

CHAPTER 1

Introduction to R-PAS

Joni L. Mihura
Gregory J. Meyer

The purpose of this book is to illustrate how to use and interpret the Rorschach Performance Assessment System (R-PAS; Meyer, Viglione, Mihura, Erard, & Erdberg, 2011) in a wide variety of situations. Through a presentation of illustrative cases, the book focuses on the ways in which the Rorschach is often used and can be helpful—thus, the title *Using the Rorschach Performance Assessment System® (R-PAS®)*. We designed the chapters to serve as exemplars for students and psychologists working in particular settings or situations (e.g., child custody, violence risk assessments, criminal responsibility evaluations), with certain populations (e.g., couples, female psychopaths, inpatients with a recent suicide attempt), and answering certain referral questions (e.g., detecting psychosis).

This volume should be considered essential for everyone who uses R-PAS, including practitioners, instructors, supervisors, and students. Its individual chapters, each of which has been thoroughly reviewed and vetted by the editors for administration, coding, and interpretation, can also be used as exemplars for students or psychologists who are using, or are considering using, R-PAS in any of these situations. There are many other audiences for this book as well. Psychologists whose expertise is not the Rorschach but who work in settings in which the Rorschach is used can read examples of its potential application. Judges or attorneys can use the book as a resource for relevant information on the Rorschach and the ways it is being used (or can or should be used) in legal settings.

What Is R-PAS?

R-PAS (Meyer et al., 2011) is a Rorschach system that vastly improves upon the most commonly used previous system, the Comprehensive System (CS; Exner,

2003), by addressing its major criticisms (Meyer, Viglione, & Mihura, 2017; Mihura, Meyer, Bombel, & Dumitrascu, 2015; Mihura, Meyer, Dumitrascu, & Bombel, 2013; Wood, Garb, Nezworski, Lilienfeld, & Duke, 2015). R-PAS was designed as a replacement for the CS by members of Exner's Rorschach Research Council (Gregory J. Meyer, Donald J. Viglione, Joni L. Mihura, and Philip Erdberg) and a prominent forensic psychologist (Robert E. Erard). The council viewed this replacement as a necessary step following Exner's death in 2006 and the decision by his heirs, about 2 years later, not to further develop the CS. The CS itself was first published in 1974 (Exner, 1974), designed as a replacement for five previous competing Rorschach systems that were popular in the United States at the time (i.e., Beck, Beck, Levitt, & Molish, 1961; Hertz, 1970; Klopfer & Davidson, 1967; Piotrowski, 1957; Rapaport, Gill, & Schafer, 1968), which themselves were designed as extensions of and replacements for Hermann Rorschach's original test approach (Rorschach, 1921/1942).

What Are the Essential Components of R-PAS?

An R-PAS assessment starts with a standardized administration of the test stimuli (i.e., the 10 inkblots) by an examiner, who asks the respondent to look at each card and answer the question "What might this be?" and then records the respondent's responses verbatim along with any relevant nonverbal expressions (Meyer et al., 2011). All Rorschach systems use the same 10 inkblots,¹ which were originally designed by Hermann Rorschach (1921/1942) after pilot-testing various iterations of the inkblots and refining them to improve their evocative features. After administering the test, the examiner codes the responses according to R-PAS guidelines and enters these codes into the online scoring and interpretation program (www.r-pas.org). This secure online program calculates the scores to be interpreted and plots them on a graph using standardized scores—similar to those used by other popular tests, such as intelligence tests—to compare the examinee's scores to norms. Next, the examiner interprets the test results using the R-PAS interpretive guidelines provided in the test manual or the editable case-based interpretive guidelines that are available from the online program. The R-PAS results are interpreted in the context of other assessment data, taking into account the method by which all of the information was obtained (e.g., clients' performance behavior on the Rorschach vs. self-report of their personality on questionnaires).

Table 1.1, "Brief Guide to Variables on the R-PAS Profile Pages," provides the names and a brief description of each scale and its basic interpretation. Figure 1.1 provides an image of the R-PAS Page 1 Profile to illustrate the results printout.² These resources are provided for readers who are encountering R-PAS for the first time, in order to give them a basic idea of its components. The table and figure are not sufficient for using and interpreting the system, however. Instead, the full manual is needed.

¹Other inkblot tests have been developed, but they are rarely used.

²The R-PAS variables and results pages are updated with the emerging research.

TABLE 1.1. Brief Guide to Variables on the R-PAS Profile Pages

Term	Description
<u>Page 1</u>	
<i>Administration Behaviors and Observations</i>	
Pr	Prompt; used to encourage the respondent to give an additional response when only one is given to a card. Giving only one response is a concrete instance of underproductive behavior that does not meet the situational demands of the environment.
Pu	Pull; when four responses are given to a card, the examiner asks for the card back and reminds the participant of the desired number of responses. Giving four responses is a concrete instance of overproductive behavior that does not meet environmentally set demands.
CT	Card Turns; total number of responses in which the card was turned, regardless of final orientation for the response. Depending on how it is contextually expressed, card turning may be linked to intellectual curiosity, flexibility, compulsivity, hostility or defiance, anxiety, authoritarianism, or suspiciousness.
<i>Engagement and Cognitive Processing</i>	
Complexity	A composite variable that quantifies the amount of differentiation and integration involved in a protocol based on Location, Space, and Object Qualities; Contents; and Determinants summed across all responses.
R	Number of Responses; R is associated with both ability and motivation, and the latter may be due to intrinsic factors or situational factors.
F%	Form Percent, computed as F/R (replaces the CS score Lambda). F is Form without other determinants, also referred to as Pure F, “ <i>the shape of a head</i> .” Determinants are perceptual dimensions that “determine” a response. They are coded for the characteristics of the inkblot or characteristics attributed to the inkblot, including movement, color (either chromatic or achromatic), shading, dimensionality, symmetrical reflection, and the form, shape, or outline of a blot region. F% is inversely related to noticing, reacting to, and articulating subtleties and nuances in the inkblot environment, which suggests similar processes when the person is attending to his or her inner life and external world.
Blend	Blend response; a response with two or more determinants other than F; the determinants are separated by a comma (e.g., Mp,FC). See F% for a description of F and determinants. Blend is like the inverse of F%, but related more specifically to the ability to identify and articulate multiple features of one’s experiential environment.
Sy	A Synthesis response; two objects meaningfully related, “ <i>two birds sitting on branch</i> ” (equal to the CS codes DQ+ and DQv+). Sy is a measure of complex and sophisticated processing and coping, which involve integrative cognitive activity or relational thinking.
MC	Sum of M and WSumC. (Replaces the CS term EA.) M is the Human Movement determinant, “ <i>people dancing</i> .” WSumC is the Weighted Sum of Color determinants: $(C \times 1.5) + CF + (FC \times 0.5)$. C is the Color determinant without form, also referred to as Pure C, “ <i>this blue stuff is water</i> .” CF is the Color-Dominated determinant with form secondary, “ <i>pink cotton candy; sort of curved</i> .” FC is the Form-Dominated Color determinant, “ <i>an airplane with a red wing</i> .” MC is a measure of psychological activity and processing that is considered an index of psychological resources and adaptive capacity, based on the ability and propensity to populate, animate, and color one’s experiential world.

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TABLE 1.1. (continued)

Term	Description
MC –PPD	The MC to PPD Difference Score; subtract PPD from MC (replaces the CS D-score and in CS terms is equivalent to EA – es). MC is as defined above. PPD refers to the Potentially Problematic Determinants, which are the sum of FM+m+Y+T+V+C' (replaces the CS acronym, es, for Experienced Stimulation). FM is the Animal Movement determinant, “ <i>a bear eating a fish.</i> ” The variables m, Y, T, V, and C' are described below. MC – PPD is obtained by contrasting codes that suggest resources (MC) associated with ideational elaboration (Human Movement) and lively responsiveness to the world (chromatic color) to codes that suggest potential liabilities (PPD).
M	Human Movement determinant, “ <i>people dancing.</i> ” Movement is not an actual attribute of the inkblot; it is a mental embellishment that requires some capacity to envision or imagine. M reflects the ability to use one’s imagination to elaborate human experiences or activities; it represents a type of mentalization process that contributes to the capacity for empathy, a sense of active personal agency, a capacity to reflect on events and experiences, and a degree of developmental maturity.
M/MC	Human Movement Proportion, M divided by the sum of M and WSumC (replaces the CS EB ratio or M:WSumC). M is as defined above. WSumC is defined above with MC. M/MC assesses the degree to which decisions and actions are influenced by thoughtful deliberation and mentalization (M) versus spontaneous reactivity, vitality, and emotional expressiveness (WSumC).
(CF+C)/ SumC	The CF+C Proportion or Color Dominance Proportion, CF+C divided by SumC (replaces the FC:CF+C ratio in the CS). FC, CF, and C are described under MC. SumC is the sum of all the Color determinants, FC+CF+C. The CF+C Proportion is a rough measure of the relative absence, or relaxation, of cognitive control and modulation in one’s reactions to the environment, especially when there is emotional provocation.

Perception and Thinking Problems

EII-3	Ego Impairment Index—3rd version; a broadband, composite measure of thinking disturbance and severity of psychopathology. Its components include poor reality testing (FQ–), thought disturbance (WSumCog), crude and disturbing thought content (Critical Contents), and measures of interpersonal misunderstanding and disturbance (M–, PHR vs. GHR). As it increases, there is greater likelihood of difficulty accomplishing day-to-day tasks effectively.
TP-Comp	Thought and Perception Composite; assesses reality testing (via FQ variables) and thought disorganization (via Cognitive Codes), making it a broadband composite measure of psychopathology severity. (TP-Comp is a fully dimensional replacement for the CS PTI.)
WSumCog	Weighted Sum of Cognitive Codes; a measure of disturbed and disordered thought. Two groups of Cognitive Codes may characterize a person’s responses: those that are visual and involve illogical or implausible relationships in the inkblot stimuli (i.e., INC, FAB, CON) and those that are linguistic and involve illogical reasoning or difficulties with effective communication (e.g., DV, DR, PEC). INC, FAB, DV, and DR are weighted for severity (Level 1 or 2).
SevCog	Sum of Severe Cognitive Codes, that is, DV2+INC2+DR2+FAB2+PEC+CON. SevCog captures significant or severe disruptions in thought processes. At least among adults and adolescents, these kinds of disruptions are typically most indicative of psychotic-level lapses in conceptualization, reasoning, communication, or thought organization.
FQ-%	“FQ Minus Percent”; percentage of all responses that are distorted—that is, FQ–/R (equal to X-% in the CS). FQ–% is a measure of distortion, misinterpretation, or mistaken perception, often leading to poor judgments, odd behavior, or poor adaptation. Internal imagery and concerns may interfere with the person’s ability to process and interpret external reality, and the person may see and describe things in a mistaken, distorted, personalized way that others will not see or understand.

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TABLE 1.1. (continued)

Term	Description
WD-%	"WD Minus Percent," computed as WD-/WD. WD-% is similar to FQ-%, but it more specifically indicates whether distortions occur even in perceptual situations that are more common and conventional and tied to familiarly identified objects. Distortions in this context may be considered more atypical and problematic.
FQo%	"F-Q-O Percent"; percentage of all responses that are common, easy to see, and accurate—that is, FQo/R (equal to X+% in the CS). FQo% is a measure of conventional judgment, good reality testing, and seeing the world the way most other people do. Like FQ-, FQo is a product of developmental maturation, such that FQo% increases progressively from childhood to adolescence to young adulthood to adulthood (and FQ- decreases).
P	Popular response, " <i>a bat</i> " (Card I). Popular objects are relatively obvious perceptions that are seen by a large proportion of people taking the test. Thus, P is a measure of highly conventional interpretations of the environment and sensitivity to obvious external cues.
<i>Stress and Distress</i>	
YTVC'	"Y-T-V-C-Prime," or Sum of Shading and Achromatic Color; Total number of shading (Y, T, V) and achromatic color (C') determinants (equal to SumShading in the CS). YTVC' is a rough measure of being drawn to inconsistencies, uncertainties, and nuances in the environment, which extends to real and imagined interactions with others. In terms of response process, incorporating these features into response descriptions adds inconsistencies and nuances to the task, while also distracting the respondent from focusing on the shape of the inkblot to answer the question of what it might be.
m and Y	m = Inanimate Movement determinant, sometimes referred to as "little m," " <i>a falling rock</i> ." Y = Diffuse Shading determinant, " <i>the shading makes it look camouflaged</i> " (equal to the CS score SumY). Both m and Y have shown a relationship to moderate to severe stressors. The m code involves mechanical or nonsentient activity that lacks volitional control and is typically characterized by external forces acting on an object. Y indicates sensitivity to nuance, minor gradations, and inconsistencies in the inkblot, as well as an effort to make sense of, or account for, these features. Y is thought to indicate a helpless feeling in the face of the stressors, whereas m is related to an anxious kind of ideation that is outside of one's control or possibly impinging on oneself from external forces.
MOR	Morbid Content Thematic Code; a response incorporating a damaged, dead, or depressive quality, " <i>a broken branch</i> ," or a " <i>sad person crying</i> ." MOR responses indicate morbid, pessimistic, injured, damaged, or sad ideational themes.
SC-Comp	Suicide Concern Composite (a fully dimensional replacement for the CS S-CON). SC-Comp is an implicit measure of risk for suicide or serious self-destructive behavior with many false-positives (elevated score but person does not engage in actual self-harm).
<i>Self and Other Representation</i>	
ODL%	Oral Dependent Language, " <i>Fried shrimp on a plate</i> ," divided by R. (ODL was formerly abbreviated ROD for Rorschach Oral Dependency; Food content [Fd] in the CS is included in ODL.) ODL codes the words that suggest or images that convey themes of nurturance, needed support or help, oral activity, food and eating, or birth and fragility. Elevations identify respondents who are implicitly motivated by dependent needs, related to an underlying dependent trait or a state.
SR	Space Reversal; the object seen resides within and is defined by the white space contours so that the typical perspective of seeing ink on a white background is perceptually reversed. The response may or may not include inked areas, " <i>A (white) lamp in the center</i> " (the CS had combined Space Integration, described below, and SR into one code, S). SR is an implicit behavioral measure of independence strivings, inventive or creative perspective taking, and oppositionality.

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Term	Description
MAP/ MAHP	The Mutuality of Autonomy Pathology Proportion, MAP divided by MAHP. MAP is the Mutuality of Autonomy–Pathology Thematic Code, “ <i>some sort of organism swallowing up that bird.</i> ” MAHP is the total number of Mutuality of Autonomy Health (MAH) and MAP codes. MAH is defined below. MAP/MAHP assesses the extent to which relationships are viewed as destructive or harmful.
PHR/ GPHR	The Poor Human Representation Proportion; the sum of Poor Human Representation (PHR) codes divided by the sum of Good and Poor Human Representation codes (GPHR; replaces the GHR:PHR ratio from the CS and their difference score, the HRV). GHR suggests an ability to envision the self and relationships with others in an adaptive or positive way. PHR suggests a propensity to misunderstand others, relationships, and/or the self, or to imbue relationships with themes of damage or aggression.
M-	“M Minus”; Human Movement determinant with FQ-. M- is a rough measure of significant misunderstanding or misperceptions of people that can result in disturbed interpersonal relations.
AGC	Aggressive Content, “ <i>a weapon.</i> ” Regularly seeing aggressive, powerful, dangerous, predatory, or threatening images is a behavioral indication that these themes are on the person’s mind.
H	Whole Human content, “ <i>a person,</i> ” also referred to as Pure H. Reporting images of whole human beings is associated with the ability to envision people in complete, intact, multifaceted, and integrated ways.
COP	Cooperative Movement; cooperative, positive, or pleasant interactions between objects, “ <i>two people dancing.</i> ” COP reflects a generally positive template for envisioning relationships.
MAH	Mutuality of Autonomy–Health, “ <i>two women leaning in on a table between them, talking.</i> ” Like COP but more restricted, MAH suggests the potential for mature and healthy interpersonal relationships.
W%	Whole Percent, W/R. W% reflects a capacity for generalization and abstraction—subsuming various facts under a larger concept, the big picture.
Dd%	Unusual Detail Percent; Dd/R. Dd% reflects a tendency to focus on rare, small, or idiosyncratic details in the experiential environment.
SI	Space Integration; background space is used in a response along with an inked blot area, “ <i>A dark face, the white is eyes</i> ” (the CS combined SI and SR into one code, S). SI is typically indicative of cognitive effort, motivation, complex integration, and possibly creative thinking.
IntCont	Intellectualized Content, (2×ABS)+Art+Ay. ABS is Abstract Representation, “ <i>the swirling represents fear</i> ” (AB in the CS). Art is Art content, “ <i>a painting.</i> ” Ay is Anthropology content; content with particular cultural, historical, or ethnographic significance, “ <i>a Greek temple.</i> ” IntCont reflects an abstract or symbolic, intellectualized style of information processing.
Vg%	Vague percent; Vg/R. Vg is Vagueness, “ <i>some haze</i> ” (corresponds to the CS codes DQv and DQv+). Vg% reflects a vague, impressionistic, and relatively ineffective processing style.

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TABLE 1.1. (continued)

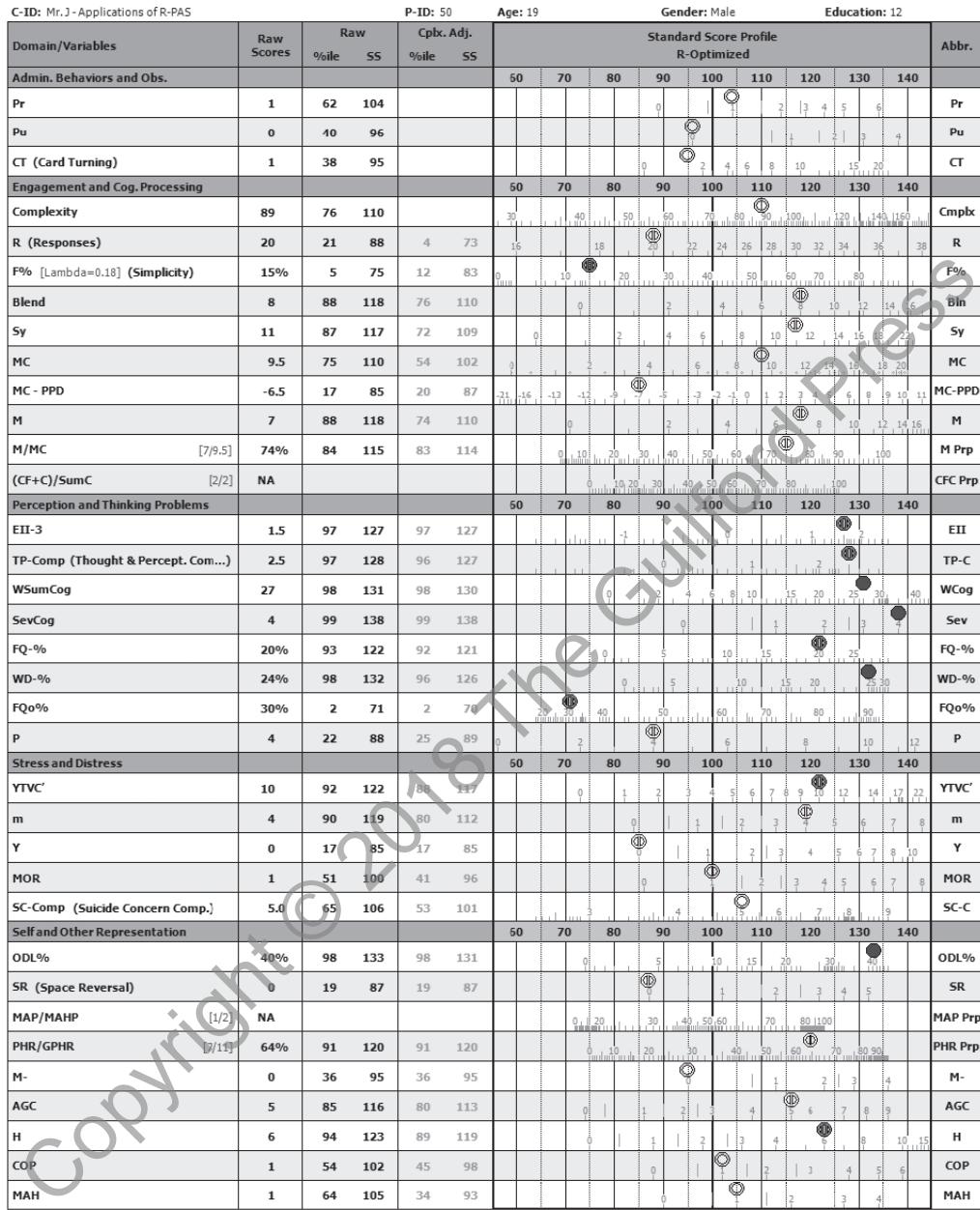
Term	Description
V	Vista determinant, where shading creates a sense of dimensionality, “ <i>a deep cave, it’s darker in the back</i> ” (equal to the CS score SumV). V reflects using nuance and subtleties as a basis for taking perspective, gaining distance, or seeing through things. It can be a cognitive resource.
FD	Form Dimension determinant, for dimensional responses based on form, “ <i>a road; the end looks far off the way it gets narrower at the top.</i> ” FD suggests a general evaluative perspective or capacity for taking a distancing perspective.
R8910%	“R-8-9-10 Percent,” R8910/R (replaces the Afr from the CS). R8910 is the total number of responses on Cards VIII, IX, and X. R8910% taps a general responsiveness to compelling or vibrant stimuli, which may include emotional situations with other people.
WSumC	Weighted Sum of Color determinants; $(C \times 1.5) + CF + (FC \times 0.5)$. C, CF, and FC are described under MC, above. WSumC is related to an interest in and awareness of stimulating, compelling features of the environment, which may include one’s emotional reactions to them.
C	Color determinant without form, also referred to as Pure C, “ <i>this blue stuff is water.</i> ” C suggests a cognitively passive or even helpless receptivity to activating or compelling experiences.
Mp/ (Ma+Mp)	The Passive Human Movement Proportion, Mp/(Ma+Mp) (replaces the CS Ma:Mp ratio). Mp is the sum of Passive Human Movement determinants, “ <i>a woman looking down,</i> ” and Ma is the sum of Active Human Movement determinants, “ <i>two men wrestling.</i> ” Mp/(Ma+Mp) indicates a propensity for passive (versus active) fantasy and ideation.
<i>Perception and Thinking Problems</i>	
FQu%	“F-Q-U Percent”; percentage of all responses that are relatively uncommon but reasonably accurate, FQu/R (equal to Xu% in the CS). FQu responses are midrange in terms of frequency and accuracy between FQo and FQ-. FQu% is associated with unconventional and individualistic ways of interpreting experiences.
<i>Stress and Distress</i>	
PPD	Potentially Problematic Determinants; FM+m+Y+T+V+C’ (replaces the CS acronym, es, for Experienced Stimulation). PPD is related to an environmental sensitivity or attunement because it reflects the capacity to animate percepts, to envision static objects in motion, and to use and describe the saturation of ink or its achromatic colors when generating images. However, this kind of sensitivity or attunement can be a liability because these codes also can be indicative of stressors that are outside one’s control in terms of impulses, needs, or feelings that are stimulating, irritating, upsetting, or pressuring.
CBlend	Color Blend, in which a color (FC, CF, C) determinant is blended with a shading (Y, T, V) or achromatic color (C’) determinant in one response; for example, CF,T (equal to Col-Shd in the CS). CBlend suggests emotional or environmental sensitivity in which emotionally spontaneous reactions (Color) can be compromised by concerns with inconsistencies, indefiniteness, and nuances (Shading) or gloomy darkness and deadening numbness (C’), thus suggesting that one is vulnerable to mixed affective experiences.
C’	Any achromatic color determinant using black, gray, or white, “ <i>a black coat</i> ” (equal to the CS score SumC’). C’ suggests being drawn to dreary, dark, and gloomy stimuli.

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TABLE 1.1. (continued)

Term	Description
V	Vista determinant, as defined above. V involves perspective taking or an evaluative attitude and may be associated with some discomfort or dissatisfaction when directed against the self or others.
CritCont%	Critical Contents divided by R. Critical Contents is an EII-3 subcomponent, equal to An+Bl+Ex+Fi+Sx+AGM+MOR. Bl is Blood content. Ex is Explosion content, “ <i>an atomic bomb going off</i> .” Fi is Fire or smoke content, “ <i>a candle flame</i> .” Sx is Sexual content, “ <i>a nude guy</i> .” MOR is described above; An and AGM are described below. CritCont% may be elevated from traumatic experiences, primitive thinking, or exaggeration and malingering.
<i>Self and Other Representation</i>	
SumH	Sum of all Human content codes, H+(H)+Hd+(Hd). SumH reflects an awareness of, or interest in, other people.
NPH/ SumH	The Non-Pure Human Proportion, NPH/SumH (replaces the CS H:(H)+Hd+(Hd) ratio). NPH is the sum of Non-Pure Human content, that is, the total number of human-like or human detail contents, (H)+Hd+(Hd). NPH/SumH indicates the tendency to mentally represent human objects in incomplete, unrealistic, or fanciful ways.
V-Comp	Vigilance Composite (a fully dimensional replacement for the CS HVI). V-Comp assesses guardedness, effortful and focused cognition, sensitivity to cues of danger, tense affective constriction, interpersonal wariness, and distancing.
r	Reflection determinant, “ <i>a parrot looking in the mirror</i> ” (equal to the CS variable Fr+rF). r may reflect a need for mirroring support, experiencing oneself as reflected in the world in a self-centered way, and/or a propensity to use the self as a frame of reference when processing information.
p/(a+p)	The Passive Movement Proportion, p/(a+p) (replaces the a:p ratio from the CS). p is the sum of Passive Movement determinants, “ <i>sitting</i> .” p/(p+a) is a rough measure of passive versus active inclinations in a person’s behaviors or attitudes.
AGM	Aggressive Movement, “ <i>men fighting</i> ” (AG in the CS). AGM indicates that the person has imagined, and, at some level, probably identified with, aggressive activity, but it does not indicate the person’s attitude toward this aggressive activity.
T	Texture determinant, where shading designates a tactile sensation, “ <i>the coloration makes it seem furry</i> ” (equal to the CS score SumT). T suggests that the person is attuned to touch and to tactile experiences in his or her environment, which may reflect an implicit desire for interpersonal closeness.
PER	Personal Knowledge Justification, the use of personal experience to justify a response, “ <i>it’s a fancy bicycle; I’ve seen one just like that</i> .” PER suggests a tendency to justify one’s views and positions based on private, personal knowledge or authority.
An	Anatomy content, “ <i>a heart</i> ,” which includes medical imaging content, “ <i>an X-ray of a chest</i> ” (equal to the CS An+Xy). An suggests that a person is concerned about bodily, physical, or medical issues.

R-PAS Summary Scores and Profiles – Page 1



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FIGURE 1.1. R-PAS results: Page 1 Profile. Reproduced from the Rorschach Performance Assessment System® (R-PAS®) Scoring Program (© 2010–2016) and excerpted from the *Rorschach Performance Assessment System: Administration, Coding, Interpretation, and Technical Manual* (© 2011) with copyrights by Rorschach Performance Assessment System, LLC. All rights reserved. Used by permission of Rorschach Performance Assessment System, LLC. Further reproduction is prohibited without written permission from R-PAS.

How Is R-PAS an Improvement Over the CS?

R-PAS addresses many problems with the CS that have been expressed by different constituents: the self-proclaimed “Rorschach critics” (Wood, Nezworski, Garb, & Lilienfeld, 2006), psychologists who research and use the Rorschach in practice (Meyer & Archer, 2001; Meyer, Hsiao, Viglione, Mihura, & Abraham, 2013), and students learning to use the task for the first time (Viglione, Meyer, Resende, & Pignolo, 2017). The following sections briefly summarize these improvements. See Meyer et al. (2017) for more detail.

Validity Meta-Analyses for Individual Scores

Although many narrative reviews of the Rorschach validity literature exist, including Exner’s research reviews in the CS test manuals (Exner, 2003), meta-analyses based on systematic reviews of the literature have become the expected norm in psychology to summarize the existing research on a topic. Because the Rorschach has always been somewhat controversial, by 2001, three independent meta-analyses had been conducted on the *general* validity of the Rorschach (Atkinson, 1986; Hiller, Rosenthal, Bornstein, Berry, & Brunell-Neuleib, 1999; Parker, Hanson, & Hunsley, 1988). In each case, the authors compared the general validity of Rorschach to the general validity of the Minnesota Multiphasic Personality Inventory (MMPI). Meyer and Archer (2001) greatly expanded one of those meta-analyses (Parker et al.) and then statistically summarized the results across all three meta-analyses. They showed that, on average, Rorschach scores were as valid as MMPI scores, both when considering all hypothesized effects ($r = .32$ for both, using 523 effect sizes for the Rorschach and 533 effect sizes for the MMPI) and when considering all studies examining heteromethod validity ($r = .29$ for both, using 73 studies for the Rorschach with $N = 6,520$, and 85 studies for the MMPI with $N = 15,985$).

However, much less systematic work had been done on the validity of individual Rorschach variables. Until 2011, validity meta-analyses for six Rorschach scores had been published. Four of these were not CS scores, and validity support was found for all four scores (Bornstein, 1999; Diener, Hilsenroth, Shaffer, & Sexton, 2011; Meyer & Handler, 1997; Romney, 1990). For the two CS scores, support was found for the Schizophrenia Index but not the Depression Index (Jørgensen, Andersen, & Dam, 2000, 2001).³ However, over 60 Rorschach variables are interpreted in the CS, leaving the great majority of variables unaccounted for by meta-analyses.

In 2012, the online version of Mihura and colleagues’ (2013) systematic meta-analytic reviews of 65 CS variables was published in the top scientific review journal in psychology (*Psychological Bulletin*). This extensive project was started in 2005 in response to the critics’ call for meta-analyses on all CS scales, and eventually took over 6 years and thousands of hours to complete. Although this project was originally planned as a contribution to the CS, after Exner’s death, the prepublication versions of the meta-analyses eventually formed the backbone of the revised system, R-PAS.

³Three of the five Rorschach scores with meta-analytic validity support are now included in R-PAS (the Schizophrenia Index, which has been renamed the Thought and Perception Composite, the Ego Impairment Index-3, and the Oral Dependent Language Scale).

In a momentous event, in response to these meta-analyses, the most vocal critics of the Rorschach lifted their call for a global moratorium on the use of the Rorschach in clinical and forensic settings (see Wood et al., 2015; and our response, Mihura et al., 2015). Because the CS is frozen in time without the possibility of updating, it cannot incorporate any of these meta-analytic findings.

In addition to their importance for the Rorschach, Mihura and colleagues' (2013) large-scale meta-analyses were notable for any multiscale psychological test. As of this writing, compared to the Rorschach, no other psychological tests have so many published meta-analyses addressing the construct validity of their individual scales. Mihura et al. systematically reviewed the published validity literature for 65 Rorschach scales; enough data existed to perform meta-analyses on 53 of these scales.⁴ R-PAS included seven other non-CS variables that have published validity meta-analyses (Bornstein, 1999; Diener et al., 2011; Graceffo, Mihura, & Meyer, 2014), systematic reviews (Mihura, Dumitrascu, Roy, & Meyer, 2017), and meta-analyses in progress (Kiss, Mihura, & Meyer, 2017). In contrast, meta-analyses on the popular MMPI-2 have mainly been conducted on the scales designed to detect faking (e.g., Rogers, Sewell, Martin, & Vitacco, 2003). The MMPI-2 has published validity meta-analyses for only 2 of its 112 clinical and treatment scales, supporting the relationship between two depression scales and the diagnosis of depression (Gross, Keyes, & Greene, 2000).

More Accurate Norms Than the CS

The CS norms have been an area of contention. Wood and his colleagues published research suggesting that many of the CS normative values were inaccurate, in the direction of overpathologizing clients (Wood, Nezworski, Garb, & Lilienfeld, 2001a, 2001b). At first, Exner and members of his Rorschach Research Council thought this criticism was largely in error (Exner, 2001; Meyer, 2001), but research they conducted on their own showed that the CS norms were substantially different for many important scores (e.g., those assessing psychosis; Meyer, Erdberg, & Shaffer, 2007; Viglione & Giromini, 2016). Subsequently, new international norms were published the year after Exner's death (Meyer et al., 2007), which R-PAS adopted with some modifications (see Chapter 16, "Generating Normative Reference Data," in the R-PAS manual; Meyer et al., 2011, pp. 469–484; Meyer, Shaffer, Erdberg, & Horn, 2015; Viglione & Giromini, 2016). The R-PAS developers are currently collecting new norms.

Less Variable Number of Responses Than the CS

The Rorschach in general (Cronbach, 1949) and the CS in particular (Meyer, 1992, 1993) have been criticized for using a method of administration that results in a widely varying number of responses, depending on the respondent and the examiner. Practically, this varying number of responses also makes it difficult for examiners to allot time for an administration. In addition, examiners using the CS are often faced with the need to readminister the task due to an insufficient number of responses,

⁴R-PAS relies on CS research as part of its evidence base. Throughout the history of the CS, it also relied on research from previous ways of scoring and administering the Rorschach.

resulting in frustration for the respondent and in confusion and scheduling complications for the examiner. Therefore, R-PAS instituted new administration guidelines that were first reviewed, vetted, and tested in an early form by the Research Council before Exner's death (Dean, 2005; Dean, Viglione, Perry, & Meyer, 2007, 2008). These guidelines were revised several times until they resulted in significantly reduced variability in the number of responses and virtually eliminated the need to readminister the task (Hosseininasab et al., *in press*; Reese, Viglione, & Giromini, 2014; Viglione et al., 2015). The latter is an improvement that is especially important in forensic settings where the client might be resistant to engage in an assessment.

Reduces Examiner Differences Compared to the CS

Different examiner styles can significantly affect important Rorschach variables when using CS administration and coding guidelines—particularly the complexity of a person's responses and the degree to which the objects he or she sees fit the blot contours, which is used as a measure of reality testing (see Exner, 2007, Table 1). To address this problem, R-PAS made numerous improvements to reduce ambiguities in administration and coding and to ensure that both steps are undertaken with more consistency and reliability across examiners (Meyer et al., 2011, 2017). R-PAS also provides many online resources to help clinicians and students practice and calibrate to R-PAS standards for administration and coding (www.r-pas.org). These resources include administration videos; practice protocols for role-playing the examiner and respondent, along with one for a “coach”; administration checklists; and several R-PAS cases coded by its developers.

Interpretation Is More Efficient and Credible Than in the CS

Two changes from the CS to R-PAS—(1) using standardized scores instead of raw scores and (2) basing interpretations on the response process—make interpretation notably more efficient and credible. These improvements are especially important for students who are learning the test for the first time, although making Rorschach interpretation more credible and plausible is important for many constituents: the general public; psychologists who doubt the Rorschach simply based on its association with psychoanalytic theory; and judges, attorneys, and juries.

Standardized Score Printout

The R-PAS scoring program provides test results that compare the client's data to norms using standardized scores like those used on self-report tests (e.g., MMPI-2, MMPI-2-RF, and Personality Assessment Inventory [PAI]) and intelligence tests (e.g., Wechsler Adult Intelligence Scale—Fourth Edition [WAIS-IV]). In contrast, the CS uses raw score results, requiring users to memorize or look up the normative values for over 60 scores each time they interpret the test. CS interpretation presents an overwhelming situation for students who are first learning the test. To illustrate the difference, compare the R-PAS Page 1 results presented in Figure 1.1 to the bottom third of the CS Structural Summary, which contains the main CS results, presented in Figure 1.2. Instructors switching from CS to R-PAS say that the standardized

RATIOS, PERCENTAGES, AND DERIVATIONS								
				AFFECT		INTERPERSONAL		
R = 16 L = 0.33				FC:CF+C = 0 : 4	Pure C = 2	COP = 1	AG = 3	
EB = 6 : 5.0 eb = 2 : 2	EA = 11.0 es = 4 Adj es = 4	EBPer = N/A D = +2 Adj D = +2		SumC' : WSumC = 1 : 5.0	Afr = 0.33	GHR:PHR = 1 : 6	a:p = 5 : 3	
FM = 1 m = 1	SumC' = 1 SumV = 1	SumT = 0 SumY = 0		S = 2	Blends:R = 4 : 16	Food = 1	SumT = 0	
				CP = 0		Human Content = 7	PER = 4	
						Isolation Index = 0.19		
IDEATION			MEDIATION		PROCESSING		SELF-PERCEPTION	
a:p = 5 : 3 Ma:Mp = 4 : 2 2AB+(Art+Ay) = 2 MOR = 2	Sum6 = 10 Lvl-2 = 3 WSum6 = 34 M- = 3 M none = 0		XA% = 0.56 WDA% = 0.54 X-% = 0.31 S- = 1 P = 2 X+% = 0.38 Xu% = 0.19	Zf = 9 W:D:Dd = 8:5:3 W : M = 8 : 6 Zd = +4.5 PSV = 0 DQ+ = 6 DQv = 2			3r+(2)/R = 0.25 Fr+rF = 0 SumV = 1 FD = 2 An+Xy = 1 MOR = 2 H:(H)+Hd+(Hd) = 3 : 4	
<input checked="" type="checkbox"/> PTI = 5 <input type="checkbox"/> DEPI = 4 <input type="checkbox"/> CDI = 2 <input type="checkbox"/> S-CON = 7			<input checked="" type="checkbox"/> HVI = Yes		<input type="checkbox"/> OBS = No			

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Version: 5.00.137

FIGURE 1.2. Rorschach Comprehensive System (CS) Structural Summary: Main results section. Reproduced by special permission of the Publisher, Psychological Assessment Resource, Inc. (PAR), 16204 North Florida Avenue, Lutz, Florida 33549, from the Rorschach Interpretation Assistance Program: Version 5 by John E. Exner, Jr., PhD, Irving B. Weiner, PhD, and PAR Staff. Copyright 1976, 1985, 1990, 1994, 1995, 1999, 2001, 2003 by PAR. Further reproduction is prohibited without permission of PAR.

score results and response process foundation for interpretation significantly improve students' learning experiences. R-PAS users report that being able to view all of the main results at a glance is helpful, and they are less likely to lose track of important results. The main R-PAS results pages are described further in Chapters 2 and 3 and are illustrated in every case chapter (Chapters 4–19).

Response Process-Based Interpretations

The *response process* refers to the psychological operations that occur in the process of generating a response to a task. As described further in Chapter 2, basing Rorschach interpretations on the response process is similar to interpreting cognitive performance tasks like those on the WAIS-IV. For example, on the WAIS-IV Block Design subtest, clinicians do not interpret the person's ability to put together blocks in everyday life; they generalize the psychological operations that occur in the process of generating a response (e.g., visual analysis and synthesis in the case of Block Design) to similar operations in everyday life. For CS interpretations, the lack of a clear link between the respondent's Rorschach response and the clinician's interpretation of that response has resulted in a sense of hiddenness and mystery around the

Rorschach that has surely led to an inherent doubting and discounting of the test. Therefore, R-PAS highlights the link between the coded behavior and its interpretation, and removes the mystery.

As a broader context, for many years, the Rorschach was associated with psychoanalytic theory (even though Hermann Rorschach did not describe it that way; Rorschach, 1921/1942; Searls, 2017). When psychoanalysis came under attack (Crews, 1996), the Rorschach did too. Exner (1974) tried to remove the stigma from the Rorschach by presenting his system as atheoretical and empirical, but for the vast majority of variables, he did not explain the link between the coding of the response and the resultant interpretation. In contrast, similar to Schachtel's (1966) phenomenological approach to understanding the Rorschach, R-PAS focuses strongly on the response process when interpreting the test results (see also Mihura et al., 2017). Response process-based interpretation makes Rorschach interpretation more credible, understandable, and easier for students to learn. We also expect that this strong link between response process and interpretation will lead clinicians to more accurately see examples of the associated attitudes and behaviors in their client's everyday life.

Culture and Gender

The last improvement over the CS that we mention is R-PAS's nongendered international norms. In addition to being more accurate than Exner's CS norms (as previously noted), the R-PAS normative sample includes protocols from non-American countries (i.e., Argentina, Belgium, Brazil, Denmark, Finland, France, Greece, Israel, Italy, Portugal, Romania, and Spain), whereas Exner's (2003) norms, collected in the 1970s and early 1980s (Exner, 1986; Exner & Weiner, 1982), were entirely from the United States. There is no reliable evidence to date that the basic cognitive and perceptual task of the Rorschach results in cultural and gender differences (e.g., Meyer et al., 2007; Meyer, Giromini, Viglione, Reese, & Mihura, 2015; Meyer, Shaffer, et al., 2015). The main differences across countries occur with some salient cultural images—such as the “Christmas elves” in Scandinavian countries reported in response to Card II and totem poles in the U.S. Southwest reported in response to Card VI—but not, for example, how well the image fits the blot, the perceptual features that are described, or the base rates of thought disturbance. Six of the 16 case chapters in this book focus on cases from countries other than the United States (i.e., Finland, Israel, Italy, the Netherlands, and Norway).

What Are Key Strengths and Applications of R-PAS?

More Construct Validity Meta-Analyses Than Any Other Test

As previously noted, a significant strength of the Rorschach is that it has, by far, the most published construct validity meta-analyses for its clinical scales than any other psychological test—over 50 Rorschach scales compared to only two MMPI-2 clinical scales (Bornstein, 1999; Diener et al., 2011; Graceffo et al., 2014; Gross et al., 2000; Meyer, 2000; Mihura et al., 2013). The development of R-PAS was guided by these meta-analyses—which is not the case for any other existing Rorschach system.

Incremental Validity Over Self-Report Measures

In clinical and forensic practice, the Rorschach offers a different method of assessment that provides incremental validity over self-report measures (for a discussion, see Meyer, 1996, 1997; Mihura, 2012; Mihura et al., 2013). There is strong support in the literature for valid Rorschach scores to add incremental validity over self-report measures, including Mihura et al.'s (2013) meta-analyses and a number of other studies (Blasczyk-Schiep, Kazén, Kuhl, & Grygielski, 2011; Dao, Prevatt, & Horne, 2008; Fowler, Piers, Hilsenroth, Holdwick, & Padawer, 2001; Hartmann & Grønnerød, 2009; Hartmann, Sunde, Kristensen, & Martinussen, 2003; Meyer, 2000; Ritsher, 2004; Viglione & Hilsenroth, 2001). This finding is not surprising, given that a substantial body of literature shows only small to moderate relationships between what people say about themselves and what they do (e.g., Mihura & Graceffo, 2014; Wilson & Dunn, 2004).

The Best Normed Measure to Assess Psychosis

Especially strong and robust evidence exists regarding the Rorschach's ability to detect psychosis and psychotic symptoms (Jørgensen et al., 2000, 2001; Mihura et al., 2013, Table 4), something that even the Rorschach's staunchest critics do not contest (Garb, Wood, Lilienfeld, & Nezworski, 2005). Our recent, but as yet unpublished, systematic review of the literature on the ability of all versions of the MMPI to detect psychosis in clinical and forensic settings suggests that it is a less valid measure for this purpose than the Rorschach (Mihura, Ales, et al., 2017). This finding is consistent with published studies showing that the Rorschach provides incremental validity over self-report measures in detecting psychosis but not the other way around (e.g., Dao et al., 2008). In Chapters 4, 5, 6, 10, 11, 12, and 16, we provide case examples of using R-PAS when the referral question targets psychosis, as well as when the diagnosis of psychosis emerges as a possibility only after R-PAS is administered.

Valid, Normed Behavioral Assessment of Psychological Characteristics Not Available on Other Tests

In addition to the general ability to detect psychosis, R-PAS also offers valid, normed behavioral assessment of psychological characteristics that are not available through other tests (for more discussion of this topic, see Mihura, 2012; Mihura & Graceffo, 2014). For example, reality testing and thought disturbance are components of psychosis, but they are also characteristics of other disorders and of personality in general. They run along a continuum that is not limited to psychosis or schizophrenia. Reality testing problems result in misinterpretations of the environment that can make successful treatment and healthy adaptation very challenging, even among patients who do not have psychotic-spectrum difficulties (e.g., Opaas, Hartmann, Wentzel-Larsen, & Varvin, 2016). R-PAS also provides a typical performance measure of cognitive complexity, in contrast to the maximal performance measures of cognitive complexity that are obtained by cognitive ability tests (e.g., intelligence, memory). There is empirical evidence that a client who scores low on these Rorschach measures of cognitive complexity is significantly more likely to report symptoms of

alexithymia (the inability to notice and describe one's emotions; Porcelli & Mihura, 2010) and to have problems engaging in and benefiting from psychotherapy (Mihura et al., 2013; see the “Strongly Supported Variables” section in the Discussion).

The Rorschach also is the only performance test with norms to assess mental imagery—norms that can provide helpful information about preoccupations in general, as well as for disorders in which intrusive imagery is a symptom, such as PTSD (with traumatic images) and OCD (with obsessive images). Finally, relevant for all clinicians but especially those who integrate relational or psychodynamic components in their case conceptualizations, R-PAS provides (1) valid, normed measures of self and other representations and (2) coded behaviors with the examiner to compare to norms (e.g., Card Turning; evidence of not “following the rules,” as in high number of Prompts and Pulls) that can be generalized to everyday life and to interpersonal dynamics that can be expected with the client’s therapist.

Orientation to This Book

This book contains three introductory chapters written by R-PAS developers: (1) the present introductory chapter by Mihura and Meyer; (2) a basic chapter on interpretation, by Mihura and Meyer (Chapter 2), that summarizes and extends the interpretive guidelines found in the R-PAS manual; and (3) a chapter on norms, by Meyer and Erdberg (Chapter 3), with a particular focus on using R-PAS with children and adolescents. For readers unfamiliar with R-PAS, Table 1.1 lists the variable names and a concise description of how they are coded and interpreted. The subsequent chapters (Chapters 4–19) illustrate R-PAS cases from various settings—clinical and forensic as well as also medical, pre-employment, neuropsychological, and educational. The chapter topics were chosen to represent referral questions that R-PAS can help answer. In all cases, client names and identifying information have been carefully altered to protect their anonymity. The chapters are written by international assessment experts; about two-thirds are United States authors, and the others represent the countries of Finland, Israel, Italy, the Netherlands, and Norway.

By design, the chapters have similar sections: (1) a brief introduction to the case, (2) the referral question(s), (3) a summary of other assessment data, (4) relevant research or legal matters, (5) reasons why R-PAS was chosen to help address the referral questions, (6) the experience of the R-PAS administration, (7) the deidentified Results (Responses, Code Sequence, and Profile Pages 1 and 2), and (8) a discussion of the results as applied to the case(s). The chapters are concise and tightly packed with information. To assist the chapter authors with their case interpretation, an early version of the R-PAS Case-Based Interpretive Guide was prepared for each of their cases. Depending on the particular assessment setting and situation, the chapters conclude with a summary about the impact that the R-PAS experience had on the person being assessed and/or the importance of the R-PAS data for understanding the person and answering the referral questions.

REFERENCES

- Atkinson, L. (1986). The comparative validities of the Rorschach and MMPI: A meta-analysis. *Canadian Psychology, 27*, 238–247.
- Beck, S. J., Beck, A. G., Levitt, E. E., & Molish, H. B. (1961). *Rorschach's test: Vol. I. Basic processes* (3rd ed.). Oxford, UK: Grune & Stratton.
- Blaszczyk-Schiep, S., Kazén, M., Kuhl, J., & Grygielski, M. (2011). Appraisal of suicide risk among adolescents and young adults through the Rorschach test. *Journal of Personality Assessment, 93*, 518–526.
- Bornstein, R. F. (1999). Criterion validity of objective and projective dependency tests: A meta-analytic assessment of behavioral prediction. *Psychological Assessment, 11*, 48–57.
- Crews, F. (1996). The verdict on Freud. *Psychological Science, 7*, 63–67.
- Cronbach, L. J. (1949). Statistical methods applied to Rorschach scores: A review. *Psychological Bulletin, 46*, 393–429.
- Dao, T. K., Prevatt, F., & Horne, H. L. (2008). Differentiating psychotic patients from nonpsychotic patients with the MMPI-2 and Rorschach. *Journal of Personality Assessment, 90*, 93–101.
- Dean, K. L. (2005). A method to increase Rorschach response productivity while maintaining comprehensive system validity. *Dissertation Abstracts International, 65*, 4280.
- Dean, K. L., Viglione, D. J., Perry, W., & Meyer, G. J. (2007). A method to optimize the response range while maintaining Rorschach comprehensive system validity. *Journal of Personality Assessment, 89*, 149–161.
- Dean, K. L., Viglione, D. J., Perry, W., & Meyer, G. J. (2008). Correction to: “A method to optimize the response range while maintaining Rorschach comprehensive system validity.” *Journal of Personality Assessment, 90*, 204.
- Diener, M. J., Hilsenroth, M. J., Shaffer, S. A., & Sexton, J. E. (2011). A meta-analysis of the relationship between the Rorschach Ego Impairment Index (EII) and psychiatric severity. *Clinical Psychology & Psychotherapy, 18*, 464–485.
- Exner, J. E. (1974). *The Rorschach: A comprehensive system*. New York: Wiley.
- Exner, J. E. (1986). *The Rorschach: A comprehensive system. Vol. 1: Basic foundations* (2nd ed.). New York: Wiley.
- Exner, J. E. (2001). A comment on “The misperception of psychopathology: Problems with norms of the Comprehensive System for the Rorschach.” *Clinical Psychology: Science and Practice, 8*, 386–396.
- Exner, J. E. (2003). *The Rorschach: A comprehensive system* (4th ed.). New York: Wiley.
- Exner, J. E. (2007). A new U.S. adult nonpatient sample. *Journal of Personality Assessment, 89*(Suppl.), S154–S158.
- Exner, J. E., & Weiner, I. B. (1982). *The Rorschach: A comprehensive system: Vol. 3. Assessment of children and adolescents*. New York: Wiley.
- Fowler, J. C., Piers, C., Hilsenroth, M. J., Holdwick, D. J., & Padawer, J. R. (2001). The Rorschach Suicide Constellation: Assessing various degrees of lethality. *Journal of Personality Assessment, 76*, 333–351.
- Garb, H. N., Wood, J. M., Lilienfeld, S. O., & Nezworski, M. T. (2005). Roots of the Rorschach controversy. *Clinical Psychology Review, 25*, 97–118.
- Graceffo, R. A., Mihura, J. L., & Meyer, G. J. (2014). A meta-analysis of an implicit measure of personality functioning: The Mutuality of Autonomy Scale. *Journal of Personality Assessment, 96*, 581–595.
- Gross, K., Keyes, M. D., & Greene, R. L. (2000). Assessing depression with the MMPI and MMPI-2. *Journal of Personality Assessment, 75*, 464–477.
- Hartmann, E., & Grønnerød, C. (2009). Rorschach variables and Big Five scales as predictors of military training completion: A replication study of the selection of candidates to the Naval Special Forces in Norway. *Journal of Personality Assessment, 91*, 254–264.

- Hartmann, E., Sunde, T., Kristensen, W., & Martinussen, M. (2003). Psychological measures as predictors of military training performance. *Journal of Personality Assessment*, 80, 87–98.
- Hertz, M. R. (1970). *Frequency tables for scoring Rorschach responses* (5th ed.). Cleveland, OH: Case Western Reserve University.
- Hiller, J. B., Rosenthal, R., Bornstein, R. F., Berry, D. T. R., & Brunell-Neuleib, S. (1999). A comparative meta-analysis of Rorschach and MMPI validity. *Psychological Assessment*, 11, 278–296.
- Hosseininasab, A., Meyer, G. J., Viglione, D. J., Mihura, J. L., Berant, E., Resende, A. C., . . . Mohammadi, M. R. (in press). The effect of receiving CS administration or an R-optimized alternative on R-PAS variables: A meta-analysis of findings from six studies. *Journal of Personality Assessment*.
- Jørgensen, K., Andersen, T. J., & Dam, H. (2000). The diagnostic efficiency of the Rorschach Depression Index and the Schizophrenia Index: A review. *Assessment*, 7, 259–280.
- Jørgensen, K., Andersen, T. J., & Dam, H. (2001). “The diagnostic efficiency of the Rorschach Depression Index and the Schizophrenia Index: A review”: Erratum. *Assessment*, 8, 355.
- Kiss, A. B., Mihura, J. L., & Meyer, G. J. (2017). *A meta-analytic review of the AGC score and its relationship to real life violence*. Manuscript in preparation.
- Klopfer, B., & Davidson, H. H. (1967). *The Rorschach procedure: An introduction*. New York: Harcourt, Brace & World.
- Meyer, G. J. (1992). Response frequency problems in the Rorschach: Clinical and research implications with suggestions for the future. *Journal of Personality Assessment*, 58, 231–244.
- Meyer, G. J. (1993). The impact of response frequency on Rorschach constellation indices and on their validity with diagnostic and MMPI-2 criteria. *Journal of Personality Assessment*, 60, 153–180.
- Meyer, G. J. (1996). The Rorschach and MMPI: Toward a more scientifically differentiated understanding of cross-method assessment. *Journal of Personality Assessment*, 67, 558–578.
- Meyer, G. J. (1997). On the integration of personality assessment methods: The Rorschach and MMPI. *Journal of Personality Assessment*, 68, 297–330.
- Meyer, G. J. (2000). The incremental validity of the Rorschach Prognostic Rating Scale over the MMPI Ego Strength Scale and IQ. *Journal of Personality Assessment*, 74, 356–370.
- Meyer, G. J. (2001). Evidence to correct misperceptions about Rorschach norms. *Clinical Psychology: Science and Practice*, 8, 389–396.
- Meyer, G. J., & Archer, R. P. (2001). The hard science of Rorschach research: What do we know and where do we go? *Psychological Assessment*, 13, 486–502.
- Meyer, G. J., Erdberg, P., & Shaffer, T. W. (2007). Toward international normative reference data for the Comprehensive System. *Journal of Personality Assessment*, 89(Suppl.), S201–S216.
- Meyer, G. J., Giromini, L., Viglione, D. J., Reese, J. B., & Mihura, J. L. (2015). The association of gender, ethnicity, age, and education with Rorschach scores. *Assessment*, 22, 46–64.
- Meyer, G. J., & Handler, L. (1997). The ability of the Rorschach to predict subsequent outcome: A meta-analysis of the Rorschach Prognostic Rating Scale. *Journal of Personality Assessment*, 69, 1–38.
- Meyer, G. J., Hsiao, W.-C., Viglione, D. J., Mihura, J. L., & Abraham, L. M. (2013). Rorschach scores in applied clinical practice: A survey of perceived validity by experienced clinicians. *Journal of Personality Assessment*, 95, 351–365.
- Meyer, G. J., Shaffer, T. W., Erdberg, P., & Horn, S. L. (2015). Addressing issues in the development and use of the Composite International Reference Values as Rorschach norms for adults. *Journal of Personality Assessment*, 97, 330–347.
- Meyer, G. J., Viglione, D. J., & Mihura, J. L. (2017). Psychometric foundations of the Rorschach Performance Assessment System (R-PAS). In R. E. Erard & F. B. Evans (Eds.), *The Rorschach in multimethod forensic practice* (pp. 23–91). New York: Routledge.
- Meyer, G. J., Viglione, D. J., Mihura, J. L., Erard, R. E., & Erdberg, P. (2011). *Rorschach Performance Assessment System: Administration, coding, interpretation, and technical manual*. Toledo, OH: Rorschach Performance Assessment System.

- Mihura, J. L. (2012). The necessity of multiple test methods in conducting assessments: The role of the Rorschach and self-report. *Psychological Injury and Law*, 5, 97–106.
- Mihura, J. L., Dumitrascu, N., Roy, M., & Meyer, G. J. (2017). The centrality of the response process in construct validity: An illustration via the Rorschach space response. *Journal of Personality Assessment*. [Epub ahead of print]
- Mihura, J. L., & Graceffo, R. A. (2014). Multimethod assessment and treatment planning. In C. J. Hopwood & R. F. Bornstein (Eds.), *Multimethod clinical assessment* (pp. 285–318). New York: Guilford Press.
- Mihura, J. L., Meyer, G. J., Bombel, G., & Dumitrascu, N. (2015). Standards, accuracy, and questions of bias in Rorschach meta-analyses: Reply to Wood, Garb, Nezworski, Lilienfeld, and Duke (2015). *Psychological Bulletin*, 141, 250–260.
- Mihura, J. L., Meyer, G. J., Dumitrascu, N., & Bombel, G. (2013). The validity of individual Rorschach variables: Systematic reviews and meta-analyses of the comprehensive system. *Psychological Bulletin*, 139, 548–605.
- Mihura, J. L., Ales, F., Meyer, G. J., Meadows, E. A., Roy, M., & Dumitrascu, N. (2017). A meta-analytic review of the MMPI's (all versions) ability to detect psychosis in clinical and forensic settings. Manuscript in progress.
- Opaas, M., Hartmann, E., Wentzel-Larsen, T., & Varvin, S. (2016). Relationship of pretreatment Rorschach factors to symptoms, quality of life, and real-life functioning in a 3-year follow-up of traumatized refugee patients. *Journal of Personality Assessment*, 98, 247–260.
- Parker, K. C., Hanson, R. K., & Hunsley, J. (1988). MMPI, Rorschach, and WAIS: A meta-analytic comparison of reliability, stability, and validity. *Psychological Bulletin*, 103, 367–373.
- Piotrowski, Z. A. (1957). *Perceptanalysis*. New York: Macmillan.
- Porcelli, P., & Mihura, J. L. (2010). Assessment of alexithymia with the Rorschach Comprehensive System: The Rorschach Alexithymia Scale (RAS). *Journal of Personality Assessment*, 92, 128–136.
- Rapaport, D., Gill, M. M., & Schafer, R. (1968). *Diagnostic psychological testing* (rev. ed., R. Holt, Ed.). New York: International Universities Press.
- Reese, J. B., Viglione, D. J., & Giromini, L. (2014). A comparison between Comprehensive System and an early version of the Rorschach Performance Assessment System administration with outpatient children and adolescents. *Journal of Personality Assessment*, 96, 515–522.
- Ritsher, J. B. (2004). Association of Rorschach and MMPI psychosis indicators and schizophrenia spectrum diagnoses in a Russian clinical sample. *Journal of Personality Assessment*, 83, 46–63.
- Rogers, R., Sewell, K. W., Martin, M. A., & Vitacco, M. J. (2003). Detection of feigned mental disorders: A meta-analysis of the MMPI-2 and malingering. *Assessment*, 10, 160–177.
- Romney, D. M. (1990). Thought disorder in the relatives of schizophrenics: A meta-analytic review of selected published studies. *Journal of Nervous and Mental Disease*, 178, 481–486.
- Rorschach, H. (1942). *Psychodiagnostik* [Psychodiagnostics]. Bern, Switzerland: Bircher. (Original work published 1921)
- Schachtel, E. G. (1966). *Experiential foundations of Rorschach's test*. Hillsdale, NJ: Analytic Press.
- Searls, D. (2017). *The inkblots: Hermann Rorschach, his iconic test, and the power of seeing*. New York: Crown.
- Viglione, D. J., & Giromini, L. (2016). The effects of using the international versus Comprehensive System Rorschach norms for children, adolescents, and adults. *Journal of Personality Assessment*, 98, 391–397.
- Viglione, D. J., & Hilsenroth, M. J. (2001). The Rorschach: Facts, fictions, and future. *Psychological Assessment*, 13, 452–471.
- Viglione, D. J., Meyer, G. J., Jordan, R. J., Converse, G. L., Evans, J., MacDermott, D., & Moore, R. C. (2015). Developing an alternative Rorschach administration method to optimize the number of responses and enhance clinical inferences. *Clinical Psychology & Psychotherapy*, 22, 546–558.

- Viglione, D. J., Meyer, G. J., Resende, A. C., & Pignolo, C. (2017). A survey of challenges experienced by new learners coding the Rorschach. *Journal of Personality Assessment*, 99, 315–323.
- Wilson, T. D., & Dunn, E. W. (2004). Self-knowledge: Its limits, value, and potential for improvement. *Annual Review of Psychology*, 55, 493–518.
- Wood, J. M., Garb, H. N., Nezworski, M. T., Lilienfeld, S. O., & Duke, M. C. (2015). A second look at the validity of widely used Rorschach indices: Comment on Mihura, Meyer, Dumitrescu, and Bombel (2013). *Psychological Bulletin*, 141, 236–249.
- Wood, J. M., Nezworski, M. T., Garb, H. N., & Lilienfeld, S. O. (2001a). Problems with the norms of the Comprehensive System for the Rorschach: Methodological and conceptual considerations. *Clinical Psychology: Science and Practice*, 8, 397–402.
- Wood, J. M., Nezworski, M. T., Garb, H. N., & Lilienfeld, S. O. (2001b). The misperception of psychopathology: Problems with norms of the Comprehensive System for the Rorschach. *Clinical Psychology: Science and Practice*, 8, 350–373.
- Wood, J. M., Nezworski, M. T., Garb, H. N., & Lilienfeld, S. O. (2006). The controversy over Exner's Comprehensive System for the Rorschach: The critics speak. *Independent Practitioner*, 26, 73–82.