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## **Advances in Clinical Assessment**

The Differential Diagnosis of Dissociative Identity Disorder and Schizophrenia

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Dissociative disorders are characterized by 'a disruption of and/or discontinuity in normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior' (DSM-5, American Psychiatric Association, 2013). Considered post-traumatic syndromes, the dissociative symptoms and disorders are more common than previously recognized. Extensive research over the past several decades has established that Dissociative Identity Disorder (DID) is: (i) relatively common in out-patients and in-patients (prevalence rates ranging between 1 and 10%), (ii) frequently unrecognized for many years while a person seeks treatment, and (iii) often misdiagnosed as a psychotic disorder (or sometimes only the presenting co-morbid disorder is recognized, such as an affective, anxiety, substance use, or personality disorder; Aderibigbe, Block, & Walker, 2001; Allen, 1995; Bliss, Larson, & Nakashima, 1983; Chu, 1996; Gast, Rodewald, Nickel, & Emrich, 2001; Ginzburg, Somer, Tamarkin, & Kramer, 2010; Kluft, 1985a, 1985b, 1987, 1995; Mueller, Moergeli, Assaloni, et al., 2007; Putnam, Guroff, Silberman, Barban, & Post, 1986; Şar, Tutkun, Alyanak, Bakim, & Baral, 2000; Şar, Koyuncu, Ozturk, et al., 2007; Spiegel, 1993; Steinberg, 1995; Steinberg, 2000a; Steinberg & Schnall, 2001; Van der Hart, 1993).1

The misdiagnosis of patients with DID as having a psychotic disorder, including schizophrenia, is typically due to: (i) the overlap of isolated symptoms, including the presence of 'voices'; (ii) misinformation about DID; (iii) lack, until the 1980s, of reliable diagnostic tools for dissociative symptoms and disorders; and (iv) misclassification based upon commonly used evaluative measures which are insensitive to the existence of a dissociative disorder (Allen & Coyne, 1995; Bliss, 1984; Coons, 1984; Kluft, 1984, 1995; Steinberg, Barry, Sholomskas, & Hall, 2005). Misdiagnosis of DID as a psychotic disorder is not a benign misclassification; research indicates that DID patients previously diagnosed with schizophrenia had a history of more hospitalizations, more self-mutilation, and more suicide attempts than those with DID who had never been diagnosed as psychotic (Putnam et al., 1986; Ross & Norton, 1988). Accurate and early diagnosis of DID is particularly important given that individuals with DID usually respond well to specialized psychotherapy and do not require chronic use of

antipsychotic medication, in contrast to schizophrenia (Coons & Bowman, 2001; Kluft, 1984, 1999; Myrick et al., 2017; Steinberg & Schnall, 2001).

Commonly used screening tools have demonstrated weaknesses in differentiating psychosis from dissociation. For example, patients with dissociation demonstrate high SCL-90 scores on the psychoticism and paranoid ideation scales. Clinicians should be aware that elevated psychoticism scales may reflect underlying dissociative rather than psychotic-spectrum disorders (Allen & Coyne, 1995; Derogatis, 1994; Moskowitz, Barker-Collo, & Ellson, 2005; Steinberg et al., 2005). With the development of specialized diagnostic tools for the dissociative disorders, research has documented the essential features of these disorders, establishing dissociative pathology as distinct syndromes that can be reliably differentiated from other disorders. As a result of such standardized instruments, we can now more reliably differentiate symptoms and features of DID from those occurring in schizophrenia.

This chapter is intended to help mental health professionals become familiar with distinguishing dissociative disorders from schizophrenia based on systematic research using standardized tests. Several dissociative screening and diagnostic instruments will be reviewed for their contribution to our knowledge of overlapping and distinguishing symptoms between the dissociative and psychotic populations. One diagnostic instrument, the Structured Clinical Interview for DSM-IV – Dissociative Disorders (SCID-D), is presented in detail, together with data establishing its ability to differentiate dissociative from psychotic patients (Steinberg, 1994a, 1994b, in press a, in press b; Steinberg, Cicchetti, Buchanan, Rakfeldt, & Rounsaville, 1994).

# DID and Schizophrenia: Overlapping/Non-specific **Symptoms**

Individuals with schizophrenia and DID experience some of the same symptoms, with these shared symptoms referred to here as 'overlapping symptoms'. Particularly noteworthy are the so-called 'Schneiderian' or 'first-rank' symptoms (Schneider, 1959). These symptoms include audible thoughts, voices arguing, voices commenting, influences playing on the body, thought withdrawal, thought insertion, thought broadcasting, 'made' feelings, 'made' impulses, and 'made' volitional acts (see Chapter 4 of this book).

Originally thought to be unique to schizophrenia, research indicates that firstrank symptoms are quite common in individuals with DID (Kluft, 1987; Laddis & Dell, 2012a; Moise & Leichner, 1996; Ross, Miller, Reagor, Bjornson, & Fraser, 1990; Chapter 12 of this book). Diagnostic confusion can be exacerbated due to the continued misperception that hearing voices is unique to psychotic disorders. Recent investigations note that a variety of factors associated with auditory hallucinations fail to distinguish the voices which occur in dissociative disorders from those in psychotic disorders. These non-specific factors include whether the voices are perceived as originating inside versus outside of one's self, whether voice content is incongruent with mood, or whether the overall content of the voices is reported to be supportive or destructive (Copolov, Trauer, & Mackinnon, 2004; Dorahy, Shannon, Seagar, et al., 2009; Honig et al., 1998; Moskowitz, 2012; Moskowitz & Corstens, 2007; Pilton, Varese, Berry, & Bucci, 2015; Chapter 13 of this book).

Instruments that inquire about patient experiences in great detail have more success in identifying possible distinguishing symptoms. Using a comprehensive instrument assessing auditory hallucinations, Dorahy et al. (2009) found that persons with DID were more likely than a schizophrenia group to experience visual, tactile, and olfactory hallucinations, report hearing both adult and child voices, and have the onset of voice hearing before age 18, suggesting that the presence of these factors can be used to consider an 'increased likelihood' of DID. In addition, clinician-administered diagnostic interviews such as the SCID-D, which allow for extensive patient elaborations, have successfully identified distinguishing features of seemingly overlapping symptoms in DID and schizophrenia (discussed below; Steinberg, 1994a; Steinberg et al., 1994; Welburn, Fraser, Jordan, et al., 2003).

## Assessment of Dissociation in DID and Schizophrenia

Routine identification of dissociative symptoms requires systematic screening of dissociation in all patients who present for evaluation. Failure to screen for dissociation increases the likelihood of misdiagnosis, potentially lasting for years, along with associated suffering. Screening tests for dissociative symptoms are useful for detecting persons at risk of having a dissociative disorder. However, a diagnosis of a dissociative disorder requires further specialized clinical evaluation and/or standardized diagnostic tests for dissociative disorders. Commonly used screening and diagnostic tests for dissociation that have been used in numerous psychotic and dissociative populations are reviewed in this section.

#### A Screening Test: The Dissociative Experiences Scale (DES)

Screening tests are self-administered instruments intended to provide a preliminary screen for particular symptoms and diagnoses. The DES is a self-report scale that allows clinicians to rapidly screen for pathological dissociation. The DES assesses the frequency and type of dissociative experiences a person has had in their life. Many studies report good to excellent reliability and validity for the DES (Bernstein & Putnam, 1986; Carlson & Putnam, 1993; Frischholz et al., 1990; Van IJzendoorn & Schuengel, 1996).

The Dissociative Experience Scale contains 28 items. The DES uses a 100 mm analog line, while the DES-II uses an 11-point response format from 0 to 100%. Total scores, the average of the scores on all 28 items, theoretically range from 0 to 100; cut-off scores varying from 12 to 30 (and above) have been recommended to indicate patients possibly suffering from a dissociative disorder (Bernstein & Putnam, 1986; Carlson & Putnam, 1993; Draijer & Boon, 1993; Mueller-Pfeiffer, Rufibach, Wyss, et al., 2013; Steinberg, Rounsaville, & Cicchetti, 1991). In addition, 8 DES items, referred to as the DES taxon or DES-T have been found to correlate with psychopathological levels of dissociation (Waller, Putnam, & Carlson, 1996.)

With respect to the differentiation of DID from schizophrenia, studies have found that persons with DID have significantly higher scores on the DES than persons with schizophrenia (Bernstein & Putnam, 1986). The degree of dissociation in persons with schizophrenia correlates with emotional and physical abuse (Dorahy et al., 2009; Holowka, King, Saheb, Pukall, & Brunet, 2003; Schäfer et al., 2006, 2012). Similar

correlates between abuse and dissociative symptoms have been noted in persons with dissociative disorders (Allen, 1995; Chu, 1996; Goodwin, 1988; Kluft, 1987, 1995; Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1998).

While patients without a psychotic disorder are noted to have relatively stable DES scores, patients diagnosed with schizophrenic spectrum disorders have been found to vary in DES scores ranging from mean scores of 10 to 30 (in different studies). The variable DES score may be related to whether the patient is evaluated during an acute psychotic phase of their illness or once they have been stabilized (Schäfer et al., 2012). For example, Schäfer et al. (2012) evaluated 145 patients with schizophrenic spectrum disorders at admission on an in-patient unit and again 3 weeks later. They found that dissociative symptoms as measured by the DES decreased significantly following 3 weeks of in-patient treatment and concluded that dissociative symptoms appear to be statedependent in this population. Further research is needed to better understand reasons for this observed decrease in DES scores. Because of the significant state-dependent variability of DES scores in this population, Schäfer et al. (2012) recommended that diagnostic interviews for dissociative disorders, in addition to the DES, be used to 'avoid measurement artifacts' in patients with schizophrenic spectrum disorders.

## A Screening Test: The Somatic Dissociation Questionnaire (SDQ-20)

The SDQ-20 is a self-report tool evaluating somatoform dissociation, which refers to dissociative symptoms that involve the body (such as sensory loss or loss of control over one's body) but which cannot be accounted for by a medical condition, drugs, or alcohol. The SDQ-20 consists of 20 items rated on a five-point Likert-type scale. Total scores range from 20 to100 (Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1996).

For all SDQ-20 items, the person is asked to indicate whether their bodily symptom is related to a physical disease. However, if used for research purposes, Nijenhuis et al. (1996) recommends that the researcher not adjust the score of items if the patient attributes the cause to physical disease, as the patient's interpretation often may not be accurate. If used for clinical purposes, when physical illness is confirmed by the physician who diagnosed the medical condition, the SDQ authors suggest that item scores be adjusted to indicate that the symptom does not apply to the patient. When used for research purposes, the SDQ-20's test-retest reliability and convergent validity are reported as satisfactory.

Patients with dissociative disorders have significantly higher scores on the SDQ-20 (mean score of 51.8) than patients with other psychiatric disorders (including schizophrenia, mean score of 27.1). SDQ scores have been found to correlate with early onset and prolonged abuse in patients with dissociative disorders, compared to patients with other disorders. This is consistent with research linking severe dissociative disorders to early and severe abuse or traumas (Nijenhuis et al., 1996, 1997).

## A Screening Test: The Multidimensional Inventory of Dissociation (MID)

The MID is a self-report tool of pathological dissociation containing 218 items, which is reported to assess 14 facets of dissociation and 23 symptoms of dissociation (Dell, 2006; Somer & Dell, 2005). For each item, the MID uses an 11 point frequency response scale from 0 (Never) to 10 (Always). The person is asked to rate 'how often' they experience each item when they are not using alcohol or drugs (similar to the prompt in the DES). While the MID was initially presented as a diagnostic tool for dissociative disorders, recent psychometric analyses indicate that it functions better as a screening tool, with similar false-positive and false-negative characteristics to that of the DES and SDQ-20 (Gingrich, 2009; Mueller-Pfeiffer et al., 2013).

Laddis and Dell (2012b) assert that 'current measures of dissociation cannot distinguish between the symptoms of DID and the "dissociative-like" symptoms of schizophrenia', citing two studies using the structured interview DDIS which showed large overlap in dissociation scores between the DID and schizophrenic study groups. While Laddis and Dell's statement may be true of highly structured interviews such as the DDIS, and certainly true of self-administered screeners, numerous studies indicate that the clinician administered semi-structured SCID-D can differentiate between DID and schizophrenic populations by identifying both quantitative differences (severity/frequency) as well as qualitative differences that distinguish dissociative symptoms in DID from those seen in patients with psychosis (Boon & Driajer, 1993; Haugen & Castillo, 1999; Steinberg et al., 1994; Welburn et al., 2003). Using assessment methods that have a demonstrated ability to diagnostically distinguish between DID and schizophrenic patient populations is the first step in isolating any distinct pathophysiology between the two disorders (Şar & Ross, 2006).

## A Structured Diagnostic Tool: The Dissociative Disorders Interview Schedule (DDIS)

The DDIS is a structured interview that diagnoses dissociative disorders, borderline personality, major depression, and substance abuse. Diagnosis of the dissociative disorders is based on items that ask the patient whether or not they endorse each disorder's DSM criteria. Given the DDIS's yes/no/unsure response set, a patient's 'yes' endorsement of three questions corresponding to DSM-IV's DID diagnostic criteria, along with one 'no' response to exclusion criteria, results in a diagnosis of DID. In the original published study, the inter-rater reliability of the diagnosis of DID using the DSM-III-R version of the DDIS was good, with a kappa = 0.68 (Ross, Heber, Norton, Anderson, & Barchet, 1989).

Studies using the DDIS in schizophrenic populations have explored the frequency of overlapping symptoms of schizophrenia and DID particularly with respect to Schneiderian symptoms. Once thought to be specific to schizophrenia, these symptoms are now considered non-specific and their presence or absence does not provide information that allows the clinician to distinguish dissociative symptoms in patients with dissociative disorders from psychotic disorders. Not only were patients with DID found to have Schneiderian symptoms, they endorsed more positive symptoms of schizophrenia than schizophrenic patients (Kluft, 1987; Ross et al., 1990).

## A Semi-Structured Diagnostic Interview: The Structured Clinical Interview for Dissociative Disorders (SCID-D)

The SCID-D provides a standardized method for clinicians to identify dissociative symptoms and disorders (Steinberg, 1994a, 1994b, in press a, in press b). It is widely considered to be the 'gold standard' for the diagnosis of dissociative symptoms and

disorders and for testing the dissociative properties of dissociation screening instruments (Allen, 2000; Mueller-Pfeiffer et al., 2013; Putnam & Loewenstein, 2000; Welburn et al., 2003). Based on a clinical model/typology of five core dissociative symptoms (amnesia, derealization, depersonalization, identity alteration, and identity confusion), each of which are capable of being reliably assessed, the SCID-D enables the diagnosis of dissociative symptom severity and disorders in adolescents and adults. The SCID-D's semi-structured format utilizing open-ended follow-up questions elicits elaborate descriptive symptom responses which, if present, support DSM or ICD criteria for the dissociative disorders. The SCID-D also allows the interviewer to evaluate dissociative symptoms present in patients with post-traumatic stress disorder.

Guidelines for the administration, scoring, and interpretation of the SCID-D, including Severity Rating Definitions for systematic rating of dissociative symptoms severity, are described in the *Interviewer's Guide to the SCID-D* (Steinberg, 1994b, in press b.) Guidelines for the SCID-D's use in forensic evaluations and for documenting the detection of malingerers have been published separately (Steinberg, Hall, Lareau, & Cicchetti, 2001; Welburn et al., 2003.)

The SCID-D results include both qualitative descriptive information as well as quantitative scoring of dissociative symptom severity. Researchers in the US and elsewhere (Canada, Germany, Israel, the Netherlands, the Philippines, Switzerland, and Turkey) have verified the SCID-D's psychometrics and distinctive dissociative symptom phenomenology including: (i) excellent overall inter-rater reliability and good discriminant validity for the detection of dissociative symptoms and disorders, (ii) significantly higher dissociative symptom severity scores in patients with dissociative disorders as compared to those with other psychiatric disorders and normal controls, and (iii) virtually identical dissociative symptom severity profiles and symptom phenomenology in cross-cultural studies for patients with dissociative disorders, other psychiatric disorders (including psychotic disorders), and non-clinical controls (Boon & Draijer, 1991; Bowman & Coons, 2000; Chang, Chang, Shiah, & Huang, 2005; Gast et al., 2001; Gingrich, 2009; Ginzburg et al., 2010; Goff, Olin, Jenike, Baer, & Buttolph, 1992; Haugen & Castillo, 1999; Kundakçi, Şar, Kiziltan, et al., 2014; Mueller-Pfeiffer, Rufibach, Perron, et al., 2012; Şar, Akyuz, Kundakci, Kiziltan, & Dogan, 2004; Şar, Onder, Kilicaslan, et al., 2014; Steinberg, 2000a, 2000b; Steinberg, Rounsaville, & Cicchetti, 1990; Steinberg et al., 1990, 1994; Tezcan, Atmaca, Gecici, Buyukbayram, & Tutkun, 2003; Welburn et al., 2003; Yargiç, Şar, Tutkun, & Alyanak, 1998). Recent physiological research has validated the SCID-D's ability to identify those with complex dissociative disorders. For example, a recent study documented that DID patients identified by SCID-D had characteristic brain activity during state switching that could not be duplicated by either fantasy-prone controls or controls trained to fake DID (Reinders, Willemsen, Vos, den Boer, & Nijenhuis, 2012; Reinders et al., 2006).

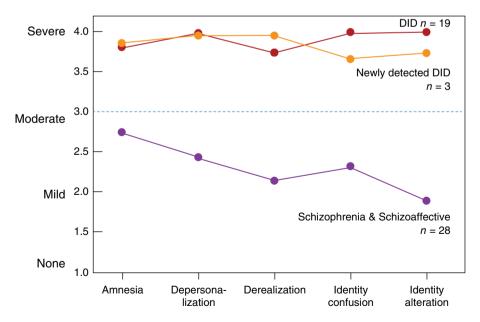
# Distinguishing DID from Schizophrenia: Identifying Diagnostically Distinct Features Based on the SCID-D Interview

Researchers have identified previously unrecognized dissociation in patients with schizophrenia and schizoaffective disorder using the SCID-D. Specifically, 10-28% of patients with schizophrenia or schizoaffective disorder interviewed with the SCID-D

were found to have DID or DDNOS (Boon & Driajer, 1993; Haugen & Castillo, 1999; Steinberg et al., 1994). Further, patients with DID have distinctly different dissociative symptom profiles (higher scores on all five dissociative symptoms) than patients with schizophrenia or schizoaffective disorder. Consistent dissociative symptom profiles have been found in these diagnostic groups in studies conducted in North America and in Europe (Boon & Driajer, 1993; Haugen & Castillo, 1999; Steinberg et al., 1994; Welburn et al., 2003).

Steinberg et al. (1994) studied 50 psychiatric out-patients referred with one of three DSM-III-R diagnoses: schizophrenia (n=17), schizoaffective disorder (n=14), and DID (then known as multiple personality disorder, n=19). Subjects were administered the SCID-D by trained interviewers blind to referring diagnosis. A diagnosis of DID was confirmed in all 19 subjects referred with the diagnosis. Of the 31 subjects referred with diagnoses of schizophrenia or schizoaffective disorder, 3 (10%) met the criteria for DID based on SCID-D assessment. Results indicated that patients with DID (including newly diagnosed DID) had significantly higher dissociative symptom and overall SCID-D scores than patients with schizophrenia/schizoaffective disorder (DID mean = 19.6; schizophrenia/schizoaffective mean = 11.8). All 19 DID subjects reported experiencing recurrent to persistent (moderate to severe) depersonalization, derealization, identity confusion, and identity alteration. No patient in the schizophrenia/schizoaffective group experienced moderate to severe symptoms in all of the four dissociative symptom categories noted in the DID group.

See Figure 21.1 for a summary of SCID-D dissociative symptom profiles for persons with DID, schizophrenia/schizoaffective disorder, and newly detected DID (data from Steinberg et al., 1994).



**Figure 21.1** SCID-D symptom profile: DID, schizophrenia, and newly detected DID or DDNOS. Based on data from Steinberg et al. (1994).

Welburn et al. (2003) documented that, by using the SCID-D, patients with schizophrenia can be reliably distinguished not only from DID, but also from feigned DID. Consistent with Steinberg et al. (1994), the authors found schizophrenic subjects to have an average SCID-D total score of 11.00, while DID subjects had an average total score of 19.08. Patients with DID had statistically significant higher scores on each of the five dissociative symptoms (amnesia, depersonalization, derealization, identity confusion, and identity alteration) than patients with schizophrenia. Welburn et al. (2003) noted that the SCID-D was 'clearly the most efficacious instrument in discriminating DID from schizophrenia and from feigned dissociation' (p. 124).

In addition to quantitative differences (severity/frequency), analysis of the SCID-D interviews revealed qualitatively distinct distinguishing features of the specific dissociative symptoms for DID as compared to schizophrenia. For example, depersonalization symptoms in persons diagnosed as schizophrenia occurred in the context of psychotic/delusional symptoms or transient identifications with another person (real or mythological). One patient with schizophrenia when asked whether she had ever experienced depersonalization ('Have you ever had the feeling that you were a stranger to yourself?') stated: 'Yes, it sure wasn't me. ... One time I thought I was Mrs. Santa Claus, things like that, it was not me.' With respect to identity alteration, schizophrenic subjects reported transient identifications with other people or transient alterations in their own identity, while individuals with DID reported ongoing consistent alterations in their sense of identity, that is the existence of alters each with consistent feelings, thoughts, and/or behaviours. One patient with schizophrenia described her identity confusion and alteration as follows: 'I thought this arm was Jesus and this arm was me and I would hold my hand like this [places left hand on right forearm] to take care of Jesus' (Steinberg, 1994a; Steinberg et al., 1994).

In comparison, DID subjects experienced multiple severe dissociative symptoms while maintaining (relatively) intact reality testing. A characteristic feature of depersonalization exhibited by DID patients in response to SCID-D depersonalization questions was endorsement of depersonalization along with spontaneous elaborations of interactive dialogues between observing and participating self. One DID patient reported 'There's a part of me I call the observer. The observer likes to tell me what I should and should not do?

There are many qualitative differences between schizophrenia and DID which can be detected by the SCID-D. Persons with DID maintain intact reality testing, and are often aware that the voices they are experiencing are not emanating from outside of themselves but that they may feel 'as if' they are. Voice hearing occurring within the context of intact reality testing was a crucial element to the correct diagnosis in the well-known case of Chris Sizemore ('Eve') (Thigpen & Cleckley, 1954). Most significant to differential diagnosis, the voices associated with DID occur within the context of other dissociative symptoms assessed with the SCID-D, specifically the symptoms of amnesia, depersonalization, derealization, identity confusion, and identity alteration (Steinberg et al., 1994).

In summary, while superficial manifestations of overlapping symptoms such as hearing voices and specific dissociative symptoms may appear similar in DID and schizophrenia, careful examination of dissociative symptoms as assessed by the SCID-D indicate that symptom characteristics (including content, context, severity, and cooccurrence with other dissociative symptoms) and severity of dissociative symptoms differentiate the two disorders (Steinberg et al., 1994).

For a summary of the overlapping and diagnostically distinct symptoms in persons with schizophrenia and DID, see Table 21.1.

 
 Table 21.1
 Overlapping symptoms and unique features of schizophrenia and dissociative identity
 disorder (DID).

Overlapping symptoms potentially present in both schizophrenia and DID	Distinguishing features of schizophrenia	Distinguishing features of DID
Dissociative symptoms	Usually few to occasional dissociative symptoms, and mild to moderate severity ratings on SCID-D dissociative symptoms. Symptoms typically occur in the context of delusions or other psychotic symptoms.	Recurrent to persistent dissociative symptoms and moderate to severe severity ratings on at least three SCID-D dissociative symptoms. Reality testing is typically intact.
	Average total SCID-D score, mean = 11.7	Average total SCID-D score, mean = 19.6
Identity confusion/ disturbance	Lack of sense of identity and one's role in society, or transient uni-dimensional alterations in identity	Recurrent, consistent, multi- dimensional and distinct alterations in one's identity.
Internal dialogues and/or auditory hallucinations	Hallucinations other than the voices of alter personalities.	Dialogues/hallucinations representing conversations between observing and participating self or alters. These voices may be described as similar to thoughts.
Schneiderian symptoms and delusions	Schneiderian symptoms are present. Bizarre delusions, paranoid delusions, and any other delusions that do not involve other personalities (e.g. 'The CIA is out to get me') are common.	Schneiderian symptoms can be present. Delusions if present are typically associated with experiencing alter personalities.
Other symptoms associated with psychosis	Thinking characterized by incoherence or marked loosening of associations.	Generally absent in DID. If present, usually as transient episodes.
	Catatonic behaviour.	Rare in DID.
	Chronic flat affect.	Absent in DID.
Reality testing	Impaired.	Intact reality testing; 'as if' descriptions of 'psychotic-like' symptoms are typical.
Insight	'May lack insight or awareness of their disorder Unawareness of illness is typically a symptom of schizophrenia rather than a coping strategy.' (DSM-5, p. 101)	Insight is usually intact.
Comorbid diagnoses	" if mood episodes have occurred during active-phase symptoms, they have been present for a minority of the total duration of the active and residual periods of the illness." (DSM-5, p. 99).	Frequently co-exists with mood disorders. Major depression and/or manic episodes may co-exist with the dissociative syndrome.

(Continued)

Table 21.1 (Continued)

Overlapping symptoms potentially present in both schizophrenia and DID	Distinguishing features of schizophrenia	Distinguishing features of DID
Impairment in functioning	'Level of functioning in one or more major areas such as work, interpersonal relations, or self-care is markedly below the level achieved prior to the onset' (DSM-5, p. 99)	Impairment in functioning can be temporary, with eventual full return to premorbid level of functioning.
Course of symptoms and syndrome	'Continuous signs of the disturbance persist for at least 6 months.' (DSM-5, p. 99)	Signs of the disturbance may be intermittent. Fluctuations in symptoms, mood, and degree of impairment are common.

Source: © Marlene Steinberg. Adapted from Steinberg (1994b).

## **Summary and Clinical Implications**

Patients with dissociative disorders are commonly misdiagnosed as having schizophrenia or schizoaffective disorder. Early detection of dissociative disorders in patients with psychotic presentations is essential for preventing years of misdiagnosis, ineffective treatment, and emotional suffering. Screening questionnaires and highly structured 'yes'/'no' interviews have proved unable to detect unique features capable of differentiating dissociative symptoms in patients with schizophrenia from those with dissociative disorders. In contrast, the SCID-D allows for the detection or exclusion of the existence of a dissociative disorder among the putatively psychotic population and informs on the different phenomenology of dissociative and 'psychotic' symptoms (i.e. voices) through identifying distinct distinguishing features of apparently overlapping symptoms (Haugen & Castillo, 1999; Steinberg, 1994a, 1994b, in press a, in press b; Welburn et al., 2003.) For these reasons, the SCID-D is recommended for the evaluation of persons experiencing psychotic or dissociative symptoms or who present with a history of trauma.

## Note

1 The author would like to thank Harold D. Siegel, PhD for his contributions to an earlier version of this chapter (in Moskowitz, Schäfer, & Dorahy, 2008).

## References

Aderibigbe, Y., Block, R., & Walker, W. (2001). Prevalence of depersonalization and derealization experiences in a rural population. Social Psychiatry and Psychiatric *Epidemiology*, 36(2), 63–69.

Allen, J. (1995). Coping with trauma: A guide to self-understanding. Washington, DC: American Psychiatric Press.

- Allen, J. Spring(2000). Introduction. Special issue on advances in diagnosing and treating trauma. Bulletin of the Menninger 64.
- Allen, J., & Coyne, L. (1995). Dissociation and vulnerability to psychotic experiences. The dissociative experiences scale and the MMPI-2. 183, 615-622.
- American Psychiatric Association (2013). Diagnostic and statistical manual for mental disorders (5, DSM-5). Arlington, VA: Americal Psychiatric Association.
- Bernstein, E., & Putnam, F. (1986). Development, reliability and validity of a dissociation scale. Journal of Nervous and Mental Disease, 174, 727-735.
- Bliss, E. (1984). A symptom profile of patients with multiple personalities, including MMPI results. Journal of Nervous and Mental Disease, 172, 197-202.
- Bliss, E., Larson, E., & Nakashima, S. (1983). Auditory hallucinations and schizophrenia. *Journal of Nervous and Mental Disease*, 171(1), 30–33.
- Boon, S., & Draijer, N. (1991). Diagnosing dissociative disorders in the Netherlands: A pilot study with the structured clinical interview for DSM-III R dissociative disorders. American Journal of Psychiatry, 148(4), 458–462.
- Boon, S., & Driajer, N. (1993). Multiple personality disorder in the Netherlands. A clinical investigation of 71 patients. American Journal of Pychiatry, 150(3), 489-494.
- Bowman, E., & Coons, P. (2000). The differential diagnosis of epilepsy, pseudoseizures, dissociative identity disorder, and dissociative disorder not otherwise specified. Bulletin of the Meninger Clinic, 64(2), 164-180.
- Carlson, E. B., & Putnam, F. (1993). An update on the dissociative experiences scale. Dissociation, 6, 16-27.
- Chang, AJ., Chang, SH., Shiah, IS., Huang, CW. (2005) Preliminary Study of the DES and SCID-D Chinese Versions on College Students of National Defense Medical Center. Proceedings of the 22nd International Society for the Study of Dissociation International Conference, 6.
- Chu, J. (1996). Posttraumatic responses to childhood abuse and implications for treatment. In L. K. Michelson, & W. Ray (Eds.), Handbook of dissociation: Theoretical, empirical and clinical perspectives (pp. 381–397). New York, NY: Plenum Press.
- Coons, P., & Bowman, E. (2001). Ten-year follow-up study of patients with dissociative identity disorder. Journal of Trauma & Dissociation, 2(1), 73-89.
- Coons, P. M. (1984). The differential diagnosis of multiple personality: A comprehensive review. Psychiatric Clinics of North America, 12, 51-67.
- Copoloy, D., Trauer, T., & Mackinnon, A. (2004). On the non-significance of internal versus external auditory hallucinations. *Schizophrenia Research*, 69, 1–6.
- Dell, P. F. (2006). The multidimensional inventory of dissociation (MID): A comprehensive measure of pathological dissociation. Journal of Trauma & Dissociation, 7(2), 77–106.
- Derogatis, L. (1994). Symptom checklist 90-R, Administration, scoring, and procedures manual (3rd ed.). Minneapolis, MN: National Computer Systems.
- Dorahy, M., Shannon, C., Seagar, L., et al. (2009). Auditory hallucinations in dissociative identity disorder and schizophrenia with and without a childhood trauma history: similarities and differences. The Journal of Nervous and Mental Disease, 197(12), 892-898.
- Draijer, D., & Boon, S. (1993). The validation of the dissociative experiences scale against the criterion of the SCID-D, using receiver operating characteristics (ROC) analysis. Dissociation, 6(1), 28-37.
- Frischholz, E., Braun, B., Sachs, R., Hopkins, L., Shaeffer, D., Lewis, J., ... Schwartz, D. R. (1990). The dissociative experiences scale: Further replication and validation. *Dissociation*, 3, 151–153.

- Gast, U., Rodewald, F., Nickel, V., & Emrich, H. (2001). Prevalence of dissociative disorders among psychiatric inpatients in a German university clinic. The Journal of Nervous and Mental Disease, 189(4), 249-257.
- Gingrich, H. (2009). Assessing dissociative symptoms and dissociative disorders in college students in the Philippines. *Journal of Aggression, Maltreatment & Trauma, 18,* 403-418.
- Ginzburg, K., Somer, E., Tamarkin, G., & Kramer, L. (2010). Clandestine psychopathology: Unrecognized dissociative disorders in inpatient psychiatry. The Journal of Nervous and Mental Disease, 198(5), 378-381.
- Goff, D., Olin, J., Jenike, M., Baer, L., & Buttolph, M. (1992). Dissociative symptoms in patients with obsessive-compulsive disorder. The Journal of Nervous and Mental Disease, 180(5), 332-337.
- Goodwin, J. (1988). Post-traumatic symptoms in abused children. Journal of Traumatic Stress, 1, 475-488.
- Haugen, M., & Castillo, R. (1999). Unrecognized dissociation in psychotic outpatients and implications of ethnicity. The Journal of Nervous and Mental Disease, 187(12), 751-754.
- Holowka, D., King, S., Saheb, D., Pukall, M., & Brunet, A. (2003). Childhood abuse and dissociative symptoms in adult schizophrenia. Schizophrenia Research, 60(1), 87-90.
- Honig, A., Romme, M., Ensink, B., Escher, S., Pennings, M., & Deviries, M. (1998). Auditory hallucinations: a comparison between patients and nonpatients. Journal of *Nervous and Mental Disease, 186*(10), 646–651.
- Kluft, R. (1984). Treatment of multiple personality disorder: A study of 33 cases. Psychiatric Clinics of North America, 7, 9–29.
- Kluft, R. (Ed.) (1985a). Childhood antecedents of multiple personality. Washington, DC: American Psychiatric Press.
- Kluft, R. (1985b). The natural history of multiple personality disorder. In R. Kluft (Ed.), Childhood antecedents of multiple personality (pp. 197–238). Washington, DC: American Psychiatric Press.
- Kluft, R. (1987). First-rank symptoms as a diagnostic clue to multiple personality disorder. The American Journal of Psychiatry, 144(3), 293–298.
- Kluft, R. (1995). Dissociative identity disorder. In G. Gabbard (Ed.), Treatment of psychiatric disorders: The DSM-IV edition (pp. 1599–1632). Washington, DC: American Psychiatric Press.
- Kluft, R. (1999). Current issues in dissociative identity disorder. Journal of Practical Psychiatry and Behavioral Health, 5, 3-19.
- Kundakçi, T., Şar, V., Kiziltan, E., et al. (2014). Reliability and validity of the Turkish version of the structured clinical interview for DSM-IV dissociative disorders (SCID-D): A preliminary study. *Journal of Trauma & Dissociation*, 15(1), 24–34.
- Laddis, A., & Dell, P. (2012a). Dissociation and psychosis in dissociative identity disorder and schizophrenia. Journal of Trauma and Dissociation., 13(4), 397-413.
- Laddis, A., & Dell, P. (2012b). All that dissociation instruments measure is not dissociation: "all that glistens is not gold". Journal of Trauma & Dissociation, 13(4), 418–420.
- Moise, J., & Leichner, P. (1996). Prevalence of dissociative symptoms and disorders within an adult outpatient population with schizophrenia. *Dissociation*, *IX*(3), 190–196.
- Moskowitz, A. (2012). Commentary on "dissociation and psychosis in dissociative identity disorder and schizophrenia (Laddis & Dell)". Journal of Trauma and Dissociation, 13, 414-417.

- Moskowitz, A., Barker-Collo, S., & Ellson, L. (2005). Replication of dissociation-psychosis link in New Zealand students and inmates. The Journal of Nervous and Mental Disease, 193, 722-727.
- Moskowitz, A., & Corstens, D. (2007). Auditory hallucinations: Psychotic symptom or dissociative experience? The Journal of Psychological Trauma, 6(2/3), 35–63.
- Moskowitz, A., Schäfer, I., & Dorahy, M. J. (2008). Psychosis, trauma and dissociation: *Emerging perspectives on severe psychopathology.* London: Wiley.
- Mueller, C., Moergeli, H., Assaloni, H., et al. (2007). Dissociative disorders among chronic and severely impaired psychiatric outpatients. *Psychopathology*, 40, 470–471.
- Mueller-Pfeiffer, C., Rufibach, K., Perron, N., et al. (2012). Global functioning and disability in dissociative disorders. Psychiatry Research, 200(2-3), 475-481.
- Mueller-Pfeiffer, C., Rufibach, K., Wyss, D., et al. (2013). Screening for dissociative disorders in psychiatric out – and day care-patients. *Journal of Psychopathology and* Behavioral Assessment, 35(4), 592-602.
- Myrick, A., Webermann, A., Loewenstein, R., Lanius, R., Putnam, F. W., & Brand, B. (2017). Six-year follow-up of the treatment of patients with dissociative disorders study. European Journal of Psychotraumatology, 8(1), 1344080.
- Nijenhuis, E., Spinhoven, P., Van Dyck, R., Van der Hart, O., & Vanderlinden, J. (1996). The development and psychometric characteristics of the somatoform dissociation questionnaire (SDQ-20). The Journal of Nervous and Mental Disease, 184(11), 688-694.
- Nijenhuis, E. R. S., Spinhoven, P., Van Dyck, R., Van der Hart, O., de Graaf, A. M. J., & Knoppert, E. A. M. (1997). Dissociative pathology discriminates between bipolar mood disorder and dissociative disorder (letter). British Journal of Psychiatry, 170, 581.
- Nijenhuis, E. R. S., Spinhoven, P., Van Dyck, R., Van der Hart, O., & Vanderlinden, J. (1998). Degree of somatoform and psychological dissociation in dissociative disorders is correlated with reported trauma. Journal of Traumatic Stress, 11, 711-730.
- Pilton, M., Varese, F., Berry, K., & Bucci, S. (2015). The relationship between dissociation and voices: A systematic literature review and meta-analysis. Clinical Psychology Review, 40, 138–155. doi:10.1016/j.cpr.2015.06.004.
- Putnam, F., Guroff, J., Silberman, E., Barban, L., & Post, R. (1986). The clinical phenomenology of multiple personality disorder: 100 recent cases. Journal of Clinical Psychiatry, 47, 285-293.
- Putnam, F., & Loewenstein, R. (2000). Dissociative identity disorder. In H. Kaplan, & B. Sadock (Eds.), Comprehensive textbook of psychiatry (7th ed., PA: Lippincott Williams & Wilkins.
- Reinders, A., Nijenhuis, E., Quak, J., Korf, J., Haaksma, J., Paans, A., ... Den Boer, J. (2006). Psychobiological characteristics of dissociative identity disorder: A symptom provocation study. Biological Psychiatry, 60, 730-740.
- Reinders, A., Willemsen, A., Vos, H., den Boer, J., & Nijenhuis, E. (2012). Fact or factitious? A psychobiological study of authentic and simulated dissociative identity states. PLoS One., 7(6), e39279.
- Ross, C., Heber, S., Norton, G. R., Anderson, G., & Barchet, P. (1989). The dissociative disorder interview schedule: A structured interview. Dissociation, 2, 169-189.
- Ross, C., & Norton, G. (1988). Multiple personality disorder patients with a prior diagnosis of schizophrenia. Dissociation, 1(2), 39–42.
- Ross, C. A., Miller, S. D., Reagor, P., Bjornson, L., & Fraser, G. A. (1990). Anderson G. (1990) Schneiderian symptoms in multiple personality disorder and schizophrenia. Comprehensive Psychiatry, 31(2), 111–118.

- Şar, V., Akyuz, G., Kundakci, T., Kiziltan, E., & Dogan, O. (2004). Childhood trauma, dissociation, and psychiatric comorbidity in patients with conversion disorder. The American Journal of Psychiatry, 161(12), 2271–2276.
- Şar, V., Koyuncu, A., Ozturk, E., et al. (2007). Dissociative disorders in the psychiatric emergency ward. General Hospital Psychiatry, 29, 45-50.
- Sar, V., Onder, C., Kilicaslan, A., et al. (2014). Dissociative identity disorder among adolescents: Prevalence in a university psychiatric outpatient unit. Journal of Trauma & Dissociation, 15(4), 402-419.
- Şar, V., & Ross, C. (2006). Dissociative disorders as a confounding factor in psychiatric research. Psychiatric Clinics of North America, 29, 129-144.
- Şar, V., Tutkun, H., Alyanak, B., Bakim, B., & Baral, I. (2000). Frequency of dissociative disorders among psychiatric outpatients in Turkey. Comprehensive Psychiatry, 41, 216 - 222.
- Schäfer, I., Fisher, H., Aderhold, V., Huber, B., Hoffmann-Langer, L., Golks, D., ... Harfst, T. (2012). Dissociative symptoms in patients with schizophrenia: Relationships with childhood trauma and psychotic symptoms. Comprehensive Psychiatry, 53, 364–371.
- Schafer, I., Harfst, T., Aderhold, V., Briken, P., Lehmann, M., Moritz, S., ... Naber, D. (2006). Childhood trauma and dissociation in female patients with schizophrenia spectrum disorders: an exploratory study. The Journal of Nervous and Mental Disease, 194(2), 135-138.
- Schneider, K. (1959). Clinical psychopathology (5th ed.). New York, NY: Grune & Stratton. Somer, E., & Dell, P. (2005). Development of the Hebrew-multidimensional inventory of dissociation (H-MID): A valid and reliable measure of pathological dissociation. Journal of Trauma and Dissociation, 6(1), 31-53.
- Spiegel, S. (1993). Multiple posttraumatic personality disorder. In R. P. Kluft, & C. G. Fine (Eds.), Clinical perspectives on multiple personality disorder (pp. 87-99). Washington, DC: American Psychiatric Press.
- Steinberg, M. (1994a). Structured clinical interview for DSM-IV dissociative disordersrevised (SCID-D-R). Washington, DC: American Psychiatric Press.
- Steinberg, M. (1994b). Interviewers' guide to the structured clinical interview for DSM-IV dissociative disorders revised (SCID-D-R). Washington, DC: American Psychiatric Press.
- Steinberg, M. (1995). Handbook for the assessment of dissociation: A clinical guide. Washington, DC: American Psychiatric Press.
- Steinberg, M. (2000a). Advances in the clinical assessment of dissociation: The SCID-D-R. Bulletin of the Menninger Clinic, 64, 146-163.
- Steinberg, M. (2000b). Das Strukturierte Klinische Interview für DSM-IV Dissoziative Störungen (SKID-D). U. Gast, T. Oswald, & F. Zündorf (Trans.), Deutsche Fassung. Göttingen: Hogrefe.
- Steinberg, M. (in press a). The SCID-D Interview: Diagnostic and therapeutic assessment for dissociative symptoms and disorders. Arlington, VA: American Psychiatric Association Publishing.
- Steinberg, M. (in press b). The interviewers' guide to the SCID-D interview. Arlington, VA: American Psychiatric Association Publishing.
- Steinberg, M., Barry, D., Sholomskas, D., & Hall, P. (2005). SCL-90 symptom patterns: Indicators of dissociative disorders. *Bulletin of the Menninger Clinic*, 69(3), 237–249.
- Steinberg, M., Cicchetti, D. V., Buchanan, J., Rakfeldt, J., & Rounsaville, B. J. (1994). Distinguishing between multiple personality disorder and schizophrenia using the

- structured clinical interview for DSM-IV dissociative disorders. The Journal of Nervous and Mental Disease, 182(9), 495-502.
- Steinberg, M., Hall, P., Lareau, C., & Cicchetti, D. (2001). Recognizing the validity of dissociative symptoms and disorders using the SCID-D-R: Guidelines for clinical and forensic evaluations. Southern California Interdisciplinary Law Journal, 10(2), 225–242.
- Steinberg, M., Rounsaville, B., & Cicchetti, D. (1991). Detecting dissociative disorders in psychiatric patients. A comparison of a screening instrument and a structured diagnostic interview. The American Journal of Psychiatry, 148, 1050–1054.
- Steinberg, M., Rounsaville, B. J., & Cicchetti, D. V. (1990). The structured clinical interview for DSM-III-R dissociative disorders: Preliminary report on a new diagnostic instrument. American Journal of Psychiatry, 147(1), 76-82.
- Steinberg, M., & Schnall, M. (2001). The stranger in the mirror, dissociation: The hidden epidemic. New York, NY: Harper Collins, Cliff Street Books.
- Tezcan, E., Atmaca, M., Gecici, O., Buyukbayram, A., & Tutkun, H. (2003). Dissociative disorders in Turkish inpatients with conversion disorder. Comprehensive Psychiatry, 44(4), 324-330.
- Thigpen, C., & Cleckley, H. (1954). A case of multiple personality. Journal of Abnormal and Social Psychology, 49, 135-151.
- Van der Hart, O. (1993). Multiple personality disorder in Europe: Impressions. Dissociation, 6, 102-118.
- Van IJzendoorn, M., & Schuengel, C. (1996). The measurement of dissociation in normal and clinical populations: meta-analytic validation of the dissociative experiences scale (DES). Clinical Psychology Review, 16, 365-382.
- Waller, N. G., Putnam, F. W., & Carlson, E. B. (1996). Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences. Psychological Methods, 1(3), 300 - 321.
- Welburn, K., Fraser, G., Jordan, S., et al. (2003). Discriminating dissociative identity disorder from schizophrenia and feigned dissociation on psychological tests and structured interview. Journal of Trauma and Dissociation, 4(2), 109–130.
- Yargiç, L. I., Şar, V., Tutkun, H., & Alyanak, B. (1998). Comparison of dissociative identity disorder with other diagnostic groups using a structured interview in Turkey. Comprehensive Psychiatry, 39(6), 345-351.