

## Chapter 2

# Developmental Considerations in Rorschach Assessment

Functional and psychodynamic assessment of adolescents presents a particularly challenging task in clinical practice. Assuming that the structures of psychopathological syndromes in adolescence differ from those in adulthood (e.g., conduct problems might hide major affective disorders), distinguishing between transitional developmental crises and psychopathological manifestations is essential (Weiner, 1992). With respect to developmental crises, adolescence poses some difficult tasks (Lerner, 2002; Lerner & Steinberg, 2004). Adolescents must adapt to rapid bodily changes; recognize and learn how to express their sexuality, individuating from their parents, becoming involved in social and romantic relationships, and beginning to establish a sense of their personal identity; and advance toward adulthood.

Developmental theories and empirical evidence have nevertheless confirmed that, in contrast to a previously prevailing view, personality functioning in normative adolescents is characterized by stability, provided that their rearing environment is expectable and facilitating (e.g., Rutter, 2007; Weiner, 1990, 1992). Normal developmental demands can at times induce regressive reactions that resemble psychopathological manifestations, but these reactions are not typical of adolescence.

Yet, research on the effect of the internet revolution and rapid social changes in recent decades shows that these changes increase the risk for adolescents of experiencing loneliness and lack of support, which makes the confusing period of adolescence even more complicated to adapt to in the twenty-first century than it was in earlier years. These findings suggest that developmental research should apply a multi-perspective approach that integrates neurobiological, cognitive, emotional, and social psychological concepts for understanding various types of symptom patterns and maladaptive behaviors (e.g., Boyer, 2006). Such a multi-perspective approach can promote treatment aimed at psychopathological development rather than at overt behavioral manifestations.

Empirical studies have shown further that there are important changes in the rate and patterns of psychiatric disorders and maladaptive behaviors during adolescence (Rutter, 2007). Schizophrenia and other psychotic disorders are rarely seen in children but become progressively more frequent in adolescents (Weiner, 1992).

Similarly, major depressive disorder is relatively infrequent during childhood but increases in frequency during adolescence. Use and abuse of drugs and alcohol as part of a general liability to engage in disruptive, risky, and sometimes antisocial and criminal behavior also rises during adolescence and is usually associated with diminished achievement in school. Such behavioral problems may mask diagnosable disorders, and should thus be taken into consideration in any adolescent's evaluation.

There is general agreement among psychoanalytically oriented clinicians that traditional descriptive diagnostic categories are less useful in understanding and working with adolescents than with adults. Psychodynamic conceptualization of personality development, such as the normally expected progression from primary to secondary thought processes, can accordingly be essential in differentiating between healthy and disturbed adolescents. Normative reactions to developmental crises may temporarily interrupt an adolescent's maturation without there being any obvious external stimulus to this interruption. Such reactions typically follow a stable period of adjustment and are characterized by a brief crisis in which the adolescent shows some regression to a prior developmental phase. The impact of such a developmental crisis is likely to be manifest in the adolescent's patterns of behavior, and it can at times be exacerbated by changes in a young person's family structure or in other situations in which the adolescent is involved.

## **Symptom Patterns in Adolescents: A Psychodynamic Developmental Perspective**

The *Psychodynamic Diagnostic Manual* (PDM Task Force, 2006) is addressed to understanding symptom patterns by applying concepts derived from psychoanalytic theoretical formulations. The manual is based on the conviction that mental health comprises more than simply the absence of symptoms. Instead, it involves an individual's overall personality functioning, including cognitive, affective, relational, and self-observing capacities that should be assessed from a dimensional rather than a categorical perspective. This perspective derives from psychodynamic theories of psychopathology that link some personality characteristics with specific patterns of symptom formation.

Psychodynamic developmental conceptualization of psychopathology suggests that character formation is incomplete until the challenges of adolescence have been met and adolescent concerns resolved (e.g., Baudry, 1995). This conceptualization can be helpful in distinguishing between healthy and psychopathological functioning in young people, and it also identifies the particular importance of the adolescent years in character formation. Freud was interested in developmental issues occurring in young children, but he hardly referred to developmental issues in adolescence. Nevertheless, he did include in his early essays a seminal discussion of changes in sexual aims and objects following puberty (Freud, 1905). Anna Freud similarly stressed the significant influence of puberty on the maturation of character and the integration of ego functions (Freud, 1936), and Erik Erikson emphasized the importance of establishing a stable sense of identity during adolescence, including

consolidation of values and ideals and thereby attaining an integrated self-concept (Erikson, 1956).

There is accordingly good basis for considering adolescence a qualitatively new developmental phase of individuation (e.g., Bleiberg, 2001; Blos, 1962) and the steps of character formation as a normal unfolding of maturational sequences, along with potential developmental discrepancies between various domains of functioning. These discrepancies run the risk of increasing confusion, vulnerability, and subjective distress. Empirical findings as well as clinical observations have further supported the notion that a considerable level of ego development, including capacities for internalization, self-object differentiation, and formation of ideals, is necessary before a stable and integrated character to be considered formed.

In general, severe disturbances in adolescence are related to a breakdown in the developmental process that interferes with an adolescent's capacity to preserve an adaptive balance between different mental structures. This developmental breakdown might be observed, for example, in the incapacity of some of them to allow their body image to change so that it would include mature sexuality. Instead, they use maladaptive defensive operations to avoid normative mature functioning. Accordingly, Rorschach evaluation of adolescents should differentiate between fixation and regression to less mature developmental stages than those already obtained. In this regard, evaluating whether observed symptoms reflect a disorder or a compensatory defensive operation in a neurotic personality organization is essential.

Although the notion of age-appropriate behaviors has recently been challenged (Hollenstein & Loughheed, 2013), extreme deviations from Rorschach CS normative data, in any of the domains of personality functioning, can help to distinguish between healthy reactions to developmental challenges and psychopathological manifestations that would be likely to persist in adulthood. By focusing on personality functioning rather than on currently observable symptoms, the Rorschach has important implications for assessment and treatment as well as for issues of prevention and reversibility of severe disorders and their effects in adulthood.

Generally speaking, the integration of a developmental perspective in drawing inferences from Rorschach data is based on the premise that, although many adolescents demonstrate occasionally impaired cognitive or affective functioning, most do not show indications of diagnosable disorder. Nevertheless, difficulties establishing mature patterns of functioning (e.g., controlled emotional communication) may put adolescents at risk for personality problems or disturbances, including such internalized deficits as depression or isolation and such externalized maladjustment manifestations as delinquent or antisocial behavior (Kimmel & Weiner, 1995).

## **Two Conceptual Models for Integrating Developmental Considerations in the Interpretation of Rorschach Data**

The present discussion explores two psychodynamic models that integrate developmental considerations in Rorschach assessment and are used to illustrate developmental trends in CS data. One of these models of interpretation was derived by

Weiner (2003) from ego psychology and elaborates the implication of CS variables from an adaptation perspective emphasizing the nature and effectiveness of a person's style of coping with age-related life demands. The other interpretive model was suggested by Leichtman (1996, 2009). This model, based on orthogenetic developmental theory, applies the concept of development as an organizing principle for drawing inferences from Rorschach data according to an expected developmental sequence from an initially undifferentiated state toward increasing differentiation and coordination of specific personality components.

### ***The Ego Psychology Model***

Historically, Freud's structural theory with id, ego, and superego as basic components, and his formulation of psychosexual development (i.e., oral, anal, and phallic stages) were implicit in the psychoanalytic conceptualizations that guided the interpretation of Rorschach findings (e.g., Rapaport, Gill, & Schafer, 1946; Schafer, 1954). In this work the Rorschach was used to assess the basic components of Freudian personality structure and their interplay while focusing mainly on the assessment of ego strength, especially with respect to thought disorder and impulse-defense configurations. Although Freud focused mainly on psychosexual issues, he, and his followers even more so, used many of the same central concepts (i.e., ego development, fixation, and regression) to explain disturbances in character formation and in the experience of self and other people (Leichtman, 2009). On the basis of these concepts, maladaptive personality traits were linked to certain patterns of symptom formation and psychopathological manifestations.

Weiner (2003) applies concepts derived from ego psychology in his interpretive model for CS data. In this model, which focuses on adaptation to external reality, CS cognitive variables provide well-validated markers of cognitive maturation as reflected in logical thinking and accurate perception. Most teenagers have not yet attained adult cognitive capacities for reasoning and concept formation. Like pre-adolescents, they often have difficulty understanding and integrating new kinds of experiences. Moreover, because adolescents are often convinced, even in the absence of solid evidence, of the correctness and appropriateness of their ideas and attitudes, they are more likely than adults to give responses that reflect circumstantial reasoning and illogical thinking (*FABCOM*, *ALOG*).

Simultaneously with the expected developmental changes in some CS cognitive variables during adolescence, age-related changes typically occur as well in certain CS affective, interpersonal, and self-perception variables. With respect to their affective functioning, adolescents become increasingly capable of modulating their emotional experience, and normative adolescents can be expected to provide Rorschach protocols in which the scores on CS variables of affective modulation closely resemble those of normative adults. In this regard, normative adolescents are expected to give more form-dominated color responses (*FC*) than color-dominated and formless color responses (*CF+C*). Nevertheless, because of their susceptibility

to episodes of anxiety and dysphoric mood, normative teenagers are more likely than normative adults to show CS markers of subjective distress.

Thus, the developing cognitive-affective schemas of young people may sometimes be marked by temporarily distorted patterns of thinking and/or unmodulated emotionality that have conscious and unconscious components and can influence a wide range of subsequent internal experiences and overt behaviors. Distorted patterns of thinking may sometimes become a prototype of how adolescents think and feel about other people and about themselves that is activated in interpersonal situations. In this regard, the construct of mental representations, which has become a prominent developmental concept (Ainsworth, 1969; Blatt, 1991; Fonagy et al., 1995; Piaget, 1954; Stern, 1985), can be reflected in CS variables. For example, the normatively increasing awareness of and positive attention to people over time, reflected in *SumH*, the sum of responses coded with *H*, (*H*), *Hd*, or (*Hd*) as representations of human figures, steadily increases from childhood to adulthood. Although mentally healthy adolescents are still learning social skills and typically lack the interpersonal competence and self-assurance of mature adults, they retain an age-appropriate capacity for establishing relationships. Developmental studies have confirmed adolescents normatively search for and are capable of maintaining close interpersonal relationships.

With respect to self-perception, however, contemporary normative reference data show a gradual increase from childhood to adulthood in the *Egocentricity Index*. This indication of increasing self-focusing during adolescence differs from traditional CS reports of greater egocentricity in children than in adolescents (Exner & Weiner, 1995). Possible reasons for this change in CS markers are discussed in Chap. 5.

### ***The Orthogenetic Developmental Model***

The orthogenetic developmental theory, which draws on biological metaphors to articulate the structure of mental phenomena, provided the conceptual basis used by Leichtman (1996, 2009) to articulate Rorschach assessment from a developmental perspective. The central organizing principle of the orthogenetic theory, and of various other developmental theories as well, stresses dialectical patterns of developmental change from an undifferentiated state to coordinated integration (Werner, 1957). This principle has been deployed as a key construct in understanding faltering developmental patterns and their corresponding psychopathological manifestations (e.g., Cicchetti, 1984; Piaget, 1954; Winnicott, 1971). It has also been empirically validated in brain research (e.g., Johnson & Vecera, 1996) and in studies of personality functioning as assessed with both explicit measures such as self-report inventories and implicit measures such as performance-based methods.

Leichtman's (1996, 2009) model is in accord with the *PDM* mental functioning axis for children and adolescents (MCA), which describes the capacity for differentiation and integration as a substantial factor in the representational world of

mentally healthy adolescents. In this regard, Rapaport (1967) used the notions of both the *relative autonomy of the ego from the id* (one's even and solid relationship with the outside world) and the *relative autonomy of the ego from external reality* to demonstrate how reality can serve as a defense against fantasy and, conversely, how fantasy can serve as a defense against reality. Rapaport attributed the literal and concrete thinking of patients with schizophrenia to impairment in the ego's autonomy from the id, and the intrapsychic blocking of instinctual drives in other patients (e.g., patients with obsessive-compulsive disorder) to an impairment in the ego's autonomy from external reality. From a developmental perspective, however, what might be viewed as psychopathological functioning in adolescents and adults is conceived as being normative in children. A Rorschach percept of "a pink bear" coded as an incongruous combination is quite a common, playful response in protocols of children but would rarely occur in a protocol of well-functioning adolescents (Leichtman, 1996).

In order to apply the two conceptual models to Rorschach CS data, clinicians should first ask themselves what normality looks like. Modern psychoanalytic conceptualization of what constitutes healthy functioning has substantially changed and adaptation is now defined in terms of both external and internal reality. The emphasis has turned from concepts like rationality to those of self-relation and object relations, authenticity, creativity and playfulness (e.g., Mitchell & Aron, 1999). With respect to adolescents, some of them might be very well adapted to their society, but missing something fundamental in their experience. In these cases the very adaptation to the external world should be regarded as the problem, not the solution (Winnicott, 1971).

Accordingly, a new type of psychopathological personality functioning, the *normotic personality* (Bollas, 1987), has been described, which delineates psychopathology of subjectivity. This type of psychopathology, which is also described by applying the psychoanalytic construct of *Alexithymia* (Nemiah & Sifneos, 1970), is demonstrated in individuals who function "abnormally normal" in their adjustment to external reality but show substantial difficulties in relating to their own subjective experience that are reflected in various disorders, particularly those involving somatic and obsessive-compulsive symptom patterns (McDougall, 1989; Ogden, 1989). However, the elusive quality of the *normotic personality* and the *Alexithymia* constructs makes them difficult to be captured in symptom-based diagnostic systems and requires instead a psychodynamic-based diagnosis for which the Rorschach CS is particularly suitable.

## Developmental Trends in Normative CS Data

Although cross situational variability in personality functioning has been interpreted against the utility of the personality construct and its measurement by assessment tools, modern theory of personality shows that on the contrary, this variability reflects some of the essence of personality coherence (Mischel & Shoda, 1995). In

line with this conceptualization, Rorschach CS normative data can be used for detecting the interactional effects of situations, dispositions, dynamics, and invariance in the development of personality structure.

Rorschach (1942) noted developmental trends in normative responses to the inkblots. Research of developmental trends, which evolved in Europe and in the USA, served further for establishing foundations of integrating psychometric approaches with developmental psychoanalytic conceptualization to Rorschach assessment of children and adolescents. Ames, Metraux, and Walker (1959) explored normative data of adolescents from a developmental perspective. As noted in Chap. 1, Margaret Hertz, who promoted Rorschach assessment with children and adolescents, emphasized that because adolescence produces both quantitative and qualitative changes, it is necessary to focus on this relatively circumscribed period of development by obtaining normative data (Hertz, 1970). Analyzing Rorschach findings, derived from an adolescent's protocol, in comparison to age-based normative data, thus offers utility for assessing developmental capacity, mastery of psychological resources, and ability to communicate effectively about the world (Leichtman, 2009).

New imaging techniques developed in neuroscience have recently broadened the understanding of the interactional effect that neurological and personality factors as measured by the CS can have on faltering development in adolescence. These studies (e.g., Porcelli, Giromini, Parolin, Pineda, & Viglione, 2013; Zillmer & Perry, 1996) have shown the impact of outside demands on inducing internal regressive experiences and primitive defensive reactions and confirmed the use of the CS as useful neuropsychanalytic tool for assessing personality functioning. This conception has been confirmed by neuropsychological studies (e.g., Paus, 2005) showing changes in multiple regions of the prefrontal cortex and improvement in various aspects of executive functioning, including metacognition, self-regulation, and the coordination of affect and cognition from childhood to adolescence and throughout adolescence.

As noted by Leichtman (2009), the most influential empirical work with respect to developmental trends shown in Rorschach normative data was conducted while developing the CS. The CS age-group reference data for children and adolescents (Exner & Weiner, 1995) have generally confirmed the expected developmental trends in the various domains of personality functioning (Wenar & Curtis, 1991), with attention becoming more focused, perception more individualized and less conformist, and thinking more coherent from childhood to adulthood. Analysis of CS developmental changes has also demonstrated affective functioning becoming more modulated and more distressful and the capacities for differentiating and integrating various aspects of functioning more developed. Accordingly, Exner (2001) provides age-based adjusted cutoff scores for children and adolescents, for three of the CS variables: *WSum6*, *Afr*, and the *Egocentricity Index*. The adjusted cutoff scores for these variables have also been implemented in the CS constellation indices.

Whereas most of the CS variables show consistent linear trends from childhood to adulthood, with decreasing maladaptive and psychopathological markers, some of them demonstrate curvilinear patterns with elevated psychopathological and/or maladaptive CS markers in adolescents. However, when comparing Rorschach



scores of an adolescent to normative data of adults, caution should be made with respect to the previously noted difference in how various disorders are manifested in children and adolescents as compared to adults. Furthermore, statistical norms should not be equated with psychological normality, which although having no satisfactory definition involves both internal and external adaptability (Exner & Weiner, 1995). In this regard, it should be stressed that the interpretations of Rorschach scores do not change in different age groups.

Developmental theories suggest that personality functioning in normative adolescents is characterized by stability. Indeed, the CS data of children and adolescents (Exner, 2001; Exner & Weiner, 1995) have shown stability coefficients similar to those of adults when retested over brief intervals. However, as would be predicted from the evolving nature of personality, Rorschach scores can often fluctuate throughout development and do not stabilize until mid-adolescence (Weiner, 2001). On the other hand, the long-term stability of Rorschach variables gradually increases during adolescence, which is consistent with the expected gradual consolidation of personality characteristics during this developmental stage thus further supporting the construct validity of the Rorschach as a personality assessment method. This implies that during adolescence, individuality features become more prominent than those reflecting normative developmental trends.

Consistent with what is known about normative developmental processes, most of the changes in CS variables are expected to occur between childhood and adolescence. These trends were validated in normative samples (see Chap. 5). Accordingly, except for some of the CS variables, in which changes are expected to occur during adolescence, most of the CS reference values for adults can be applied for adolescents. It should be stressed, however, that developmental changes, whether occurring in childhood or in adolescence, do not call for corresponding changes in the interpretation of related CS variables. As an example, the  $FC:CF+C$  ratio commonly indicates the degree of affective control regardless the age group. Instead, the implications of deviant CS scores would be age related, and the presence of values that exceed the CS cutoff points for adults should be interpreted accordingly. In line with these guidelines, internalized emotional distress, as shown in CS variables, might quite frequently suggest normative development in adolescents while implying psychopathological functioning in children.

The extent to which the CS normative data, collected from nonpatient samples in the USA, also represents adolescents from other countries could not have been explored until large cross-cultural samples were collected. However, supporting evidence for the cross-cultural applicability of the CS cutoff scores cross-culturally has been provided by three normative samples of nonpatient adolescents from Italy (Lis, Salcuni, & Parolin, 2007), Israel (Tibon-Czopp, Rothschild-Yakar, & Appel, 2012), and Iran (Hosseininiasab, Mohammadi, Weiner, & Delavar, 2015). These data provided empirical evidence for some of the expected cross-cultural developmental trends in most of the CS data (see Chap. 5). Based on the general similarity shown between these three samples and the international sample of nonpatient adults (Meyer, Erdberg, & Shaffer, 2007) as well as on the developmental trends reflected in comparisons of two age-based groups (11–14, 15–18) within each of the



three samples, the samples have been combined into one cross-cultural sample. The international combined sample, presented in this volume, provides clinicians with updated CS reference data for adolescents.

## **Applying CS and CS-Based Indices for Assessing Psychopathological Development**

The present volume elaborates the utility of 45 CS structural variables for distinguishing between healthy and psychopathological functioning in adolescents. The selected variables refer to *cognitive functioning*, *affective experience*, *interpersonal relatedness*, and *self-perception* (see Chap. 6). Five additional variables that are indicative of personality style rather than psychopathology are also used for providing a contextual framework for interpretation. Specific forms of psychopathology associated with deviant scores on the selected variables are discussed in Chaps. 7–9.

While most of the selected variables are drawn directly from the CS (Exner, 2003; Exner & Weiner, 1995), some of them are relatively new CS-based indices, including two derivations of the *Reality–Fantasy Scale Version 2.0 (RFS-2*; Tibon-Czopp, Appel, & Zeligman, 2015) that have been validated as measures of psychotic thinking and dissociation proneness, respectively; the *Ego Impairment Index (EII-2*; Viglione, Perry, & Meyer, 2003), which has been validated as a measure of psychopathological cognitive and relatedness functioning; and the *AdjDMD* index (Weiner, 2003), which has been validated as a measure of likelihood of anxiety symptoms. These indices are described and applied in relation to psychopathological development in the second and the third part of this volume. The well-validated new indices enable clinicians to distinguish between healthy and psychopathological development and point out that the CS should not be viewed as a fixed or closed method, but rather as an evolving system, which should be further explored and revised.

As has been noted, with psychological development and the mature capacity for differentiating and integrating experiences, the representational world of mentally healthy adolescents becomes increasingly complex. The notion of mature personality functioning as reflected in adequate processing of stimulus has recently been explored by applying Rorschach CS variables to the construct of *Integrative Complexity* (Tibon-Czopp, Appel, & Zeligman, 2014). This construct, which is related to the capacity to tolerate paradox, has been extensively investigated in relation to decision-making, negotiation, and conflict resolution issues, in high-functioning adolescents and adults (e.g., Tibon-Czopp, Appel, & Zeligman, 2015), by using various CS and CS-based variables. As noted by Pizer (1998), the capacity to tolerate paradox implies a mode of organizing continuing experience in which distinctions between self and other, internal and external, and fantasy and perception are dissolved. The boundaries separating these apparent paradoxical or polarized conceptual pairs reflect fluidly shifting experiences that change at different

times and different contexts thus making them sensitive to developmental and cross-cultural issues.

The progressive maturation in the capacity to tolerate paradox is expected to be shown not only in the cognitive functioning of normative adolescents but also in their affective experiences, interpersonal relatedness, and self-conception. With respect to affect, for example, the normal maturational tendency for adolescents to become emotionally more reserved and the intense subjective distress derived from developmental challenges are assumed to be reflected in some of the CS affective variables (Weiner, 1996, 2003). The previous CS age-group norms for children and adolescents (Exner, 2001; Exner & Weiner, 1995) confirmed the expected reduced intensity of emotionality, reflected in a decreasing number of color-dominated (*CF*) and no form color (*C*) responses, as compared to form-dominated color responses (*FC*). Interestingly, a recent study in adult patients diagnosed with severe dissociative disorders (Zeligman, Smith, & Tibon, 2011) has shown that the immature capacity of modulating affect, assumed to characterize dissociative patients, would be demonstrated not only in chromatic color responses but also in those using achromatic or shading, reflecting subjective distress. Accordingly, the less modulated distress would be reflected in elevated number of shading-dominated (*C'F*, *VF*, *TF*, and *YF*) and no-form shading (*C'*, *V*, *T*, and *Y*) responses, as compared to form-dominated shading responses (*FC'*, *FV*, *FT*, and *FY*).

## Conclusion

The developmental considerations discussed in this chapter by using normative data have substantial implications with respect to construct validity of CS variables beyond enhancing their clinical utility. Normative age-based CS data can be particularly useful for validating deviant scores that point to immature functioning because they constitute observed variables of demographic that have little, if any, error variance and are independent of test findings. Should age differences emerge contrary to what would be expected according to developmental theories, the suitability of these theories to contemporary adolescents in different countries has to be reexamined. However, as stated by the developers of the CS (Exner & Weiner, 1995), when cross-cultural differences are shown with respect to expected developmental trends, particularly in perceptual variables of Form Quality (*FQ*), it seems reasonable to review the items in the tables for frequency. In other words, if a response currently not found in the *FQ* tables occurs frequently in some countries, the form quality scoring for this response should be adjusted accordingly. Likewise, if a response currently presented in the *FQ* tables as unusual occurs with a high frequency in nonpatient adolescents in some countries, it should be scored with *FQo*. This is a very different procedure from establishing country-specific reference data and thus allows the use of combined international norms.

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