions under which they occur. From there, it is important to rely on a broader array of information before making a formal clinical diagnosis. In essence, our assessment data are powerful markers of functional difficulties that may or may not lead us to formal diagnostic conclusions.

Critical Issues in Terminology

Using clear and unambiguous terminology is always important when describing the functions we are assessing. Achieving conceptual clarity has been most challenging when describing disorders of thought processes. Unfortunately,

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the term *thought disorder* has been the source of misunderstanding and disagreement regarding scope, underlying mechanisms, and degree of diagnostic specificity (Kleiger, 1999; Kleiger & Khadivi, 2015). Alternatives such as "disorganized thinking," "cognitive disorganization," "disorganized speech," or Andreasen's (1978) inclusive yet cumbersome expression, "disorders of thought, language, and communication" are but a few of the more common terms used to capture this phenomenon. Although we are not opposed to the term *thought disorder* when denoting severe and static disturbance in communication and logic, we prefer the term *disordered thinking* to capture the dimensional nature of the psychological function we are assessing.

As noted previously, we also utilize the terms *disturbed* or *inaccurate* perception, as opposed to *reality testing*, to describe departures from conventional perception of external stimuli. Reality testing is an important clinical concept related to perceptual inaccuracy; however, we view it a clinical concept, which moves us a step away from the core function of perception. We also differentiate two closely related functions: perception and interpretation. The terms are often used interchangeably but should be recognized as cognitive processes. *Perception* involves the registration and translation of sensory stimuli (visual, auditory, gustatory, tactile, olfactory, and somatic) into subjective experience. Closely related to immediate, experience-near perceptual experience is *interpretation* of one's perceptions, which involves how we understand, conceptualize, or assign meaning to our perceptual experiences. How one understands and interprets perceptions overlaps with how one judges the accuracy of one's perceptions (i.e., reality testing). How successful one is in the process of interpreting, testing, or judging one's perceptual experiences relates to concept of *insight*.

Another clarification involves use the term *diagnosis* in the context of psychological assessment. The term has dual meanings, which can be confusing to practitioners and consumers of psychological assessment. In its narrow meaning, diagnosis relies on accepted nomenclature to name a condition, presumably for treatment-related purposes. As previously noted, psychological assessment may involve formal diagnostic nomenclature, provided it is based on convergent lines of inference (including multiple assessment methods, history, interview material, and additional forms of collateral information). However, a less static meaning of the term pertains to developing an understanding of the individual's functioning—their abilities, regulatory functions, representational capacities, possible areas of conflict, and motivation—that goes well beyond the use of formal diagnostic nomenclature.

OVERVIEW OF THE BOOK'S CONTENTS

The text begins in Part I with a chapter on the importance of multimethod psychological assessment. Part II then continues with six chapters on the assessment of disordered thinking and perception with widely used self-report

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measures: interview methods and the Minnesota Multiphasic Personality Inventory–2 (MMPI-2), the Minnesota Multiphasic Personality Inventory–2–Restructured Format (MMPI-2-RF), the Personality Assessment Inventory (PAI), the Millon Clinical Multiphasic Inventory-IV (MCMI-IV), and the commonly used rating scales (Positive and Negative Syndrome Scale [PANSS], Scale for the Assessment of Positive Symptoms [SAPS], Brief Psychiatric Rating Scale [BPRS], and Psychotic Symptom Rating Scale [PSYRATS]). Part III follows with four chapters on assessment with performance-based measures: the Rorschach Comprehensive System (RCS), the Rorschach Performance Assessment System (R-PAS), the Thematic Apperception Test (TAT), and the Wartegg Drawing Completion Test (WDCT). Consideration of individual assessment methods concludes in Part IV with chapters on intelligence measures and neuropsychological measures.

The text then continues in Part V with chapters on three special topics: assessment issues that often arise in the context of forensic evaluations, developmental considerations (specifically when evaluating children and adolescents) that may affect the implications of psychological assessment findings, and cross-cultural differences that should be considered in weighing the interpretive significance of test data. Chapter 14 on forensic considerations approaches a broader range of issues, including the nature of criminal responsibility, clinician bias and error, and a structured forensic process model for NGRI decision making.

The text concludes in Part VI with two case illustrations, one adolescent and one adult, that show how multimethod assessment data can be integrated to describe a person's cognitive and affective functioning. They focus particularly on behavioral difficulties resulting from disordered thinking and perception. The case examples mirror clinical practice by demonstrating how a selected, but not exhaustive, group of instruments can be used in evaluating questions concerning DTP. Unfortunately, not all of the instruments or special considerations covered in the preceding chapters could be demonstrated in the case illustrations.

The chapters are written by experienced clinicians for students and seasoned practitioners alike. We present a collection of 19 conceptual and practice-oriented chapters in a single volume, which provide detailed information about the nature of the widely used clinical assessment measures, as well as guidance in applying these measures in the assessment of disordered thinking and perception.

REFERENCES

Andreasen, N. C. (1978). *The Scale for the Assessment of Thought, Language, and Communication (TLC)*. University of Iowa Press.

Kleiger, J. H. (2017). *Rorschach assessment of psychotic phenomena*. Routledge. https://doi.org/10.4324/9781315271385

Kleiger, J. H., & Khadivi, A. (2015). *Assessing psychosis: A clinician's guide*. Routledge. https://doi.org/10.4324/9781315882086

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Parnas, J. (2015). Philosophical and phenomenological perspectives on psychosis. In F. Waters & M. Stefane (Eds.), *The assessment of psychosis*: *A reference book and rating scales for research and practice* (pp. 17–43). Routledge.

Taylor, M. A. (1981). *The neuropsychiatric mental status examination*. Spectrum. https://doi.org/10.1007/978-94-011-7391-9

Weiner, I. B. (1966). *Psychodiagnosis in schizophrenia*. Wiley.

Weiner, I. B. (1977). Approaches to Rorschach validation. In M. A. Rickers-Ovsiankina (Ed.), *Rorschach psychology* (2nd ed., pp. 575–608). Krieger.