Commentary

Cogniform Disorder and Cogniform Condition: Proposed diagnoses for excessive cognitive symptoms

Dean C. Delis *, Spencer R. Wetter

Veterans Affairs San Diego Healthcare System, University of California, San Diego, School of Medicine, CA, United States

Accepted 2 April 2007

Abstract

In neuropsychological practice, individuals often present with evidence of excessive cognitive complaints or invalid test performances indicative of symptom exaggeration; however, clinicians often struggle with how to diagnose these cases once they have been identified. Difficulties in subsuming these individuals within existing DSM-IV diagnoses such as Malingering, Factitious Disorder, and Conversion Disorder are discussed, including: (a) lack of a diagnostic category that adequately targets the specific features of this relatively common condition and (b) the use of criteria that require the clinician to make judgments about internal states that are difficult to evaluate in an objective manner (e.g., intentional versus unintentional production of exaggerated symptoms). Two diagnostic categories – Cogniform Disorder and Cogniform Condition – are proposed as new subtypes of the Somatoform Disorders to encompass cases of excessive cognitive complaints and inadequate test-taking effort in the absence of sufficient evidence to diagnose Malingering. Of the two new categories, Cogniform Disorder is defined as a more pervasive form in which the individual tends to exhibit the excessive cognitive symptoms in widespread areas of his or her life, thereby suggesting a conversion-like adoption of the sick role manifested primarily as cognitive dysfunction. Guidelines for improving the evidence-based diagnosis of these cases, particularly with regards to criteria related to intentionality, secondary gain, and sick role factors, are also discussed.

Published by Elsevier Ltd on behalf of National Academy of Neuropsychology.

Keywords: Neuropsychological assessment; Malingering; Inadequate effort; Conversion disorder

1. Introduction

In many areas of human suffering, patients often present with symptoms that are in excess of objective physical evidence. A clear illustration of this phenomenon is the individual who, while being monitored with video-EEG telemetry, appears to exhibit a generalized seizure. The individual’s convulsions may ostensibly be indistinguishable from those of patients with genuine epilepsy in every respect, including post-ictal confusion, with the exception of normal brain electrical activity concomitant to the symptom presentation (Benbadis, 2006). Many patients with nonepileptic seizures are unwavering in their beliefs of the authenticity of their disorder, thereby suggesting a conversion (unconscious) mechanism of their presentation, whereas others may have a more intentional component to their symptom amplification (Trimble, 1986). Nonepileptic seizures are one of a myriad of conditions with excessive symptom presentation, but it is the clear dissociation between the pronounced motor symptoms and normal brain
substrates that provides such a poignant lesson on the potential of human nature to unconsciously or consciously manufacture illness behavior.

In neuropsychology, a particular type of excessive symptomatology – one involving cognitive complaints such as memory, concentration, and other mental problems – has captured the focus of considerable research and debate. In the past 15 years, over 300 studies have been published in peer-reviewed neuropsychological journals that address the breadth and scope of this problem (see reviews by Hom & Denney, 2002; Iverson & Binder, 2000; Larrabee, 2005; Sweet, 1999). Considerable advances have been made in the development of empirically based methods for identifying individuals who are simulating cognitive problems, including the use of instruments designed specifically to assess cognitive validity (Binder, 1993; Boone et al., 2002; Frederick, 1997; Green, Iverson, & Allen, 1999; Hiscock & Hiscock, 1989; Tombaugh, 1996), analysis of atypical performances on standard ability tests (Delis, Kramer, Kaplan, & Ober, 2000; Iverson, 1995; Larrabee, 2003; Millis, Putnam, Adams, & Ricker, 1995; Mittenberg, DiGuilio, Perrin, & Bass, 1992), and analysis of test–retest profile inconsistencies (Hom & Denney, 2002; Iverson & Binder, 2000).

In addition, specific guidelines and criteria have been developed for diagnosing suboptimal effort and malingering on neuropsychological tests (Greiffenstein, Baker, & Gola, 1994; Slick, Sherman, & Iverson, 1999). Using these methods and guidelines, neuropsychologists have found that the frequency of individuals exhibiting excessive or exaggerated cognitive symptoms in medicolegal evaluations often ranges from 20 to 40% (Frederick, 2000; Green, Rohling, Lees-Haley, & Allen, 2001; Greiffenstein et al., 1994; Miller, 2001; Millis et al., 1995; Mittenberg, Patton, Canyock, & Condit, 2002; Rogers, 1997; Rohling, 2000). In light of the pervasiveness of this problem, it is now generally accepted that cognitive validity testing is an important part of the neuropsychological assessment process, particularly for evaluations that occur in the context of medicolegal or disability-application settings (Bush et al., 2005).

While considerable advances have been made in the methods used to detect individuals who are exhibiting inadequate effort and symptom exaggeration on cognitive testing, neuropsychologists often find themselves in a quandary in terms of the diagnostic labels to ascribe to these individuals once they have been identified. The DSM-IV offers several possible categories for diagnosing individuals with excessive cognitive symptoms (e.g., Malingering; Conversion Disorder); however, shortcomings of these conditions have been noted in the literature. In particular, Malingering has been the subject of considerable debate and criticism, especially with regards to the objectivity with which clinicians can assess if feigned symptoms were intentionally or unintentionally produced (Pankratz & Erickson, 1990; Rogers, 1990a,b; Slick et al., 1999; Trueblood & Binder, 1997). Improvements have been made in establishing criteria for this condition (Greiffenstein et al., 1994; Slick et al., 1999), but clinicians nevertheless often remain reluctant to use any diagnosis that requires them to make judgments about intentionality of symptom exaggeration (Slick, Tan, Strauss, & Hultsch, 2004; Trueblood & Binder, 1997). In this paper, we discuss shortcomings in using existing DSM-IV categories and other nomenclatures that have been proposed to classify these cases. Two new diagnostic categories – Cogniform Disorder and Cogniform Condition – are then proposed to classify individuals who exhibit excessive cognitive symptoms but who do not show sufficient evidence of intentionality of symptom production to warrant a diagnosis of Malingering.

1.1. Problems in diagnosing excessive cognitive symptoms using existing DSM-IV categories

Clinicians often face three general problems in trying to use existing DSM-IV categories to classify individuals with excessive cognitive symptoms. These problems include: (a) lack of a diagnostic category that adequately targets the specific features of this relatively common condition; (b) the use of criteria that require the clinician to make judgments about internal states that are exceedingly difficult to evaluate in an objective manner (e.g., intentional versus unintentional production of excessive symptoms); (c) difficulties in determining the relative role that external incentive and sick role factors may play in the symptom production.

1.1.1. Symptom specificity

The existing DSM-IV categories addressing excessive symptomatology can be divided into two general types: symptom-specific versus symptom-nonspecific conditions. Symptom-specific conditions are those that require amplification of only certain types of symptoms. The DSM-IV offers a relatively small number of symptom-specific categories, which fall only among the Somatoform Disorders (e.g., Somatization Disorder; Conversion Disorder) and Dissociative Disorders (e.g., Dissociative Amnesia; Dissociative Fugue). In addition, the DSM-IV offers two symptom-nonspecific conditions, Malingering and Factitious Disorder, which are discussed in the next section.
A major problem in trying to subsume individuals with excessive cognitive complaints or invalid test performances into one of the symptom-specific diagnoses is that the cognitive symptoms of many of these cases simply fail to fit adequately in these categories. Following are explanations of this problem for each of the symptom-specific categories provided in the DSM-IV:

a. **Somatization Disorder** requires at least four pain symptoms, two gastrointestinal symptoms, one sexual symptom, and one pseudoneurological symptom. However, many individuals who present with primarily excessive cognitive symptoms have few if any physical complaints (Larrabee, 2005; Rogers, 1990a,b).

b. **Undifferentiated Somatoform Disorder** requires “one or more physical complaints,” with no reference made to cognitive difficulties.

c. **Conversion Disorder** requires “one or more symptoms or deficits affecting voluntary motor or sensory function” [emphasis added], without mention of cognitive or memory difficulties among the specific criteria.

d. **Pain Disorder** requires only excessive pain symptoms.

e. **Somatoform Disorder NOS** could conceivably include individuals with predominantly excessive cognitive symptoms; however, “soma” denotes physical rather than cognitive problems, and the list of example cases provided in the DSM-IV for this catch-all category makes no reference to excessive cognitive symptoms.

f. **Dissociative Amnesia** requires one specific type of cognitive problem, namely, “an inability to recall important personal information, usually of a traumatic or stressful nature” [emphasis added]. However, individuals presenting with excessive cognitive symptoms do so in a myriad of ways (Bush et al., 2005; Delis & Jacobson, 2000; Larrabee, 2003). Some people endorse problems in all cognitive domains queried, including attention, language, math, visual-spatial functions, higher-level executive functions, new learning and memory, and remote recall of important personal information. In contrast, other individuals endorse difficulties in only one or a few specific cognitive skills (e.g., short-term memory; concentration), while denying problems in other cognitive domains, including recall of important personal information (Akhtar, Lindsey, & Kahn, 1981; Kritchevsky, Chang, & Squire, 2004; Schacter, Wang, Tulving, & Freeman, 1982). In fact, cases of isolated difficulty in remembering important autobiographical information are relatively rare (Wessel, Merckelbach, & Dekkers, 2002), illustrating the limited utility of this diagnostic category for the vast majority of cases with excessive cognitive symptoms.

g. **Dissociative Fugue** not only requires one specific cognitive difficulty (“inability to recall some or all of one’s past”), but carries the added stipulation that this difficulty must surface in the context of a “sudden, unexpected travel away from home or one’s customary place of daily activities” [emphasis added]. These cases are extremely rare among individuals presenting with excessive cognitive symptoms (Ross, 1991, 1997), thereby precluding the use of this category for almost all cases.

h. **Dissociative Identity Disorder** is thought to occur in individuals with multiple personalities in which they exhibit an inability to recall important information about one or more personality states when they are in a different personality state. However, cases of multiple personalities are relatively rare, particularly in clinical–neuropsychological practice (Ross, 1991, 1997), and thus this diagnosis is seldom applicable to individuals with excessive cognitive symptoms.

i. **Dissociative Disorder NOS** is another catchall category that, conceivably, could encompass individuals with excessive cognitive complaints. However, the tenor of this category is for individuals who exhibit an inability to recall personal information that was of a traumatic or stressful nature, thereby greatly limiting the utility of this category for most cases of excessive cognitive symptoms.

Taken together, the aforementioned nine symptom-specific categories either fail to include cognitive complaints, target only highly specific, relatively rare types of cognitive problems, or require that other, qualitatively different symptoms or conditions also be present (e.g., extensive physical symptoms for Somatization Disorder). For these reasons, these diagnoses generally fail to capture the vast majority of individuals presenting with excessive cognitive symptoms.

1.1.2. Intentionality

Another difficulty in using existing DSM-IV categories has to do with required criteria related to intentional/unintentional or voluntary/involuntary control over the production of the excessive complaints or symptoms. For example, a key required criterion for the two symptom-nonspecific categories – Malingering and Factitious Disorder – is that the clinician must determine if the excessive symptoms were generated in an intentional or volitional manner.
The problem here is that this criterion reflects a causative internal state that, for the majority of cases, is difficult if not impossible to assess in an objective manner. That is, the degree to which a person may be exhibiting excessive symptoms or behaviors in an intentional, voluntary, or conscious manner versus an unintentional, involuntary, or unconscious manner represents an untestable diagnostic hypothesis for many cases (see also Faust & Ackley, 1998; Greiffenstein et al., 1994; Panktraz & Binder, 1997; Slick et al., 1999). A clinician may have a “hunch” about whether an individual’s excessive complaints or symptoms were under the voluntary or involuntary control of the person, but usually these impressions are not substantiated by objective data, such as a disclosure or confession made by the individual to a clinician or other uninvolved, reliable third party.

Some individuals who exhibit excessive symptomatology may not even know themselves whether they are doing so in an intentional, conscious manner or an unintentional, unconscious manner. As an analogy, researchers in the area of hypnosis have struggled for decades with the question of voluntary control of behavior under hypnotic trance (Bowers, 1994; Hilgard, 1975; Hilgard, 1986; King & Council, 1998; Lynn, Rhue, & Weekes, 1990; Spanos & de Groh, 1983). On the one hand, hypnotized individuals who, at the suggestion of the hypnotist, freely engage in atypical, bizarre, or role-play behaviors (analogous to the sometimes atypical or bizarre symptoms exhibited by patients with excessive symptomatology) often later report amnesia for their actions, thereby suggesting that they produced these behaviors under hypnosis in an unintentional, unconscious manner (Bowers, 1994). On the other hand, if the hypnotist provides a suggestion that could harm the individual (e.g., touch a hot stove), individuals who are otherwise highly suggestible will typically refrain from these actions, thereby suggesting an intentional, conscious component to their hypnotized behaviors (Hilgard, 1975). These findings have led investigators to posit degrees of intentional control of behavior. For example, Hilgard (1975) advanced a “neodissociation theory” of hypnosis that “postulates a hierarchy of control systems operating at any one time in a given individual, and sees hypnosis as modifying the hierarchical arrangements of these controls, so that some become segregated (dissociated) from others” (p. 24). Even in waking states without hypnosis, individuals who are highly suggestible can be induced to exhibit bizarre behaviors or exaggerated symptoms and strongly believe that these behaviors were involuntarily produced (Hilgard, 1986; Lynn et al., 1990; Spanos & de Groh, 1983). Such suggestibility also likely plays a role in cases of mass hysteria in which the individuals’ exaggerated symptoms appear to be generated in a largely involuntary manner (Roach & Langley, 2006).

In neuropsychological practice, a similar phenomenon likely occurs in which highly suggestible individuals may be especially prone to exaggerate cognitive dysfunction, particularly in a context that reinforces a belief in those deficits, and to firmly believe that those deficits are both real and serious (Binder, 2005; Mittenberg et al., 1992). For example, the base rates of some cognitive complaints in the general population are relatively high (e.g., memory difficulties; Fox, Lees-Haley, Earnest, & Dolezal-Wood, 1995; Gouvier, Uddo-Crane, & Brown, 1988; Lees-Haley & Brown, 1993; Mittenberg et al., 1992; Paniak et al., 2002). Most people tend to dismiss or explain away their perceived cognitive difficulties in some way (e.g., lack of sleep; “stressed out”; “just getting old”). However, highly suggestible individuals may, in certain contexts (e.g., litigation; disability evaluation), develop what Mittenberg et al. (1992) describe as a selective attentional bias in which they overly focus on common cognitive difficulties, interpret them as reflecting significant brain dysfunction, and possibly act out those deficits in their daily lives or during the assessment process (see also Binder, 2005; Lees-Haley & Brown, 1993; Putnam & Millis, 1994). Their beliefs about the seriousness of their cognitive dysfunction may arise from and be buttressed by several sources, including (a) being diagnosed as having brain dysfunction by at least some health care providers in the absence of adequate medical or psychometric evidence for such a diagnosis; and/or (b) the presence of external or interpersonal incentives that may serve to reinforce those symptoms (Mittenberg et al., 1992). Highly suggestible individuals with excessive cognitive complaints or poor test performances are often adamant about the authenticity of their cognitive symptoms, which calls into question whether they have conscious awareness, and therefore intentionality, of their symptom amplification.

Another difficulty in this area of diagnosis is that intentionality is likely multifactorial in nature (Panktraz & Erickson, 1990). For example, there may be at least two key components of intentionality that can be dissociated: conscious awareness and goal-directed motivation. An individual may be both conscious of producing feigned behavior (e.g., is capable of admitting to self and others that he or she is simulating symptoms) and motivated to do so for some type of personal gain; these features would meet criteria for a DSM-IV diagnosis of Malingering. However, someone may be largely unconscious of the feigned behavior (e.g., has convinced him or herself that the excessive symptoms are real), yet the feigned behavior may still arise due to a specific, goal-directed purpose. For example, it was noted during World War II that some soldiers, when faced with the prospect of entering the frontlines of battle, would develop psychogenic paralysis (what would now be diagnosed as Conversion Disorder given that the symptom amplification is largely unconscious).
occurred primarily in the motor domain; Rogers & Cruise, 1998). These individuals often appeared to truly believe they were paralyzed, thereby suggesting an unconscious (conversion) process. However, their exaggerated behavior (paralysis) was clearly goal-directed, because it was manifested in the context of an external incentive (avoidance of danger). In these cases, the conscious component of intentionality may have been absent, but the goal-directed motivational component for producing the symptom was likely present.

In neuropsychological practice, the same type of dissociation may occur in which individuals may produce excessive cognitive symptoms in reaction to an external incentive (e.g., litigation), thereby suggesting goal-directed motivation for the symptom production. However, these individuals may have nevertheless convinced themselves that their symptoms are real, thereby suggesting a lack of a conscious component to the symptom production. Thus, for these individuals, only certain components of intentionality may be present, with the lack of conscious awareness calling into question whether they would adequately meet the required criteria for a diagnosis of Malingering. Another complicating factor in the assessment of intentionality is that conscious awareness likely exists on a continuum, with individuals varying from being fully conscious, to semi-conscious, to largely unconscious of the production of the feigned behavior. Although an operational definition of intentionality is beyond the scope of this paper, the important point here is that intentionality of symptom production not only refers to an elusive internal state, but it likely has component features that exist on a continuum (e.g., levels of conscious awareness), thereby making this construct exceedingly difficult for clinicians to assess in an objective manner (Pankraz & Erickson, 1990).

From an historical perspective, it is surprising that intentionality of symptom production has been retained as a required criterion for several diagnoses in the DSM-III and DSM-IV. That is, the DSM-III, published in 1980, represented a major improvement in the methodology used to develop modern psychiatric taxonomy by relying on, as much as possible, “explicit diagnostic criteria” and an “absence of causative factors.” The use of internal dynamics or causes as diagnostic criteria were, as much as possible, removed from the myriad of psychiatric disorders, resulting in a more objective and reliable nomenclature. However, for both the symptom-nonspecific and symptom-specific categories of the DSM-IV that address cases of excessive complaints or symptoms in any domain, virtually every one requires the clinician to make a dichotomous choice between intentional versus unintentional production of the exaggerated symptoms. Following are the diagnostic categories that could potentially encompass excessive cognitive complaints but carry constraints regarding the causative internal dynamic of intentionality that are difficult to assess:

a. Malingering requires that the exaggerated symptoms be produced in an intentional, voluntary manner for external incentive.
b. Factitious Disorder requires that the exaggerated symptoms be produced in an intentional, voluntary manner in order to adopt the sick role.
c. Conversion Disorder requires that the exaggerated symptoms be produced in an unintentional, involuntary manner.
d. Dissociative Disorders, such as Dissociative Amnesia and Dissociative Fugue, require that the cognitive problems be produced in an unintentional, involuntary manner.
e. Somatization Disorder, which can include dissociative symptoms like amnesia but must also reflect a number of other bodily complaints, require that the symptoms be produced in an unintentional, involuntary manner.

Many clinicians are reluctant to use diagnoses such as Malingering, Factitious Disorder, and Conversion Disorder at least in part because of difficulty in objectively assessing the presence or absence of intentionality in the generation of the excessive symptom (Trueblood & Binder, 1997).

Some researchers have cogently argued that diagnoses that require impressions about untestable internal states, such as hallucinations, are commonly made in clinical practice, and therefore clinicians should also be willing to diagnose Malingering, including the intentional production of the exaggerated symptoms, if there is at least some evidence to support such a diagnosis (Reynolds, 1998; Slick et al., 1999). It is the case that, despite significant improvements in DSM-III and DSM-IV diagnostic criteria that rely on external evidence as much as possible in formulating psychiatric diagnoses, clinicians must at times make inferences about untestable internal states, like hallucinations in schizophrenia and self-critical thoughts in depression. However, there are important qualitative differences between inferences made about the internal states of common psychiatric conditions versus the internal state of intentionality of symptom exaggeration. First, and perhaps most important, a diagnosis of Malingering is typically more detrimental and accusatory, particularly within the legal or disability system, than diagnosing other internal states associated with common psychiatric diagnoses. Second, the internal states associated with common psychiatric diagnoses are, in fact,
usually based on a particular type of evidence, namely, the self-reported symptoms of patients. Although self-reported symptoms must in turn be evaluated for their validity, they often do provide useful and valid data for many patients, particularly in the absence of external incentives or personal gain. At the very least, self-reported symptoms provide a foundation from which to assess other, more external corroborating evidence (e.g., disorganized speech as another marker of Schizophrenia besides self-reported hallucinations). In contrast, when evaluating intentionality of symptom amplification, clinicians rarely have access even to self-reported information (i.e., confessions of intentional exaggeration are rare; Slick et al., 1999; Youngjohn, 1995). Thus, the evidence that is available for diagnosing the internal state on intentionality is often more obscure than the evidence for assessing the internal states of other psychiatric conditions. Third, inferences about the internal states of common psychiatric conditions are not always required criteria for those diagnoses (e.g., Schizophrenia can be diagnosed without the presence of hallucinations). In contrast, it is mandatory for clinicians to make judgments about intentionality of symptom exaggeration in order to diagnose Malingering. In light of both the accusatory implications of a diagnosis of Malingering and the usual paucity of evidence for making the required determination of intentionality of symptom amplification, clinicians often feel that they should be especially conservative and data driven (e.g., below-chance performance on a symptom validity test) before making a diagnosis of Malingering (Trueblood and Binder, 1994).

### 1.1.3. External Incentive

A third difficulty in using existing DSM-IV categories to diagnose individuals with excessive cognitive symptoms is related to another required criterion for the two symptom-nonspecific categories – Malingering and Factitious Disorder – regarding the presence or absence of external incentive in the production of the symptom. Specifically, external incentive is a required inclusionary criterion for Malingering and required exclusionary criterion for Factitious Disorder. (If there is an absence of external incentive, then the clinician must make a further determination of whether or not an individual has adopted the sick role in order to diagnose Factitious Disorder.) However, the criterion of external incentive carries its own inherent difficulties for clinicians to identify when considering these diagnoses. First, for many cases, practitioners may not have access to sufficient background information about a person’s life to be able to assess if external incentives are operative in the case. That is, a practitioner may be unaware that a patient has or is planning to apply for disability or to initiate a civil lawsuit in the future, or has committed a crime and fears that he or she may soon be apprehended (Kopelman, 1987). This lack of knowledge about possible covert sources of external incentives makes it difficult to utilize the diagnoses of Malingering or Factitious Disorder for a number of cases, especially given that such information is a required criterion rather than an optional one for these categories.

Second, as currently written, the DSM-IV criteria do not allow for the possibility that a comorbidity may occur between the adoption of the sick role and the presence of external incentives (see also Slick et al., 1999). For example, some individuals may gradually develop into a progressively worsening sick role without the presence of external incentives. However, after a period of time, these individuals may present as so “disabled” that they begin to receive disability payments, without necessarily having actively sought out such compensation (Schneider, 1979). The financial gain, however, likely buttresses and propagates the continuation of the sick role (Schneider, 1979). According to the DSM-IV, these individuals would have started out as having Factitious Disorder, but as soon as the external incentive was initiated and became a reinforcing factor, the diagnosis of Factitious Disorder would be called into question (again, because external incentive is a required exclusionary criterion for this condition). However, for these cases, the predominant causative factor for the excessive symptomatology may still be the adoption of the sick role, with the external incentive playing a secondary or supportive role in the continuation of the symptoms. As another example, some individuals may begin to feign symptoms intentionally and consciously in reaction to an external incentive (e.g., a lawsuit). However, these individuals may gradually, and perhaps unconsciously, assume a progressively worsening sick role due to (a) a prolongation in obtaining the external incentive (e.g., caused by delays in the lawsuit) and (b) increased skepticism and questioning on the part of family members, co-workers, or health providers about the authenticity of the individual’s complaints (Rogers, 1990a,b). This prolonged scrutiny may be overwhelming to these individuals, compelling them to adopt the sick role and exhibit illness behavior in widespread areas of their lives, to the point where they may even convince themselves of the authenticity of their symptoms. In other words, while the DSM-IV treats external incentive and sick role as mutually exclusive diagnostic criteria for differentiating Malingering and Factitious Disorder, in reality, as is the case for most psychiatric conditions, they may co-occur in varying degrees (see also de Silva, Sujeevan, & Jayasinghe, 2004; Pankraz & Erickson, 1990; Slick et al., 1999).
In the next section, we propose two new diagnoses for encompassing cases of excessive cognitive complaints or poor (invalid) test performances in the absence of sufficient evidence of intentionality of symptom production to warrant a diagnosis of Malingering. The specific criteria for these new categories were modeled after those proposed by Bush et al. (2005), Larrabee (2003), Slick et al. (1999), and Sweet (1999), with some modifications made to reflect distinctions between Cogniform Disorder, Cogniform Condition, and Malingering. In addition, the criteria were designed to adhere to the methodology first introduced in the DSM-III in which an attempt is made to keep the defining criteria as explicit and observable as possible and to minimize required criteria about internal causative states. In proposing these diagnostic categories, we also provide new guidelines for addressing difficult issues such as intentionality of symptom production, role of secondary gain, and adoption of the sick role. These criteria are offered here, not as a final statement of how these conditions should be defined, but as an initial, preliminary step in developing a general nomenclature for these conditions.

1.2. Cogniform Disorder

The essential feature of Cogniform Disorder is a pattern of cognitive complaints or low scores on psychometric cognitive tests that are considered to be excessive because they cannot be fully explained by a neurological disorder, by another mental disorder that is associated with CNS dysfunction (e.g., Schizophrenia), by a general medical condition known to affect CNS function (e.g., renal disease), by the direct effects of a substance (e.g., opioid medications), or by other factors known to affect cognitive functioning (e.g., developmental learning disorder; insomnia; normal aging process). If the cognitive complaints or poor test performances occur in the presence of a known neurological or mental disorder or any other factor known to affect CNS function (e.g., medication), the cognitive symptoms are in excess of what would be expected from the history, physical examination, laboratory tests, or psychometric validity testing (Boone & Lu, 2003). Findings from the clinical interview or psychometric testing of cognitive functions do not substantiate the degree of cognitive complaints or symptoms because of the presence of at least two of the following features:

1. cognitive complaints or poor test performances that are rare for patients with documented mild to moderate generalized brain damage (e.g., loss of remote autobiographical memories; inability to perform over-learned verbal skills like reading, spelling, or simple math);
2. inconsistencies between the individual’s excessive cognitive complaints or poor test performances and the relatively mild nature of the injury or illness as documented in the medical records;
3. inconsistencies between the individual’s excessive cognitive complaints or poor test performances and observed behavior;
4. delayed onset of excessive cognitive complaints or symptoms after an injury and/or significant worsening of symptoms over time without an adequate explanation for the decline in functioning (e.g., subsequent neurological complications);
5. significant inconsistencies in cognitive test scores or profiles across repeat evaluations;
6. patterns of cognitive test scores within an examination that are rare for brain-damaged patients;
7. significant inconsistencies in cognitive complaints or symptoms over time;
8. evidence of insufficient test-taking effort or exaggeration on tests designed specifically to assess validity of cognitive performance;
9. evidence of insufficient test-taking effort or exaggeration on specific measures obtained from standard ability tests that have been empirically found to assess validity of cognitive performance.

Considerable individual differences are found in the performances of people with this condition on psychometric tests of cognitive skills (Iverson, 1995; Larrabee, 2003; Slick et al., 1999). Some individuals obtain markedly low scores on most cognitive tests administered; these individuals are often less sophisticated about medical and psychological conditions and more blatant in their symptom amplification. Other people may obtain low and invalid scores on only a few tests administered (e.g., memory tasks); these individuals may be more subtle in their symptom exaggeration and, as a result, more difficult to identify. Occasionally, an individual may perform within expected ranges on most cognitive tests administered, including cognitive validity tests, and yet continue to complain of extensive cognitive problems and dysfunction in their daily lives. These individuals may have learned from other sources (e.g., Internet;
attorney coaching) that neuropsychological tests are capable of detecting poor test-taking effort, and consequently exert adequate effort on psychometric tests despite reporting significant cognitive complaints and dysfunction in their daily lives.

Cognitive complaints per se do not necessarily warrant a diagnosis of Cogniform Disorder. For example, memory complaints are relatively common among normal-functioning elderly individuals (Fox et al., 1995; Gouvier et al., 1988; Lees-Haley & Brown, 1993; Mittenberg et al., 1992; Paniak et al., 2002). A diagnosis of Cogniform Disorder is not indicated for the “worried well,” because (a) their cognitive complaints are often not extreme in light of the expected changes that occur as part of the normal aging process; (b) they usually do not report excessive problems in their activities of daily living due to cognitive difficulties; (c) they generally perform within normal limits for their age group on formal cognitive testing. As another example, individuals suffering from depression often report memory and concentration difficulties (Binder, Storzbach, Anger, Campbell, & Rohlman, 1999; Seidenberg, Taylor, & Haltiner, 1994; Wearden & Appleby, 1996). However, a diagnosis of Cogniform Disorder may not be indicated for many of these individuals because (a) the degree of their cognitive complaints may be consistent with their affective disorder (and therefore not excessive); (b) cognitive complaints in these individuals have been found to be predictive of emotional dysfunction but not of cognitive deficits on formal testing (Binder et al., 1999; Wearden & Appleby, 1996); (c) depression subgroups either perform normally on formal cognitive tests or exhibit a pattern of cognitive strengths and weaknesses suggestive of subcortical dysfunction (but not to an excessive degree; Massman, Delis, Butters, Dupont, & Gillin, 1992). As a third example, individuals with test-taking anxiety may complain of cognitive difficulties (e.g., “My mind goes blank when taking a test”). However, a diagnosis of Cogniform Disorder would not be indicated for these individuals, because (a) their complaints tend to be situation-specific and (b) their complaints are likely related to their underlying anxiety condition (and therefore are not excessive in light of this condition). In contrast to these three examples, individuals with Cogniform Disorder (a) will typically complain of excessive cognitive difficulties; (b) will often report significant disruptions in their daily lives as a result of their cognitive complaints; (c) will frequently exhibit evidence of inadequate effort on psychometric tests in one way or another; (d) will often present with cognitive complaints and symptoms in the context of some type of incentive (e.g., litigation).

As discussed above, some individuals with Cogniform Disorder will have extensive cognitive complaints but generally perform within normal limits on formal cognitive tests. These cases, which tend to be infrequent, often differ from the “worried well” in that (a) these individuals will usually report more extreme cognitive problems and subsequent disruptions in their daily lives; (b) their cognitive complaints are often reported in the context of some type of incentive (e.g., litigation); (c) they may have some knowledge and sophistication about psychological conditions and testing. The primary distinguishing feature between Cogniform Disorder and Cogniform Condition (see below) concerns the degree to which the individual presents as cognitively impaired in widespread areas of his or her life. Specifically, a diagnosis of Cogniform Disorder should be made if there is reasonable evidence that the individual exhibits excessive cognitive symptoms in most if not all areas of his or her life and seemingly at all times, thereby suggesting a conversion-like adoption of the sick role manifested primarily as cognitive dysfunction. In addition, in Cogniform Disorder, the degree of claimed disability in performing activities of daily living will often parallel the individual’s complaints of cognitive dysfunction and poor (invalid) cognitive test performance. For example, the individual not only obtains severely deficient (and likely invalid) scores on tests of visual-motor and visual-spatial functioning, but he or she also ceases to drive a vehicle because of the perceived cognitive problems. In many ways, Cogniform Disorder is analogous to the somatof orm condition of Conversion Disorder, but with the excessive symptoms manifested primarily in terms of cognitive dysfunction rather than deficits affecting primarily motor or sensory functions (e.g., nonepileptic seizures). For this reason, Cogniform Disorder should be considered as a new subtype of the Somatoform Disorders.

In many cases, however, it is difficult for the clinician to ascertain whether or not an individual is exhibiting excessive cognitive symptoms in widespread areas of his or her everyday life and seemingly at all times. The evidence for this claim is often limited to information provided by the individual as well as family members and friends; however, in the context of litigation, such self-reports and collateral reports may not always be reliable. The evidence for this claim tends to be more reliable when it derives from uninvolved third parties, which, unfortunately, can be difficult to obtain in many cases. The clinician can often address this issue by examining whether or not there is a convergence of data to support the conclusion that the individual is acting out the sick role of being cognitively dysfunctional in widespread areas of his or her life. For example, for an individual who appears to meet criteria of Cogniform Disorder, the family members state that the individual can no longer drive due to their perception of cognitive dysfunction in the individual,
the individual’s physician has written a report stating that the individual should not drive due to his or her self-reported cognitive dysfunction, and the individual’s driver’s license has been revoked.

A summary of the proposed diagnostic criteria for Cogniform Disorder is presented in Table 1.

1.3. Cogniform Condition

The essential features of Cogniform Condition are the same as those of Cogniform Disorder in every respect, with the exception of the degree to which the individual exhibits cognitive dysfunction in widespread areas of his or her everyday life. That is, in Cogniform Condition, there is (a) a lack of reasonable evidence that the individual presents as cognitively dysfunctional in many areas of his or her life and (b) evidence of significant inconsistencies between the individual’s excessive cognitive complaints or poor test performances in an evaluation and his or her higher level of everyday functioning. For example, an individual may obtain severely deficient (and likely invalid) scores on tests of visual-motor and visual-spatial functioning and yet continues to drive a vehicle without apparent difficulty. In other words, in Cogniform Condition, the individual is not given a diagnosis of “disorder,” because there is a lack of

| Table 1 |
| Proposed diagnostic criteria for Cogniform Disorder |

A. Cognitive complaints or low scores on psychometric tests of cognitive functions that are considered excessive as indicated by at least two of the following:

1. Cognitive complaints or poor test performances that are rare for patients with documented mild to moderate generalized brain damage (e.g., loss of remote autobiographical memories; inability to perform over-learned verbal skills like reading, spelling, or simple math)

2. Inconsistencies between the individual’s excessive cognitive complaints or poor test performances and the relatively mild nature of the injury or illness as documented in the medical records

3. Inconsistencies between the individual’s excessive cognitive complaints or poor test performances and observed behavior

4. Delayed onset of excessive cognitive complaints or symptoms after an injury and/or worsening of symptoms over time without an adequate explanation for the decline in functioning (e.g., subsequent neurological complications)

5. Significant inconsistencies in cognitive test scores or profiles across repeat evaluations

6. Patterns of cognitive test scores within an examination that are rare for brain-damaged patients

7. Significant inconsistencies in cognitive complaints or symptoms over time

8. Evidence of insufficient test-taking effort or exaggeration on tests designed specifically to assess validity of cognitive performance

9. Evidence of insufficient test-taking effort or exaggeration on specific measures obtained from standard ability tests that have been found empirically to assess validity of cognitive performance

B. Evidence of a general consistency between the individual’s excessive cognitive complaints or poor test performances and his or her limited everyday functioning. That is, the individual not only exhibits excessive cognitive complaints or poor (invalid) test performances during an evaluation, but also appears to act out those symptoms in the form of the sick role in widespread areas of his or her everyday life. (If the individual’s level of everyday functioning is higher than predicted by his or her excessive cognitive complaints or poor test performances, then a diagnosis of Cogniform Condition may be warranted)

C. Either (1) or (2)

1. After appropriate investigation, the cognitive complaints or poor test performances in Criterion A cannot be fully explained by a known neurological or neuropsychiatric condition (e.g., cerebral vascular accident; Schizophrenia) or the direct effects of a substance (e.g., opioid medication)

2. When there is a related condition (e.g., documented brain injury), the cognitive complaints or poor test performances are in excess of what would be expected from the history, physical examination, laboratory findings, and psychometric test results

D. The cognitive complaints are not best explained by the individual exhibiting a normal degree of worry about cognitive difficulties (e.g., as seen in the “worried well” or normal-functioning elderly individuals)

E. There is a lack of clear evidence to conclude that the excessive cognitive complaints or poor test performances are produced in an intentional manner (if there is reasonable evidence that the excessive cognitive symptoms are produced in an intentional manner, then Malingering or Factitious Disorder should be considered)

Specify if:

- With evidence of external incentive: if the excessive cognitive complaints or poor test performances occur in the context of one or more identified sources of external incentives (e.g., medicolegal setting; disability application; evasion or mitigation of criminal prosecution; avoidance of work or danger)

- With evidence of interpersonal incentive: if the excessive cognitive complaints or poor test performances occur in the context of establishing or maintaining a dependent relationship with one or more significant others

Not otherwise specified (NOS): This Specifier should be used when the nature and circumstances of the excessive cognitive complaints or poor test performances are unclear
reasonable evidence that the individual is acting out the “sick role” of being cognitively dysfunctional in widespread areas of his or her life despite presenting to the clinician in a manner that suggests that he or she should be markedly impaired in everyday functioning.

A summary of the proposed diagnostic criteria for Cogniform Condition is presented in Table 2.

1.4. Cogniform Disorder and Condition versus Malingering: similarities and differences

Cogniform Disorder, Cogniform Condition, and Malingering (when manifested in the form of cognitive dysfunction) are similar in that the individual may present with excessive cognitive complaints or exhibit evidence of inadequate effort and exaggeration on formal neuropsychological testing. However, a diagnosis of Cogniform Disorder or Cogniform Condition should not be made if there is reasonable evidence that the excessive cognitive symptoms are produced in an intentional or volitional manner, in which case a diagnosis of Malingering may be warranted. As noted above, however, this determination can be difficult to make for many cases due to inherent problems in objectively assessing the internal

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Proposed diagnostic criteria for Cogniform Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cognitive complaints or low scores on psychometric tests of cognitive functions that are considered excessive as indicated by at least two of the following:</td>
<td></td>
</tr>
<tr>
<td>(1) Cognitive complaints or poor test performances that are rare for patients with documented mild to moderate generalized brain damage (e.g., loss of remote autobiographical memories; inability to perform over-learned verbal skills like reading, spelling, or simple math)</td>
<td></td>
</tr>
<tr>
<td>(2) Inconsistencies between the individual’s excessive cognitive complaints or poor test performances and the relatively mild nature of the injury or illness as documented in medical records</td>
<td></td>
</tr>
<tr>
<td>(3) Inconsistencies between the individual’s excessive cognitive complaints or poor test performances and observed behavior</td>
<td></td>
</tr>
<tr>
<td>(4) Delayed onset of cognitive complaints or symptoms after an injury and/or worsening of symptoms over time without an adequate explanation for the decline in functioning (e.g., subsequent neurological complications)</td>
<td></td>
</tr>
<tr>
<td>(5) Significant inconsistencies in cognitive test scores or profiles across repeat evaluations</td>
<td></td>
</tr>
<tr>
<td>(6) Patterns of cognitive test scores within an examination that are rare for brain-damaged patients</td>
<td></td>
</tr>
<tr>
<td>(7) Significant inconsistencies in cognitive complaints or symptoms over time</td>
<td></td>
</tr>
<tr>
<td>(8) Evidence of insufficient test-taking effort or exaggeration on tests designed specifically to assess validity of cognitive performance</td>
<td></td>
</tr>
<tr>
<td>(9) Evidence of insufficient test-taking effort or exaggeration on specific measures obtained from standard ability tests that have been found empirically to assess validity of cognitive performance</td>
<td></td>
</tr>
<tr>
<td>B. Evidence of a general inconsistency between the individual’s excessive cognitive complaints or poor test performances and his or her higher level of everyday functioning. That is, although the individual exhibits excessive cognitive complaints or poor (invalid) test performances during an evaluation, he or she appears to be functioning at a significantly higher level in his or her everyday life than predicted by the excessive cognitive symptoms. (If an individual exhibits excessive cognitive complaints or poor test performances during an evaluation and also appears to act out those symptoms in the form of the sick role in widespread areas of his or her everyday life, then a diagnosis of Cogniform Disorder may be warranted)</td>
<td></td>
</tr>
<tr>
<td>C. Either (1) or (2)</td>
<td></td>
</tr>
<tr>
<td>(1) after appropriate investigation, the cognitive complaints or poor test performances in Criterion A cannot be fully explained by a known neurological or neuropsychiatric condition (e.g., cerebral vascular accident; Schizophrenia) or the direct effects of a substance (e.g., opioid medication)</td>
<td></td>
</tr>
<tr>
<td>(2) when there is a related condition (e.g., documented brain injury), the cognitive complaints or poor test performances are in excess of what would be expected from the history, physical examination, laboratory findings, and psychometric test results</td>
<td></td>
</tr>
<tr>
<td>D. The cognitive complaints are not best explained by the individual exhibiting a normal degree of worry about cognitive difficulties (e.g., as seen in the “worried well” or normal-functioning elderly individuals)</td>
<td></td>
</tr>
<tr>
<td>E. There is a lack of clear evidence to conclude that the excessive cognitive complaints or poor test performances are produced in an intentional manner (if there is reasonable evidence that the excessive cognitive symptoms are produced in an intentional manner, then Malingering or Factitious Disorder should be considered)</td>
<td></td>
</tr>
</tbody>
</table>

Specify if:

- With evidence of external incentive: if the excessive cognitive complaints or poor test performances occur in the context of one or more identified sources of external incentives (e.g., medicolegal setting; disability application; evasion or mitigation of criminal prosecution; avoidance of work or danger)
- With evidence of interpersonal incentive: if the excessive cognitive complaints or poor test performances occur in the context of establishing or maintaining a dependent relationship with one or more significant others

Not otherwise specified (NOS): This Specifier should be used when the nature and circumstances of the excessive cognitive complaints or poor test performances are unclear
state of the intentionality of simulated behavior. For this reason, it is likely that many cases of excessive cognitive symptoms would receive the more neutral diagnosis of Cogniform Condition, and possibly a diagnosis of Cogniform Disorder if the individual exhibits cognitively dysfunctional behavior in widespread areas of his or her life. However, when evidence emerges that implicates at least a conscious component in the production of the excessive cognitive symptoms, then a diagnosis of Malingering (or Malingered Neuropsychological Dysfunction; Slick et al., 1999) may be warranted. Following are different examples of evidence that can be supportive of a diagnosis of Malingering:

1. On psychometric testing, an individual obtains an accuracy score on a forced-choice recognition memory test that falls significantly below a chance level. Such a score provides empirical evidence that the individual correctly remembered the right answers above a chance level and used this knowledge to frequently select the wrong answer (Frederick & Foster, 1991; Iverson & Franzen, 1996; Iverson, Franzen, & McCracken, 1991; Larrabee, 2003; Millis, 1992; Panktraz, 1983).

2. A person who is involved in two separate personal-injury lawsuits for different accidents complains of one set of symptoms and injuries to doctors associated with one lawsuit and different symptoms and injuries to other doctors associated with the second lawsuit. Such selective reporting of symptoms that correspond to the different lawsuits suggests a conscious component to the symptom amplification.

3. An individual “confesses” to intentionally performing poorly when taking cognitive tests (Youngjohn, 1995).

As proposed here, a diagnosis of Cogniform Disorder or Cogniform Condition does not exclude the possibility of intentional production of the excessive symptoms; rather, these categories imply only that there is insufficient evidence at the time of the assessment to formulate a diagnosis of intentionality and therefore Malingering. Indeed, an advantage of having diagnostic categories such as Cogniform Disorder and Cogniform Condition is that they allow the clinician to label the cognitive symptoms as excessive using more neutral terms that avoid the accusatory implications of Malingering when there is a lack of clear evidence to make that diagnosis. In addition, as discussed above, intentionality is likely multifactorial in nature and is comprised of at least two key components: conscious awareness and goal-directed motivation. The individual who has convinced him or herself that the feigned behavior is real may not be fully or even partially conscious of his or her symptom amplification, but this person may nevertheless have developed the symptoms in reaction to the presence of external or interpersonal incentives for personal gain. The categories Cogniform Disorder and Cogniform Condition allow the clinician to acknowledge the presence of incentives that may have played a significant role in the goal-directed motivation for the excessive symptomatology without having to make the difficult determination of whether the individual is conscious or unconscious of these dynamics.

1.5. Specifiers

The following optional Specifiers were developed for both Cogniform Disorder and Cogniform Condition and allow the clinician to note the presence of incentives that may have been temporally related to the emergence of the excessive cognitive symptoms, thereby suggesting goal-directed motivation in the generation of the symptoms. These Specifiers should be used only if there is reasonable objective evidence to support them.

1.5.1. With evidence of external incentive

This Specifier should be used with either Cogniform Disorder or Cogniform Condition when there is reasonable objective evidence that the excessive cognitive symptoms have occurred in the context of one or more identified sources of external incentives, including possible financial gain from a civil lawsuit or disability application, evasion or mitigation of criminal prosecution, or avoidance of work or danger. The presence of a temporal relationship between the perception of a significant external incentive and the onset of excessive cognitive symptoms is suggestive of goal-directed motivation in the production of the cognitive symptom, regardless of the degree to which the individual may be conscious, semi-conscious, or unconscious of this association.

1.5.2. With evidence of interpersonal incentive

This Specifier should be used with either Cogniform Disorder or Cogniform Condition when there is reasonable objective evidence that the excessive cognitive symptoms have occurred in the context of establishing or maintaining
a dependent relationship with one or more significant others. As an example, therapy records from a marital counselor indicate that an individual develops excessive cognitive symptoms shortly after his or her spouse announces the wish for a separation; however, after the individual begins to present as cognitively dysfunctional, the spouse is re-engaged in the relationship in a more caretaker role. The presence of a temporal relationship between a significant interpersonal incentive and the onset of excessive cognitive symptoms is suggestive of goal-directed motivation in the production of the cognitive symptoms. The Specifiers with evidence of interpersonal incentive and with evidence of external incentive can be used for the same individual if there is objective evidence to support them.

1.5.3. Not otherwise specified

This Specifier should be used when the nature and circumstances of the excessive cognitive symptoms are unclear.

1.6. Associated features and disorders

1.6.1. Associated descriptive features and mental disorders

Individuals with Cogniform Disorder or Cogniform Condition often describe their cognitive complaints in exaggerated terms or they may show la belle indifference (i.e., a relative lack of concern about the nature or implications of the symptoms). Individuals with some knowledge of medical or psychological concepts may report that their cognitive difficulties are improving after an injury or they may even deny having any cognitive problems at the time of the evaluation, but nevertheless exhibit insufficient effort and exaggeration of cognitive problems on psychometric testing. A small percentage of individuals may complain of extensive or atypical cognitive problems, but perform within normal limits on formal cognitive testing. However, most individuals with this condition will both complain of excessive cognitive difficulties and exhibit evidence of insufficient effort and invalid performance on cognitive testing. Cogniform Disorder or Cogniform Condition can occur by itself or in conjunction with other disorders of excessive symptomatology (e.g., Somatization Disorder) or other mood disorders (e.g., Major Depressive Disorder). In clinical practice, Cogniform Condition tends to occur more frequently than Cogniform Disorder, since a conversion-like adoption of the sick role is a more severe, and thus less common, manifestation of excessive symptomatology.

1.6.2. Associated laboratory and psychometric findings

Neurological procedures such as CT or MRI brain scans and EEGs are often notable for the absence of findings to support the subjective complaints. However, these procedures can be normal in certain insidious neurological disorders (e.g., early Alzheimer’s disease; mild traumatic brain injury; Bigler, 2001), and thus these techniques should not be used as definitive methods to rule out a neurological cause of cognitive complaints (Levin, Eisenberg, & Benton, 1989). On the other hand, cases have been reported in which individuals exhibit strong evidence of feigned cognitive performance in the face of at least mild positive findings on neuroimaging and EEG procedures (Boone & Lu, 2003). Thus, positive findings on neuroimaging and EEG studies do not necessarily rule out a Cogniform Disorder or Cogniform Condition that is superimposed on a possibly milder form of a genuine Cognitive Disorder NOS.

If an individual’s score on a validity measure (e.g., a forced-choice recognition memory test) falls below an established cut-off level for insufficient effort, this finding, in the absence of a severe neurological disorder, usually provides strong evidence of amplification of cognitive difficulties. However, the utility of these testing procedures may be diminishing with time, because the general public is becoming more aware of them (e.g., through Internet research or attorney coaching; Bauer & McCaffrey, 2005; Gutheil, 2003; Lees-Haley & Courtney, 2000; Youngjohn, 1995). In addition, individuals who are simulating cognitive difficulties and who are psychologically sophisticated may realize that forced-choice memory tests are very easy tasks and they may therefore perform adequately on them (Delis & Jacobson, 2000). Thus, normal scores on these tests do not rule out Cogniform Disorder or Cogniform Condition (Delis & Jacobson, 2000; Larrabee, 2003). Analysis of test-score consistencies both within an exam and across exams may be more sensitive than performance on cognitive validity tests in the detection of individuals who exhibit insufficient effort in a more subtle and sophisticated manner (Larrabee, 2003). However, clinicians often differ in their definitions of test-score inconsistencies, and more research is needed to develop empirically based methods to document such variability (e.g., reliable change indices; Woods, Delis, Scott, Kramer, & Holdnack, 2006). Studies have shown that well trained neuropsychologists will occasionally misdiagnose neuropsychological dysfunction in research subjects who were instructed to feign problems on cognitive tests (Cato, Brewster, Ryan, & Giuliano, 2002; Heaton, Smith, Lehman, & Vogt, 1978). This type of misdiagnosis is prone to occur in individuals who exaggerate cognitive difficulties
to a mild degree, with more blatant forms of exaggeration easier to detect (Cato et al., 2002; Delis & Jacobson, 2000; Rohling, Allen, & Green, 2002).

1.7. Course and treatment

According to the DSM-IV, the onset of a condition like Conversion Disorder may show a temporal relationship with psychological factors that are thought to be associated with the condition (e.g., stressors or external incentives). The same temporal relationships can apply to the onset of Cogniform Disorder or Cogniform Condition. These conditions may wax and wane over time, or gradually worsen if there is a prolongation in the obtainment of any pending external incentive. When there is evidence of interpersonal incentive, the development of these conditions may similarly correspond to the emergence of care-taking behaviors from significant others or the re-engagement of a partner who may have been growing distant in the relationship. Some individuals with excessive cognitive and functional complaints that they attribute to a precipitating event (e.g., mild head injury) may have had problems in their academic, occupational, or social functioning prior to the onset of the event.

In Cogniform Condition, the individual may claim significant distress or impairment in occupational, social, or other areas of functioning, but this condition may have little or no impact on the individual’s actual everyday functioning. Consequently, psychotherapy or other types of psychiatric treatment may not be warranted for these individuals (which is why they are referred to as having a “Condition” rather than a “Disorder”). In contrast, individuals with Cogniform Disorder, who exhibit marked cognitive dysfunction in all aspects of their life in a conversion-like manner, are more likely to need psychotherapy for their disorder. Their need for psychotherapy may arise from at least four possible sources: (a) stress reaction to a precipitating event to which they attribute the cause of their cognitive problems (e.g., a motor vehicle accident); (b) stress reaction to being told by at least some health care providers that they have a serious medical condition (e.g., brain dysfunction); (c) their capacity to develop sick role dynamics in the presence of external and/or interpersonal incentives; (d) anxiety and depression related to stressors created by the adoption of the sick role for a prolonged period of time (e.g., increased financial stressors). If the precipitating event was relatively minor (e.g., a minor motor vehicle accident), then the possible need for psychotherapy would be less for the precipitating event itself and more for the individual’s capacity to develop sick role behaviors and any associated mood disturbances related to the adoption of the sick role. However, if the precipitating event was more severe (e.g., major motor vehicle accident with serious nonneurological injury to the individual, or injuries or fatalities to other parties in the accident), then the individual may have a greater need for psychotherapy for both the emotional trauma surrounding the precipitating event itself and for the individual’s capacity to develop sick role dynamics. If psychotherapy is initiated for an individual who is exhibiting sick role behaviors while the external and/or interpersonal incentives are still operative in his or her life (e.g., pending court case), then the treatment, which may at times lead to some improvement, will often not result in a successful resolution of the symptoms and problems. Typically, psychotherapy targeted at sick role dynamics and associated mood disturbances is best conducted after there has been a resolution or cessation of the external or interpersonal incentives (e.g., settlement of a lawsuit).

2. Conclusion

The proposed categories of Cogniform Disorder and Cogniform Condition offer several diagnostic advantages. First, the categories encompass a domain of excessive symptomatology that is not adequately subsumed within existing DSM-IV categories and yet occurs with relatively high frequency among individuals seen by neuropsychologists, particularly in forensic settings. Second, unlike Dissociative Disorder, which is so specific that it tends to be rarely used in clinical practice, Cogniform Disorder and Cogniform Condition are sufficiently broad to encompass different forms and variations of excessive cognitive symptoms. This feature is important because there are extensive individual differences in any domain of excessive symptomatology, whether physical or cognitive (Iverson, 1995; Larabee, 2003). Third, the use of two variations of this general condition – Cogniform Condition and Cogniform Disorder – allows the clinician to distinguish between less pronounced cases that may not need psychiatric treatment and more pervasive cases that may need treatment at least in part for the individual’s capacity to develop conversion-like symptoms manifested as cognitive dysfunction. Fourth, optional Specifiers can be used (e.g., “with evidence of external incentives”) that are based on objective evidence and that allow the clinician to acknowledge the presence of factors that have likely played a significant motivational role in the development and propagation of the excessive symptoms. Fifth, and perhaps
most important, the proposed diagnoses avoid a major obstacle found in all existing DSM-IV categories of excessive symptomatology, namely, the categories do not have criteria that require the clinicians to make difficult diagnostic decisions about the nebulous internal states of conscious/intentional or unconscious/unintentional production of the excessive symptoms. Ultimately, it may not be that important diagnostically to know whether an individual is capable of consciously acknowledging his or her symptom amplification. That is, if there is empirically based evidence that an individual is exaggerating cognitive symptoms, and if this amplification occurs in the context of external or interpersonal incentives, then there are likely personal-gain factors underlying the generation of the excessive symptoms, regardless of the degree to which an individual may be conscious, semi-conscious, or unconscious of these dynamics. For these reasons, the more neutral diagnoses of Cogniform Disorder and Cogniform Condition allow the clinician to label the excessive symptomatology along with any other observable evidence that likely has a bearing on the generation of the symptoms (e.g., medicolegal context) without having to undertake the often impossible task of assessing whether an individual is conscious of these dynamics.

Acknowledgments

We thank Laurence M. Binder, Ph.D., for his thorough and invaluable critique and comments on the manuscript, and Glenn J. Larrabee, Ph.D., and Marc A. Schuckit, M.D., for their helpful reviews on an earlier draft.

References


