Commentary

Commentary on “Cogniform disorder and cogniform condition: Proposed diagnoses for excessive cognitive symptoms” by Dean C. Delis and Spencer R. Wetter

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In 1999, Slick, Sherman, and Iverson presented the first diagnostic algorithm designed to be used to identify levels of “malingered neurocognitive dysfunction (MND).” The term “definite MND” was used to designate those individuals who had motive to feign and obtained significantly below chance performance on one or more forced choice paradigms, while “probable MND” was used to refer to individuals who did not fall significantly below chance on forced choice measures but did have incentive to feign and failed two or more non-forced choice effort measures, or failed one non-forced choice measure and displayed at least one example of non-plausible self-reported symptoms or test data discrepancy. “Possible MND” was used to identify those individuals with incentive to underperform and who evidenced discrepant information on self-report. However, since the publication of that pivotal and widely cited manuscript, questions have arisen as to whether we are in fact detecting “malingering” when poor performance on effort indicators is observed.

Malingering refers to the conscious, deliberate feigning of symptoms for external gain, but it has long been appreciated that non-conscious symptom fabrication, including feigned cognitive dysfunction, can also occur. For example, in Freud’s original reports of individuals with conversion disorder (which involves non-conscious creation of neurological-type symptoms), cognitive complaints were prominent; “Freud’s remarks about Frau Cecile von M indicate that her hysterical attacks and neuralgias were accompanied by reversible amnesia and clouding of consciousness” (Mace, 1994, p. 186). In the ensuing decades, interest in conversion disorders increasingly focused on the dramatic non-plausible physical symptoms, and the accompanying cognitive pseudosymptoms, while still prevalent, unfortunately lost visibility.

If we are to use the Slick, Sherman, and Iverson (1999) criteria to diagnose “malingered” cognitive symptoms, we must have objective means by which to differentiate between consciously versus non-consciously produced symptom fabrication. However, no such techniques exist. For example, while forced choice measures are now frequently touted as the “gold standard” for identifying malingered cognitive performance (see Bianchini, Mathias, & Greve, 2001), in fact this paradigm was originally used to document conversion disorder (Pankratz, 1979). Of relevance, in hypnotized individuals, whose behavior is presumed not to be under conscious control, significantly below chance performance on forced choice measures occurs in 25% of those instructed to produce amnesia (Spanos, James, & de Groot, 1990). Unfortunately, personality inventories are similarly unhelpful in distinguishing between consciously and...
non-consciously created symptoms. While the presence of an MMPI-2 1-3 codetype has been traditionally used to “flag” the presence of conversion disorder, it also occurs in malingered physical complaints (Larrabee, 1998). Even functional brain imaging may not be useful in the differentiation of conscious and non-conscious symptom creation; activation of anterior cingulate and prefrontal context has been described in both conversion disorder (Halligan, Athwal, Oakley, & Frackowiak, 2000; Marshall, Halligan, Fink, Wade, & Frackowiak, 1997; Tiitonen, Kuikka, Viinamaki, Lehtonen, & Partanen, 1995) and in individuals instructed to lie (Ganis, Kosslyn, Stose, Thompson, & Yurgelun-Todd, 2003; Kozel, Padgett, & George, 2004; Kozel, Revell, et al., 2004; Langleben et al., 2002).

Further complicating the situation, it is now appreciated that conscious versus non-conscious creation of symptoms may lie on one or more continua, rather than falling into discrete categories. Specifically, conversion disorders may anchor opposing ends of a self-deception versus other-deception continuum, or perhaps other-deception and self-deception lie on discrete continua, allowing for the presence of both other- and self-deception concurrently. For example, malingering would reflect high other-deception and low self-deception, conversion disorders would be represented by high self-deception and low other-deception, and mixed malingering and conversion disorder conditions would be characterized by moderate to high elevations on both self- and other-deception (Boone, 2007).

Delis and Wetter (2007), in their manuscript in the most recent issue of Archives of Clinical Neuropsychology, provide an important step in moving the field of clinical neuropsychological assessment away from the problematic task of attempting to distinguish between conscious versus non-conscious determinants of symptoms. Instead, they advance a more nuanced and sophisticated perspective which allows for concurrent conscious and non-conscious impetuses for behavior and symptom fabrication. They recommend the term “Cogniform Disorder” for those individuals who: (1) report excessive cognitive complaints and/or obtain low scores on objective cognitive testing not accounted for by medical, psychiatric, or developmental conditions, and (2) show evidence for non-credible cognitive performance as demonstrated by failed effort indices, implausible symptom report (including delayed onset of symptoms or worsening of symptoms over time in the context of a discrete injury), or inconsistencies between test scores and ADLs or observed behavior, or in test scores across sequential evaluations, or in symptoms over time, and (3) who display a “conversion-like adoption of the sick role” in terms of cognitive function. Additional specifiers indicate whether the condition is associated with External Incentive or Interpersonal Incentive.

In contrast to Cognitive Disorder, “Cogniform Condition” is reserved for those situations in which the above behaviors are present with the exception that evidence for a cognitive “invalid” life role is lacking. Delis and Wetter (2007) suggest that frank “malingering” can be determined in those cases were there is irrefutable evidence of intentional feigning. They indicate that below chance performance on forced choice measures could be supportive of malingering, as well as “confessions” of malingering, or evidence of selective withholding of information to various medical providers. Cogniform Disorder or Condition could encompass malingers for whom there is no irrefutable evidence of intentional feigning.

In practical use of the Slick et al. (1999) algorithm, the term “malingering” has been applied to virtually any patient failing effort indicators in the context of external incentive. However, Delis and Wetter (2007) appreciate that non-conscious symptom production can occur in the context of external incentive and are more cautious in applying the term “malingering”. In fact, non-conscious symptom creation may be more prevalent than deliberate feigning in compensation-seeking settings; as noted by Kay, Newman, Cavallo, Ezrachi, and Resnick (1992), “conscious malingering is probably much less common than motivated but unconscious holding onto symptoms, which can be influenced by the very process of being in litigation” (p. 380). Such influences as “misattribution” (misattributing normal forgetfulness, headaches, etc., to the effects of concussion; Ferguson, Mittenberg, Barone, & Schneider, 1999) and “diagnosis threat” (being told by authorities that one is ill and dysfunctional causes a “self-fulfilling prophecy”; Suhr & Gunstad, 2002) no doubt contribute to non-conscious symptom creation/maintenance in settings in which there is external incentive to feign.

While the Delis and Wetter (2007) paper provides an important reconceptualization of the role of non-conscious processes in cognitive symptom fabrication, particularly in compensation-seeking contexts, their diagnostic approach raises its own set of questions.

First, very different subgroups are subsumed within the umbrella term of “Cogniform Disorder.” For example, patients may engage in factitious production of symptoms (i.e., the feigning is conscious and deliberate, but occurs for psychiatric reasons [e.g., to secure attention from, and/or as a function of a power struggle with, medical personnel] rather than for more obvious external incentives). In contrast to conversion disorder patients and similar to malingers,
factitious patients would be conceptualized as low on self-deception and high in other-deception. However, using the Delis and Wetter (2007) algorithm, both factitious and conversion disorder patients would be likely designated as “Cogniform Disorder with Interpersonal Incentive.” But do we wish to dispense with the distinction between factitious and conversion disorders? In addition, Delis and Wetter (2007) suggest that malingers could be included in the Cogniform Disorder category if they adopt the sick role, however, current conceptualization of malingering assumes that they do not adopt an invalid lifestyle, but only “don” symptoms during medical evaluations (which is why surveillance tapes are so helpful in these cases). In current diagnostic algorithms, a malingerer who adopts the sick role is judged to have a factitious disorder; do we want the distinction between malingering and factitious presentations to be dropped?

Further, non-plausible cognitive symptom report can occur in a group of individuals who are better conceptualized as “hypochondriacal” rather than truly conversion disorder. These individuals believe they are functioning poorly in work and social settings, but score normally on both effort indicators and standard cognitive tests (although while taking the tests they comment as to how poorly they are performing, often with considerable affect); thus, they do not “create” symptoms, but rather perceive normal function as evidence of illness. In the Delis and Wetter (2007) conceptualization, these individuals would be given the same diagnosis (i.e., Cogniform Disorder) as conversion disorder patients who “create” cognitive symptoms and in the process fail effort indicators. Of concern, if the Cogniform Disorder category, as presently conceptualized, is used for group assignment in research endeavors, subjects will be combined who are qualitatively very different. While Delis and Wetter (2007) now provide us with a reintroduction to psychiatric causes of cognitive symptom over-report, the distinction between psychiatric subgroups is missing.

Second, the recommended specifiers (Interpersonal Incentive and External Incentive) appear reasonable in the abstract, however, as shown in the chart below, in practical application they are likely either to be redundant with the Cogniform Disorder category or will allow for combinations which are not conceptually possible, at least in current thought.

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<th>Incentives</th>
<th>Interpersonal only</th>
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<tr>
<td>Cogniform Disorder</td>
<td>Redundant?</td>
<td>Not possible?</td>
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<tr>
<td>Cogniform Condition</td>
<td>Not possible?</td>
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For example, in current conceptualization of conversion disorders, adoption of the sick role (which is required for Cogniform Disorder) is believed to be a direct result of a desire to receive care-taking from others (i.e., Interpersonal Incentive), so would it not be redundant to diagnose a patient with Cogniform Disorder with Interpersonal Incentive? Can adoption of the sick role ever occur without the non-conscious goal of securing caretaking from other (i.e., would a recluse ever assume an invalid life role)? Similarly, if adoption of the sick role is a direct result of an Interpersonal Incentive, then it would not be possible to have a Cogniform Disorder with only an External Incentive. Conversely, would it not be true that the Cogniform Condition, which by definition excludes adoption of the sick role, cannot be diagnosed with an Interpersonal Incentive, since Interpersonal incentive leads to adoption of the sick role? An alternative to the Delis and Wetter conceptualization would be to use the term “Cogniform” to identify individuals who display a non-credible cognitive presentation, and then use external incentive and adoption of the sick role (which assumes interpersonal incentive) as specifiers.

Third, in the Delis and Wetter (2007) proposed criteria, no recommendations are provided regarding the number of effort indicator failures required to make the diagnosis of “Cogniform Disorder” or “Cognitive Condition”. Do we wish to view those patients who fail eight effort indicators as comparable to those who fail one or two? The Slick et al. (1999) use of the terms “possible”, “probable”, and “definite” provided a rudimentary “effort” continuum which is missing in the Delis and Wetter (2007) algorithm. Recent research has suggested that failure on two or more effort indicators best differentiates credible and non-credible groups (Meyers & Volbrecht, 2003; Suhr, Tranel, Wefel, & Barrash, 1997; Victor, Boone, Serpa, & Buehler, 2006), however, this standard is not without false positive identifications (≤10%). Increasing numbers of effort test failures provide greater confidence in determination of poor effort; excluding patients with dementia or mental retardation, virtually none of the non-compensation-seeking (e.g., not in litigation and not attempting to secure disability compensation) patients in our archival data set of over 200 referrals to the Harbor-UCLA neuropsychology clinic failed >4 indicators. In contrast, failure on a single effort indicator was common, occurring in 42%. To guard against false positive errors in diagnosis, it is preferable that diagnostic algorithms enumerate a minimum
number of failed effort indicators required to meet diagnostic criteria, with higher numbers of failures judged to be reflective of more extreme or widespread symptom fabrication.

Finally, Delis and Wetter (2007) make failure on effort indicators interchangeable with other methods of determining non-credible cognitive symptoms (i.e., implausible symptom report and inconsistencies between standard cognitive test scores and ADLs or observed behaviors, or in test scores obtained sequentially, or in symptom report over time). Thus, in their approach, individuals can be determined to be engaging in cognitive symptom over-report without failing effort indicators, a potentially useful strategy given evidence that attorneys are coaching their clients regarding effort tests and/or clients are researching effort measures on the internet. I tested a litigating individual who passed all effort indicators, yet performed much lower on standard cognitive tests on my exam (which occurred 2 years after his injury) as compared to the normal cognitive scores he obtained immediately prior to his release from rehab (within 2 months of injury). The Delis and Wetter (2007) criteria would enable this patient to be diagnosed with Cogniform Condition. In contrast, the Slick et al. (1999) criteria preserve the pre-eminence of effort indicators in the determination of non-credible cognitive symptoms; using their criteria, the above example would at most be determined to have engaged in “possible” non-credible cognitive symptom production. Thus, unyoking the determination of non-credible cognitive symptoms from effort test failures has advantages. However, effort tests are psychometrically powerful, objective measures, and as a field, do we wish to have them treated as equal to the more subjective determinations regarding effort that can be made by non-psychologists? Are effort test failures in fact comparable to subjective evaluations of symptoms, or have the development of effort indicators “raised the bar” in detecting non-credible symptoms? Further, in terms of Daubert criteria, we know the error rate for psychometric effort measures but not for the other recommended observational techniques recommended by Delis and Wetter (2007).

It is hoped that with further evolution and advances in identification of non-credible cognitive presentations, attention will be given to “effort” subgroups/subtypes, perhaps incorporating measurement of other-deception versus self-deception, and to development of a unique role for objective psychometric approaches in documentation of symptom feigning. In addition, it may be useful to construct algorithms that specify the particular types of neuropsychological deficits that are feigned (e.g., memory, mental speed, motor, etc.), much as current somatoform designations are divided by types of feigned symptoms (e.g., neurological in conversion disorder, pain in pain disorder, multi-organ system in somatization).

References


