

# Precursors of Personality Disorders in Children and Adolescents

## *Kişilik Bozukluklarının Çocuk ve Ergenlerde Öncül Bulguları*

Merve Çıkılı Uytun, Didem Behice Öztop

### Özet

Kişilik bozuklukları toplumda sık görülen ve işlevsellikte önemli derecede bozulmaya neden olan psikiyatrik rahatsızlıklardır. Şu anda tanı sistemlerinde çocuklarda kişilik bozuklukları ile ilgili bir tanı sınıflaması yer almamaktadır. Geçtiğimiz yıllarda erişkin kişilik bozukluklarının öncülü olarak kişilik özellikleri ve bozukluklarının çocukluk ve ergenlik döneminde araştırılmasına yönelik artan bir ilgi vardır. Bu yazıda kişilik bozukluklarının çocukluk ve ergenlik dönemindeki öncül bulguları konusunda yapılan çalışmalar gözden geçirilmiştir.

**Anahtar sözcükler:** Çocukluk, ergenlik, kişilik bozuklukları.

### Abstract

Personality disorders are common psychiatric disorders in community that cause substantial disruption of functionality. Current diagnostic systems do not include classification of personality disorders in children. However, in recent years there has been an increasing interest in investigation of personality traits and disorders at childhood and adolescence as a precursor of adult personality disorders. The aim of this article was to review the precursors of personality disorders at childhood and adolescence

**Key words:** Childhood, adolescence, personality disorders.

**PERSONALITY** is defined as a stable set of characteristics and tendencies that have continuity in time and that may not be easily understood as the sole results of the social and biological pressures of the moment (Berens 1999). Human personality is the dynamic organization of the psychobiological systems by which a person shapes and adapts in a unique way to changing internal and external environments (Kuzgun 1972). Personality disorders (PD) are a class of mental disorders characterized by enduring maladaptive patterns of behavior, cognition and inner experience. (APA 1994).

DSM-5 lists 10 personality disorders, grouped into 3 clusters (APA 2013). Cluster A PD have common biological weaknesses with schizophrenia spectrum disorders but their cognitive and social dysfunction is lower than schizophrenia spectrum disorders (Thaker et al. 1993). This cluster includes schizoid, schizotypal and paranoid PD (APA 2000). Cluster B includes the narcissistic, borderline, antisocial and histrionic PD. Cluster C, includes three disorders sharing anxious and fearful features: obsessive-

compulsive, dependent and avoidant PD (Sadock and Sadock 2007). In DSM-5, PD are categorized the same as in DSM-IV (APA 2013).

Estimates of the prevalence of these disorders in the general population range from 10 to 20 percent (Sadock and Sadock 2007). For adolescents estimates are about 6 to 17 percent (Johnson et al. 2006). In a recent review is reported that one in 10 adolescents is likely to be diagnosed with a PD, with rates of occurrence for particular PD being around 1–2% (Shiner 2009).

Research in this area has been limited because of the assumption that childhood and adolescent personality characteristics are unstable, and do not persist into adulthood (Trull and Durrett 2005, Esterberg 2010). Although the assumption by the DSM of “instability of personality in childhood and it should be recognized that the traits of a personality disorder that appear in childhood will often not persist unchanged into adult life,” in DSM-IV, it is emphasized that the diagnosis of a specific PD may be made in children or adolescents when observed maladaptive personality traits are pervasive, persistent, and unlikely to be limited to a particular developmental stage or an episode of an Axis I disorder. Diagnosis of a PD in child and adolescence requires that the features be present for more than 1 year (APA 2000).

In recent studies it was suggested that the precursors of PD can be detected in children and adolescents (Millon and Davis 1996). To date, the most important long-term PD study is the Children in the Community (CIC) study of a randomly selected cohort of about 800 American children first studied at a mean age of 6 and first assessed for all Axis I and Axis II mental disorders at a mean age of 13.5. The cohort had an approximate mean age of 38 on completion of the current assessment of all mental disorders in 2009. In one of CIC study, Bernstein et al (1996) randomly selected a community sample of 641 youths and they followed these youths longitudinally over 10 years. Childhood behavioral and emotional problems were associated with higher risk of an adolescent personality disorder 10 years later. Also other subsequent studies showed that maladaptive behaviors were associated with personality disorders in adolescents and adults (Hart et al. 1997, Newman et al. 1997, Cohen 1999).

In one CIC study, Cohen et al (2005) found that the independent impact of PD on subsequent Axis I disorders, suicide attempts, violent and criminal behavior, interpersonal problems and other problematic adult outcomes confirms the importance of these problems when they manifest in early adolescence. Moreover, PDs in early adulthood have been shown to increase risk for Axis I disorders and to have a negative effect on quality of life (Crawford et al. 2008).

In particular, recent studies in this field found that antisocial and borderline personality disorders are more common in adolescents than in adults (Seagrave and Grosse 2002, Frick 2002). One study reported the increasing appreciation that most mental disorders have prodromal signs or even onset much earlier in life than is implicit in an adult-oriented diagnostic system (Cohen 2008). For example, the National Comorbidity Survey Replication found that half of all lifetime cases of anxiety, mood, impulse-control, and substance use disorders had started by age 14 in a retrospective report (Kessler et al. 2005). Another reason for the growth in interest in developmental issues in PD is the increasing appreciation of the complexity of genetic and environmental causes of all mental disorders reflected in empirical work based on human and animal models (Penke and Denissen 2007).

## Common Precursors of Personality Disorders

An earlier review on vulnerability to PD noted the sparseness of prospectively measured (or even retrospective) data on childhood characteristics preceding PD. These characteristics include the following: a hostile, paranoid world view, intense, unstable, inappropriate, or flat emotion, impulsivity or rigidity, overly close or distant/avoidant relationships, extreme or absent sense of self, peculiar thought processes and behaviors, poor outcomes in educational attainment, occupational status and social life, forensic problems, suicidal thoughts and behaviors, depression, substance abuse and psychopathy (Bernstein et al. 1993, Brent et al. 1993, Brent et al. 1994, Geiger and Crick 2001). In one CIC study including 641 children, at the end of 10 years follow up it was shown that behavior problems predicted disorders in all three clusters with elevated odds of about 20% to 30%. Depressive problems predicted clusters A and B, each with odds about 40% higher for each PD. Anxiety problems, somewhat surprisingly, significantly predicted only Cluster B, whereas immaturity predicted all three clusters at about 20% to 30% higher rates (Bernstein et al. 1996). A study by Helgeland et al. found that disruptive behavior disorders in adolescence were predictive of cluster B PD in both men and women and emotional disorders in adolescence were associated with cluster C PD in women only (Helgeland et al. 2005).

It is known that childhood experiences may be associated with risk for the development of PD symptoms. Longitudinal studies have suggested that neglect is associated with borderline, avoidant and schizotypal PD, sexual abuse is associated with all PD except dependent PD; physical abuse is associated with antisocial, borderline and schizotypal PD; emotional abuse is associated with borderline, dependent, schizotypal, schizoid, obsessive compulsive, narcissistic and paranoid PD (Johnson et al. 2005a, Teicher et al. 2006). These risks include low socioeconomic status of family, being raised in a single-parent family, welfare support of family, parental death, and social isolation. The other risk factors are parental over-control, problematic parenting, parental psychopathology, substance abuse and forensic problems (Bezirgianian et al. 1996, Cohen 1996, Guzder et al. 1999, Bradley et al. 2005, Johnson et al. 2006, Tackett et al. 2009).

## Schizotypal Personality Disorder

Schizotypal PD was based on the characteristics of first-degree relatives of patients with schizophrenia and the disorder was first described in DSM-III (Siever&Gunderson 1983). The diagnostic criteria for schizotypal PD include excessive social anxiety, odd speech, constricted affect, suspiciousness/ paranoia, ideas of reference, odd beliefs/magical thinking, and unusual perceptual experiences (APA 2000). The cumulative prevalence of schizotypal PD in the CIC study which a prospective longitudinal study including 568 individuals was reported as 1.8% at a mean age of 14, 2.5% at a mean age of 16 and 3.3% at a mean age of 22 (Johnson et al. 2008).

Studies about the etiology of schizotypal PD indicate that total life events were more frequent in adolescents with schizotypal PD compared with healthy controls (Tessner et al. 2009) and in the first 2 years of life duration of separation from the mother is predicted elevated schizotypal PD symptoms (Anglin et al. 2008). Also, low socioeconomic status is a risk factor for schizotypal PD (Cohen et al. 2008). Pre- or perinatal

problems may also result in lower intellectual function, which tends to be a (modest) risk for PD in adolescence and adulthood, particularly for symptoms of borderline and schizotypal PD (Cohen 1996, 1998).

### ***Precursor Symptoms***

Findings in the literature indicate that adolescents with schizotypal PD showed significantly more severe current and past autistic features in the areas of social functioning and eccentric interests and behaviors compared to healthy controls and other personality disorder controls (Esterberg et al. 2008). The other symptoms of schizotypal PD include lack of close friends (Olin et al. 1997), cognitive distortions (Trotman et al. 2006), social anxiety, poor educational achievement, paranoid ideation, odd thinking, speech without incoherence, odd beliefs and magical thinking (APA 2000). In another study it was shown that fantasy proneness in adolescents is related with schizotypal scores. It was shown that fantasy proneness, magical ideation and the cognitive-perceptual dimension are related with positive features of schizotype, but they are not related with social anxiety (Sanchez-Bernardos and Avia 2006). In another study, it was found that positive features of schizotypal PD in adolescents are related with severe mood symptoms including depression and anxiety (Deurell et al. 2008). Additionally in the schizotypal PD group it was reported that more time was spent in chat rooms and playing online games (Mittal 2007).

In some studies schizotypal PD adolescents showed significantly greater cognitive problems than healthy adolescent groups (Diforio et al. 2000, Trotman et al. 2006). In the study of Mittal et al. (2007) assessed for movement abnormalities aged 12-18, 26 schizotypal PD, 22 other PD and 33 normal adolescents; the authors found that movement abnormalities were more common in schizotypal PD. Other studies by Mittal et al. (2008) replicate previous reports that minor physical anomalies, movement abnormalities and significantly elevated cortisol are more common in adolescents with diagnosed schizotypal PD compared with normal and other personality disorder control groups. Prognosis of schizotypal PD has a relatively stable course and longitudinal studies have found that participants with high scores in schizotypy present higher rates of schizophrenia-spectrum disorders (Asarnow 2005).

## **Schizoid Personality Disorder**

Schizoid PD is characterized by a lack of social functioning and lack of desire to seek interpersonal relationships. People who meet the diagnostic criteria for schizoid PD tend to organize their lives in a manner that results in limited relationship with others, generally selecting occupations that require little social connectedness even if such positions fall below their level of ability (Beck et al. 2006). The cumulative prevalence of paranoid PD in the CIC study including 568 individuals was reported as 1.1% at a mean age of 14, 1.8% at a mean age of 16, 2.8% at a mean age of 22 (Johnson et al. 2008). Some studies have pointed to sexual and emotional abuse in the etiology of this personality disorder (Johnson et al. 2005b, Teicher et al. 2006).

### ***Precursor Symptoms***

Schizoid PD is not known well, because it has not been found to be as strongly associated with more severe psychopathology, relative to other Cluster A PD. Early studies

by Wolff and colleagues described a group of predominantly male school-age children with schizoid PD who demonstrated lack of empathy, mental rigidity, increased interpersonal sensitivity, eccentric relationship styles, and loneliness. Some studies have shown that children with this PD were of average or above-average IQ, and half presented with other, common, child psychiatric syndromes (Wolff 1991a, 1991b). Schizoid PD may be first apparent in childhood and adolescence with solitariness, poor peer relationships, and underachievement at school, which mark these children or adolescents as different and make them subject to teasing (APA 2000). Follow-up studies have shown that these characteristics remain quite stable and that many subjects met the criteria for schizotypal PD as adults (Wolff 1980). There is evidence that PD is a risk factor for the development of schizophrenia-spectrum disorders (Wolff et al. 1991).

## **Paranoid Personality Disorder**

Individuals with this disorder assume that other people will exploit, harm, or deceive them, even if no evidence exists to support this expectation. They suspect, on the basis of little or no evidence, that others are plotting against them and may attack them suddenly, at any time and without reason. They often feel that they have been deeply and irreversibly injured by another person or persons even when there is no objective evidence for this (APA 2000).

The cumulative prevalence of paranoid PD in the CIC study including 568 individuals was reported as 1.9% at a mean age of 14, 3% at a mean age of 16 and 4% at a mean age of 22 (Johnson et al. 2008). Numerous studies have shown early traumatic experiences such as abuse and neglect in the etiology of this personality disorder (Grant et al. 2004). Childhood attention deficit/hyperactivity disorder (ADHD) have been shown to be a risk factor for paranoid PD in late adolescence (Miller et al. 2008). It was shown that the odds of developing paranoid PD increased among youths with anxiety disorders (Kasen et al. 2001).

### ***Precursor Symptoms***

The data are limited for this PD. However paranoid PD may be first apparent in childhood and adolescence with solitariness, poor peer relationships, social anxiety, underachievement at school, hypersensitivity, peculiar thoughts and language, and idiosyncratic fantasies (APA 2000). In the study by Natsuaki et al. (2009) the authors followed 174 children between the ages of 9 to 12 longitudinally for 10 years. At the end of the study they found that children who showed higher levels of PPD symptoms in adolescence had higher odds of having a history of maltreatment when childhood. They also manifested a faster growth rate for peer bullying and externalizing problems in childhood, their peers described them as less cooperative, less likely to be leaders, and more likely to initiate fights, however interestingly, they did not find any significant association between childhood peer victimization and later paranoid symptoms. Data regarding the prognosis of paranoid personality disorder (PD) are relatively limited compared to other cluster A PDs.

Paranoid PD also comprises risk for schizophrenia spectrum disorders, although the risk is lower than in schizotypal PD (Esterberg et al. 2010). Johnson et al.(2000) de-

monstrated that adolescents diagnosed as paranoid PD during the adolescence period are associated with increased risk for violence- and crime-oriented projection disorders

## **Narcissistic Personality Disorder**

The essential feature of narcissistic PD is a pervasive pattern of grandiosity, need for admiration, and lack of empathy that begins by early adulthood and is present in a variety of contexts. Narcissistic traits may be particularly common in adolescents and do not necessarily indicate that the individual will go on to have narcissistic PD and these features should be discriminated from narcissistic PD (APA 2000). The cumulative prevalence of narcissistic PD in the CIC study including 568 individuals was reported as 3.2% at a mean age of 14, 4.9% at a mean age of 16, 5.3% at a mean age of 22 (Johnson et al. 2008).

### ***Precursor Symptoms***

Features such as not feeling dependency, thinking that he/she deserves care, failure to respond during relationships and failure to state gratitude are observed in children with narcissistic disorder (Oncu 2007). It was shown that psychopathy is predictive for narcissistic PD (Westen et al. 2005). In the study of Shahar et al., 113 suicidal young adults were assessed, and cross-lagged associations between unipolar and hypomanic mood disturbances and cluster B PD features were examined and the authors found that hypomanic symptoms predict an increased risk for narcissistic personality features (Shahar et al. 2008). The relationship between disruptive behavioral disorder and narcissistic PD was shown in a study performed in the context of the CIC Study (Kasen et al. 2001). However it failed to find data regarding prognosis.

## **Borderline Personality Disorder**

Childhood borderline PD was first described by Margeret Mahler in the late 1940s. According to the definitions made by several authors, the characteristics of the disorder are defined as rapid fluctuations between ego states, tendency to primitive regressions, impaired interpersonal relationships and severe and common panic anxiety (Weil 1953, Ekstein and Wallerstein 1957, Geleerd 1958, Mahler 1958, Mahler 1960). In DSM-IV-TR, the hallmarks of borderline PD are pervasive and excessive instability of affect, self-image, and interpersonal relationships, chronic feelings of emptiness, impulsivity, recurrent suicidal behavior, gestures, threats, or self-mutilating behaviors (APA 2000). Although there have been continuous efforts to develop diagnostic criteria for children and adolescents since the 1980s, the presence of reliable and valid criteria remains controversial (Tamar 2008). The cumulative prevalence of borderline PD in the CIC study including 568 individuals was reported as 0.9% at a mean age of 14, 1.4% at a mean age of 16 and 3.2% at a mean age of 22 (Johnson et al. 2008).

Numerous studies have pointed to early traumatic experiences in the etiology of this personality disorder. Exposure to harsh treatment in the family environment up to the age of 10 predicted borderline personality and subjects' mothers expressed more negative emotions than other mothers (Belsky et al. 2012). Physical, sexual abuse and neglect are other risk factors for borderline PD (Johnson et al. 2005a, Teicher et al. 2006).

Pre- or perinatal problems may also result in lower intellectual function, which tends to be a (modest) risk for PD in adolescence and adulthood, particularly for symptoms of borderline and schizotypal PD (Cohen 1996, 1998). Additionally, oppositional defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD) as childhood risk factors for borderline PD in adolescence and young adulthood (Fossati et al. 2002, Philipsen et al. 2008, Stepp et al. 2012).

### ***Precursor Symptoms***

Emotional deregulation, problems in interpersonal relationships, attachment disorders and history of sexual abuse are developmental precursors in adults and adolescents diagnosed as borderline PD (Westen et al. 1990, Ludolph et al. 1990, Johnson et al. 1995, Pinto et al. 1996, Carlson et al. 2009). Difficult temperament, hyperactivity, low adjustment capacity, negative mood, rhythmic sleep-wakefulness pattern, nutritional disorders, difficulty in relaxing and giving difficulties to caregivers have been reported as risk factors for the development of borderline PD. There may be hyperactivity, anger episodes, vulnerability to separation, parental attachment, anxiety and mood problems in pre-school and school-age children with borderline PD and these children are generally managed by diagnoses of ADHD, behavioral disorder, anxiety disorder or mood disorders (Tamar 2008).

In studies using the Wisconsin Card Sorting test and Continuous Performance tests in school-age children with suspected borderline disorder, it was seen that there was an abnormality in executive functions independent from history of trauma (Paris et al. 1999). In another study, children with borderline personality traits were assessed at 12 years of age. In that study, it was demonstrated that children with borderline personality traits had lower IQ, that they displayed less improvement in theory of mind, they were unable to control themselves, they were impulsive, and these children had been diagnosed as having introversion and extroversion disorders at 5 years of age (Belsky et al. 2012).

In adolescents, these symptoms presented as impulsive anger, bulimia, novelty seeking, anxiety, irritability, readiness to explode, frustration in the face of a small intense emotional storms, emotional dysregulation, suicidal or parasuicidal behavior, problems in relationships with family and peers (Bagge et al. 2004, Zanarini et al. 2006), deficits in executive functioning (Zelkowitz et al. 2001) impairment functioning, substance use and risky sexual behaviors (Steinberg 2008).

Generally borderline PD follows a pattern of chronic instability in early adulthood with episodes of serious affective and impulsive dyscontrol. Although there is no study indicating a relationship with schizophrenia, these patients are at risk for major depressive episode (Sadock & Sadock 2007). In a study in adolescents, it was shown that borderline personality traits were predictive for unipolar depression (Shahar et al. 2008). The impairment of familial relationship, occupational problems, substance abuse and the risk of suicide are highest in the young adult years and gradually decrease with advancing age (Tamar 2008).

## **Antisocial Personality Disorder**

Antisocial PD is a personality disorder that causes severe impairment in functionality and sociality, and it is highly resistant to therapy (Loeber et al. 2005). The hallmarks of

antisocial PD are pervasive disregard for and violation of the rights of others occurring from the age of 15 years and continuing into adulthood. For diagnosis a person has to be 18 years or older, and there has to be evidence of conduct disorder before the age of 15 years (APA 2000). Prevalence rates vary from 1 to 16 percent in the general population for conduct disorder. This disorder is more commonly diagnosed (4-12:1) in males.

Adoption studies have shown that both genetic and environmental factors contribute to the risk for this disorder (Ercan 2008). Prenatal exposure to the Dutch famine in the World War II period was shown to predict subsequent antisocial PD (Neugebauer and Hoek 1999). In one study the results indicated that lower serotonergic responsivity in children with ADHD was associated with the development of antisocial personality disorder (Flory et al. 2007). In the study of Caspi et al. (2002) childhood adverse life events were associated with decreased monoamin oxidase-A and these social factors may interact with variants of serotonin-regulating genes to present higher risk for antisocial personality disorder. These studies suggest that in one aspect of conduct disorder etiology there is interplay between genetic and environmental factors (Foley et al. 2004).

### ***Precursor Symptoms***

Conduct disorder involves a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate social rules are violated; examples include aggression aimed at people and/or animals, destruction of property, deceitfulness or theft, serious violation of rules and running away from home or school (APA 2000). Poor prognostic factors for antisocial PD include presence of neurodevelopmental disorders, symptom onset in early childhood, negative environmental conditions and low anxiety level (Frick et al. 1994). Antisocial PD develops in approximately 30-40% of children with conduct disorder alone (Robins et al. 1991). However, it is essential to define the characteristics of children with conduct disorder in whom antisocial PD will or will not develop. In the study of Loeber et al. (2002), the authors recruited 177 boys who were seven to 12 years of age at the beginning of the study, and were followed up annually with parent and child assessments until the age of 19. Fifty four of 114 patients who had conduct disorder with or without ODD were diagnosed as antisocial PD at age 18-19. Current research suggests that about 14 of the patients with ODD progressed to conduct disorder and 5 patients progressed to antisocial PD. One of the 27 patients who had neither ODD nor conduct disorder was diagnosed with antisocial PD at age 18-19. Studies show that ODD in childhood is significantly associated with adolescent conduct disorder and conduct disorder is significantly associated with antisocial PD. However, in this study a regression model of the significant psychopathology predictors, including callous/unemotional behaviors, depression and marijuana use was employed to identify the strongest predictors of antisocial PD. Also, it was shown that psychopathy and depression are predictors of antisocial PD (Kasen et al. 2001, Westen et al. 2005).

### **Histrionic Personality Disorder**

The hallmarks of histrionic PD are pervasive and excessive self-dramatization, excessive emotionality, and attention seeking. Those with this disorder have difficulties in achie-



ving emotional intimacy in romantic or sexual relationships (Sadock & Sadock 2007). The cumulative prevalence of histrionic PD in the CIC study, including 568 individuals was reported 1.6% at a mean age of 14, 2.3% at a mean age of 16 and 3.7% at a mean age of 22 (Johnson et al. 2008).

### ***Precursor Symptoms***

Studies have shown that histrionic sexual behaviors, emotion regulation disorder and depression in childhood predicted histrionic PD (Kasen et al. 2001, Westen et al. 2005). However in one study it was found that hypomanic symptoms predicted an increase in histrionic personality disorder features (Shahar 2008).

## **Obsessive Compulsive Personality Disorder**

The hallmarks of obsessive-compulsive PD are pervasive, along with preoccupation with orderliness, perfectionism, and mental and interpersonal control at the expense of flexibility (Sadock and Sadock 2007). These traits may be common in developing children. However normally developing children do not show excessive sensitivity, these traits do not necessarily indicate that the higher risk for developing obsessive-compulsive PD and these features should be discriminated from obsessive compulsive PD. However obsessive-compulsive children can show excessive anger and anxiety (Oncu 2007). The cumulative prevalence of obsessive-compulsive PD in the CIC study including 568 individuals was reported as 0% at a mean age of 14, 0% at a mean age of 16 and 0.7% at a mean age of 22 (Johnson et al. 2008).

### ***Precursor Symptoms***

In these children, general characteristics include continuous writing and erasing at school, tearing up homework which he/she doesn't like, anger, tendency to evade regulations and refusal to accept their own mistakes (Oncu 2007). The other traits of obsessive compulsive PD include perfectionism, desire to mental and interpersonal control, over compliance to rules, overconscientiousness, excessive attentiveness, working in order and obsession with symmetry (Anderluh et al. 2003). In addition, it was found that anxious obsessions in childhood are predictive for obsessive-compulsive PD (Westen et al. 2005).

The aim of Maina et al.'s study was to investigate whether adult patients with prepubertal onset obsessive-compulsive disorder (OCD) differ from subjects with later onset in terms of personality disorder comorbidity. With this aim 69 patients with two groups were selected that consisted of 33 patients with onset of symptoms at or before the age of 10 and onset of symptoms at or after age 17. They showed that early-onset patients showed more obsessive-compulsive PD (OCPD) than later onset patients. Their findings suggest that OCD in childhood increases the risk for developing obsessive-compulsive PD in adulthood, or that early onset OCD and obsessive-compulsive PD share a common pathogenesis (Maina et al. 2008).

Obsessive-compulsive PD's course is variable. Some adolescents with obsessive-compulsive PD will grow up to be open, warm hearted and sincere adults, while OCD can escalate over time in others, predicting major depressive disorder or schizophrenia (Sadock and Sadock 2007).

## Dependent Personality Disorder

The hallmarks of dependent PD are a pervasive and excessive need to be taken care of that leads to clinging behavior, submissiveness, fear of separation, and interpersonal dependency. This diagnosis should be used with great caution, if at all, in children and adolescents, for whom dependent behavior may be developmentally appropriate (APA 2000).

The cumulative prevalence of dependent PD in the CIC study including 568 individuals was reported as 0.2% at a mean age of 14, 0.5% at a mean age of 16 and 3% at a mean age of 22 (Johnson et al. 2008). Chronic physical illness or separation anxiety disorder especially in childhood and puberty may predispose for dependent PD (APA 2000).

### *Precursor Symptoms*

It was shown that dysphoria and depression in childhood predicted dependent PD (Kasen et al 2001, Westen et al 2005). Studies showed that dependent PD was associated with anxiety disorders (Millon & Davis 1996).

## Avoidant Personality Disorder

The hallmarks of Avoidant PD are pervasive and excessive hypersensitivity to negative evaluation, social inhibition, and feelings of inadequacy. Those with this disorder are not asocial but they display restraint in intimate relationships because of the in fear of being shamed or ridiculed (Sadock and Sadock 2007). It is emphasized that this diagnosis should be used with great caution in children and adolescents for whom shy and avoidant behavior may be developmentally appropriate (APA 2000).

The cumulative prevalence of avoidant PD in the CIC study including 568 individuals was reported as 1.2% at a mean age of 14, 1.8% at a mean age of 16 and % 4 at a mean age of 22 (Johnson et al. 2008). Some studies have pointed to early traumatic experiences in the etiology of this personality disorder. The reported rates of physical and emotional abuse were higher (Rettew et al. 2003).

### *Precursor Symptoms*

Some studies suggest that early manifestations of avoidant PD are present in childhood (Rutter 1987). It frequently begins in childhood with shyness and fear of strangers and new situations. Disfiguring illness and shyness in childhood predispose children for this personality disorder (APA 2000). In Rettew et al.'s study they assessed 146 adults diagnosed with primary avoidant PD and compared them with a group of 371 patients with other personality disorders as a primary diagnosis and a group of 83 patients with current major depression disorder and no personality disorders. They found that adults with avoidant PD reported poorer child and adolescent athletic performance, less involvement in hobbies, and less adolescent popularity than the depressed comparison group and the other personality disorder group (Rettew et al. 2003).

In a study to determine the association of behavioral inhibition and avoidant PD, psychopathology in children was compared between children with behavioral inhibition (N=64) and without (N=152). As a result of the study it was found that, behavioral inhibition was associated with avoidant PD mainly among children whose parents had

panic disorder either with or without depression (Biederman et al. 2001). Dysphoria in childhood was a predictor of avoidant PD (Westen et al. 2005). Avoidant PD was selectively associated with social phobia (Dyck et al. 2001). Also, avoidant and dependent personality disorders are both positively correlated with neuroticism as well as internalizing disorders (Saulsman & Page 2004).

## Conclusion

PD are common psychiatric disorders in adult life, which significantly impact on functionality. Major problems have a chronic course and are resistant to therapy. In recent years, the increasing number of studies on personality disorders in children and adolescents seems to be important for the recognition and treatment of these disorders at the early phase. In recent studies, it has been observed that there are precursor signs for borderline and antisocial PD in particular. It is believed that recognition of these characteristics in children is extremely important. It is also believed that the growing number of studies in this field will make it possible to define the precursors of PD precisely and to establish diagnostic criteria, while allowing treatment of these disorders at early stage, thus decreasing their prevalence in the population.

The most significant advantage of early diagnosis seems to be the likelihood of early treatment while decreasing prevalence as well as severity of impairment in functionality. However, there are some disadvantages of establishing such diagnosis in childhood. The most important problem is that child could be labeled with a diagnosis that will not be reviewed in the future. Another problem is that shortages in available healthcare systems may impede treatment of these children. We believe that it is necessary to increase the number of studies regarding diagnosis and treatment in this field and to develop diagnostic classification for children.

## References

- Allport G (1937) *Personality: A Psychological Interpretation*. Constable, London.
- APA (1994) *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition. Washington DC., American Psychiatric Association.
- APA (2000) *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition text revision. Washington DC., American Psychiatric Association.
- APA (2013) *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition. Washington DC., American Psychiatric Association.
- Anderlueh MB, Tchanturia K, Rabe-Hesketh S, Treasure J (2003) Childhood obsessive-compulsive personality traits in adult women with eating disorders: defining broader eating disorder phenotype. *Am J Psychiatry*, 160:242-247.
- Anglin DM, Cohen PR, Chen H (2008) Duration of early maternal separation and prediction of schizotypal symptoms from early adolescence to midlife. *Schizophr Res*, 103:143-150.
- Asamow JR (2005) Childhood-onset schizotypal disorder: a follow-up study and comparison with childhood-onset schizophrenia. *J Child Adolesc Psychopharmacol*, 15:395-402.
- Bagge C, Nickell A, Stepp S, Durrett C, Jackson K, Trull TJ (2004) Borderline personality disorder features predict negative outcomes 2 years later. *J Abnorm Psychol*, 113:279-288.
- Beck AT, Freeman A, Davis DD (2006) *Cognitive Therapy of Personality Disorders*, 2nd edition. New York, Guilford Press.
- Belsky DW, Caspi A, Arseneault L, Bleidorn W, Fonagy P, Goodman M et al. (2012) Etiological features of borderline personality related characteristics in a birth cohort of 12-year-old children. *Dev Psychopathol*, 24:251-265.
- Berens LV (1999) *Sixteen Personality Types: Descriptions for Self-Discovery*. Telos Publications, California.
- Bernstein DP, Cohen P, Skodol A, Bezirgianian S, Brook JS (1996) Childhood antecedents of adolescent personality disorders. *Am J Psychiatry*, 153:907-913.
- Biederman J, Hirshfeld-Becker DR, Rosenbaum JF, Herot C, Friedman D, Snidman N et al. (2011) Further evidence of association between behavioral inhibition and social anxiety in children. *Am J Psychiatry*, 58:1673-1679.

- Bradley R, Zittel Conklin C, Westen D (2005) The borderline personality diagnosis in adolescents: gender differences and subtypes. *J Child Psychol Psychiatry*, 46:1006–1019.
- Brent DA, Johnson B, Bartle S, Bridge J, Rother C, Matta J et al. (1993) Personality disorder, tendency to impulsive violence, and suicidal behavior in adolescents. *J Am Acad Child Adolesc Psychiatry*, 32:69–75.
- Brent DA, Johnson BA, Perper J, Connolly J, Bridge J, Bartle S et al. (1994) Personality disorder, personality traits, impulsive violence, and completed suicide in adolescents. *J Am Acad Child Adolesc Psychiatry*, 33:1080–1086.
- Carlson EA, Egeland B, Sroufe LA (2009) A prospective investigation of the development of borderline personality symptoms. *Dev Psychopathol*, 21:1311–1334.
- Caspi A, McClay J, Moffitt TE, Mill J, Martin J, Craig IW (2002) Role of genotype in the cycle of violence in maltreated children. *Science*, 297:851–854.
- Cohen P (1996) Childhood risks for young adult symptoms of personality disorder: method and substance. *Multivariate Behav Res* 31:121–148.
- Cohen P, Crawford TN, Johnson JG (2005) The children in the community study of developmental course of personality disorder. *J Pers Disord*, 19:466–486.
- Cohen P (2008) Child development and personality disorder. *Psychiatr Clin North Am*, 31:477–493.
- Cohen P, Chen H, Gordon K, Johnson J, Brook J, Kasen S (2008) Socioeconomic background and the developmental course of schizotypal and borderline personality disorder symptoms. *Dev Psychopathol*, 20:633–650.
- Crawford TN, Cohen P, First MB, Skodol AE, Johnson JG, Kasen S (2008) Comorbid axis I and axis II disorders in early adolescence: prognosis for 20 years later. *Arch Gen Psychiatry*, 65:641–648.
- Deurell M, Weischer M, Pagsberg AK, Labianca J (2008) The use of antipsychotic medication in child and adolescent psychiatric treatment in Denmark. *Nord J Psychiatry*, 62:472–480.
- Diforio D, Walker EF, Kestler LP (2000) Executive functions in adolescents with schizotypal personality disorder. *Schizophr Res*, 42:125–134.
- Dyck IR, Phillips KA, Warshaw MG, Dolan RT, Shea MT, Stout RL et al. (2011) Patterns of personality: Pathology in patients with generalized anxiety disorder, panic disorder with and without agoraphobia, and social phobia. *J Pers Disord*, 5:60–71.
- Ercan ES (2008) Davranım Bozukluğu. In *Çocuk ve Ergen Psikiyatrisi Temel Kitabı* (Ed FÇ Çetin):312–315. Ankara, Hekimler Yayın Birliği.
- Esterberg ML, Trotman HD, Brasfield J, Compton MT, Walker EF (2008) Childhood and current autistic features in adolescents with schizotypal personality disorder. *Schizophr Res*, 104:265–273.
- Esterberg ML, Goulding SM, Walker EF (2010) Cluster A personality disorders: schizotypal, schizoid and paranoid personality disorders in childhood and adolescence. *J Psychopathol Behav Assess*, 32:515–528.
- Flory JD, Newcorn JH, Miller C, Harty S, Halperin JM (2007) Serotonergic function in children with attention-deficit hyperactivity disorder: Relationship to later antisocial personality disorder. *Br J Psychiatry*, 190:410–414.
- Foley DL, Eaves LJ, Wormley B, Sillberg JL, Maes HH, Kuhn J et al. (2004) Childhood adversity, monoamine oxidase A, and risk for conduct disorder. *Arch Gen Psychiatry*, 61:738–744.
- Frick PJ, O'Brien BS, Wootton JM, McBurnett K (1994) Psychopathy and conduct problems in children. *J Abnorm Psychol*, 103:700–707.
- Frick PJ (2002) Juvenile psychopathy from a developmental perspective: Implications for construct development and use in forensic assessments. *Law Hum Behav*, 26:247–253.
- Geiger TC, Crick NR (2001) A developmental psychopathology perspective on vulnerability to personality disorders. In *Vulnerability to psychopathology: risk across the lifespan*. (Eds RE Ingram, JM Price):57–102. New York, Guilford Press.
- Geleerd ER (1958) Borderline states in childhood and adolescence. *Psychoanal Study Child*, 13:279–295.
- Grant BF, Hasin DS, Stinson FS, Dawson DA, Chou SP, Ruan W et al. (2004) Prevalence, correlates, and disability of personality disorders in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *J Clin Psychiatry*, 65:948–958.
- Hart D, Hofmann V, Edelstein W, Keller M (1997) The relation of childhood personality types to adolescent behavior and development: a longitudinal study of Icelandic children. *Dev Psychol*, 33:195–205.
- Helgeland MI, Kjelsberg E, Torgersen S (2005) Continuities between emotional and disruptive behavior disorders in adolescence and personality disorders in adulthood. *Am J Psychiatry*, 162:1941–1947.
- Johnson JG, Cohen P, Kasen S, Skodol AE, Hamagan F, Brook JS (2000) Age-related change in personality disorder trait levels between early adolescence and adulthood: A commonly-based longitudinal investigation. *Acta Psychiatr Scand*, 102:265–275.
- Johnson JG, First MB, Cohen P, Skodol AE, Kasen S, Brook JS (2005a) Adverse outcomes associated with personality disorder not otherwise specified in a community sample. *Am J Psychiatry*, 162:1926–1932.

- Johnson JG, Bromley E, McGeoch PG (2005b) Role of childhood experiences in the development of maladaptive and adaptive personality traits. In *The American Psychiatric Publishing Textbook of Personality Disorders*. (Eds. JM Oldham, AE Skodol, DS Bender):209–221. Washington DC, American Psychiatric Publishing.
- Johnson JG, Cohen P, Chen H, Kasen S, Brook JS (2006) Parenting behaviors associated with risk for offspring personality disorder during adulthood. *Arch Gen Psychiatry*, 63:579–587.
- Johnson JG, Cohen P, Kasen S, Skodol AE, Oldham JM (2008) Cumulative prevalence of personality disorders between adolescence and adulthood. *Acta Psychiatr Scand*, 118:410–413.
- Kasen S, Cohen P, Skodol AE, Johnson JG, Smailes E, Brook JS (2001) Childhood depression and adult personality disorder: alternative pathways of continuity. *Arch Gen Psychiatry*, 58:231–236.
- Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE (2005) Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Arch Gen Psychiatry*, 62:593–602.
- Loeber R, Burke JD, Lahey BB (2002) What are adolescent antecedents to antisocial personality disorder? *Crim Behav Ment Health*, 12:24–36.
- Loeber R, Pardini D, Homish DL, Wei EH, Crawford AM, Farrington DP et al. (2005) The prediction of violence and homicide in young men. *J Consult Clin Psychol*, 73:1074–1088.
- Ludolph PS, Westen D, Mislis B, Jackson A, Wixom J, Wiss FC (1990) The borderline diagnosis in adolescents: symptoms and developmental history. *Am J Psychiatry*, 147:470–476.
- Mahler MS (1960) Symposium on psychotic object relationships. III. perceptual de-differentiation and psychotic object relationship. *Int J Psychoanal*, 41:548–553.
- Maina G, Albert U, Salvi V, Pessina E, Bogetto F (2008) Early onset obsessive-compulsive disorder and personality disorders in adulthood. *Psychiatry Res*, 158:217–225.
- Miller CJ, Flory JD, Scott RM, Hartly SC, Newcorn JH, Halperin JM (2008) Childhood attention-deficit/hyperactivity disorder and the emergence of personality disorders in adolescence: a prospective follow-up study. *J Clin Psychiatry*, 69:1477–1484.
- Millon T, Davis RO (1996) *Disorders of Personality: DSM-IV and Beyond*. Oxford, England, Wiley.
- Mittal VA, Tessner KD, Walker EF (2007) Elevated social Internet use and schizotypal personality disorder in adolescents. *Schizophr Res*, 94:50–57.
- Mittal VA, Dhruv S, Tessner KD, Walder DJ, Walker EF (2007) The relations among putative biologic markers in schizotypal adolescents: minor physical anomalies, movement abnormalities and salivary cortisol. *Biol Psychiatry*, 61:1179–1186.
- Mittal VA, Neumann C, Saczawa M, Walker EF (2008) Longitudinal progression of movement abnormalities in relation to psychotic symptoms in adolescents at high risk of schizophrenia. *Arch Gen Psychiatry*, 65:165–171.
- Natsuaki MN, Cicchetti D, Rogosch FA (2009) Examining the developmental history of child maltreatment, peer relations, and externalizing problems among adolescents with symptoms of paranoid personality disorder. *Dev Psychopathol*, 21:1181–1193.
- Neugebauer R, Hoek HW, Susser E (1999) Prenatal exposure to wartime famine and development of antisocial personality disorder in early adulthood. *JAMA*, 282:455–462.
- Newman DL, Caspi A, Moffitt TE, Silva PA (1997) Antecedents of adult interpersonal functioning: effects of individual differences in age 3 temperament. *Dev Psychol*, 33:206–217.
- Olin SCS, Raine A, Cannon TD, Parnas J, Schulsinger F, Mednick SA (1997) Childhood behavior precursors of schizotypal personality disorder. *Schizophr Bull*, 23:93–103.
- Oncu B (2007) Ergenlerde kişilik bozuklukları. In *Çocuk ve Ergen Psikiyatrisi Kitabı* (Eds. AS Aysev, YI Taner). Istanbul, Golden Print.
- Paris J, Zerkowicz P, Guzder J, Joseph S, Feldman R (1999) Neuropsychological factors associated with borderline pathology in children. *J Am Acad Child Adolesc Psychiatry*, 38:770–774.
- Penke L, Denissen JA, Miller GF (2007) The evolutionary genetics of personality. *Eur J Pers*, 21:549–587.
- Philipsen A, Limberger MF, Lieb K, Feige B, Kleindienst N, Ebner-Priemer U et al. (2008) Attention-deficit hyperactivity disorder as a potentially aggravating factor in borderline personality disorder. *Br J Psychiatry*, 192:118–123.
- Rettew DC, Zaranini MC, Yen S, Grilo CM, Skodol AE, Shea MT et al. (2003) Childhood antecedents of avoidant personality disorder: A retrospective study. *J Am Acad Child Adolesc Psychiatry*, 42:1122–1130.
- Robins LN (1991) Conduct disorder. *J Child Psychol Psychiatry*, 32:193–212.
- Rutter M (1987) Temperament, personality, and personality disorder. *Br J Psychiatry*, 150:443–458.
- Sadock VJ, Sadock BA (2007) *Kaplan & Sadock's Synopsis of Psychiatry*, 10th edition. New York, Lippincott Williams & Wilkins.
- Sánchez-Bernardos ML, Avia MD (2006) The relationship between fantasy proneness and schizotypy in adolescents. *J Nerv Ment Dis*, 194:411–414.

- Saulsman LM, Page AC (2004) The five-factor model and personality disorder empirical literature: a meta-analytic review. *Clin Psychol Rev*, 23:1055–1085.
- Seagrave D, Grisso T (2002) Adolescent development and the measurement of juvenile psychopathy. *Law Hum Behav*, 26:219–239.
- Shahar G, Ann Scoti M, Rudd MD, Joiner TE. (2008) Hypomanic symptoms predict an increase in narcissistic and histrionic personality disorder features in suicidal young adults. *Depress Anxiety*, 25: 892-898.
- Shiner RL (2009) The development of personality disorders: perspectives from normal personality development in childhood and adolescence. *Dev Psychopathol*, 21:715-734.
- Siever LJ, Gunderson JG (1983) The search for a schizotypal personality: historical origins and current status. *Compr Psychiatry*, 24:199-212.
- Steinberg L (2008) A social neuroscience perspective on adolescent risk-taking. *Dev Rev*, 28:78–106.
- Stepp SD, Burke JD, Hipwell AE, Loeber R. (2012) Trajectories of attention deficit hyperactivity disorder and oppositional defiant disorder symptoms as precursors of borderline personality disorder symptoms in adolescent girls. *J Abnorm Child Psychol*, 40:7-20.
- Tackett JL, Balsis S, Oltmanns TF, Krueger RF (2009) A unifying perspective on personality pathology across the life span: Developmental considerations for the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders. *Dev Psychopathol*, 21:687-713.
- Tamar M (2008) Borderline kişilik bozuklukları. Çocuk ve Ergen Psikiyatrisi Temel Kitabı (Ed FÇ Çetin):319-324. Ankara, Hekimler Yayın Birliği..
- Teicher MH, Tomoda A, Andersen SL (2006) Neurobiological consequences of early stress and childhood maltreatment: are results from human and animal studies comparable? *Ann N Y Acad Sci*, 1071:313-323.
- Tessner KD, Mittal V, Walker EF (2011) Longitudinal study of stressful life events and daily stressors among adolescents at high risk for psychotic disorders. *Schizophr Bull*, 37:432-441.
- Thaker G, Moran MS, Adami H, Cassady S (1993) Psychosis proneness scales in schizophrenia spectrum personality disorders: Familial vs. nonfamilial samples. *Psychiatry Res*, 46:47-57.
- Trotman HD, McMillan A, Walker EF (2006) Cognitive function and symptoms in adolescents with schizotypal personality disorder. *Schizophr Bull*, 32:489–497.
- Trull TJ, Durrett C (2005) Categorical and dimensional models of personality disorder. *Ann Rev Clin Psychol*, 1:1–26.
- Weil AP (1953) Clinical data and dynamic considerations in certain cases of childhood schizophrenia. *Am J Orthopsychiatry*, 23:518-529.
- Westen D, Ludolph P, Lerner H, Ruffins S, Wiss FC (1990) Object relations in borderline adolescents. *J Am Acad Child Adolesc Psychiatry*, 29:338–348.
- Westen D, Dutra L, Shedler J (2005) Assessing adolescent personality pathology. *Br J Psychiatry*, 186:227–238.
- Wolff S, Chick J (1980) Schizoid personality in childhood: a controlled follow-up study. *Psychol Med*, 10:85-100.
- Wolff S (1991a) 'Schizoid' personality in childhood and adult life I: the vagaries of diagnostic labeling. *Br J Psychiatry*, 159:615–620
- Wolff S (1991b) 'Schizoid' personality in childhood and adult life III: The childhood picture. *Br J Psychiatry*, 159:629–635.
- Wolff S, Townshend R, McGuire RJ, Weeks DJ. (1991) 'Schizoid' personality in childhood and adult life II :Adult adjustment and the continuity with schizotypal personality disorder. *Br J Psychiatry*, 159:620–629.
- Zanarini MC, Frankenburg FR, Hennen J, Reich DB, Silk KR. (2006) Prediction of the 10-year course of borderline personality disorder. *Am J Psychiatry*, 163:827–832.
- Zelkowitz P, Paris J, Guzder J, Feldman R (2001) Diatheses and stressors in borderline pathology of childhood: The role of neuropsychological risk and trauma. *J Am Acad Child Adolesc Psychiatry*, 40:100-105.

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**Merve Çikılı Uytun**, Dr., Erciyes University, Faculty of Medicine Department of Child and Adolescent Psychiatry, Kayseri, Turkey; **Didem Behice Öztop**, Assoc.Prof., Erciyes University, Faculty of Medicine Department of Child and Adolescent Psychiatry, Kayseri, Turkey.

**Yazışma Adresi/Correspondence:** Merve Çikılı Uytun, Erciyes University, Faculty of Medicine Department of Child and Adolescent Psychiatry, Kayseri, Turkey. E-mail: mervecikili@yahoo.com

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