Development of A New Classificatory Model of Malingering

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Inclusion criteria for the classification of malingering are shaped and largely predetermined by our explanatory theories. Current theories have postulated the motivation to malinger is either the product of underlying psychopathology (pathogenic model) or criminal backgrounds (DSM III-R model). I have proposed a third model that malingering is typically an adaptive response to adverse circumstances which may best be understood in the context of decision theory. Based on this approach I have argued that indices of malingering should be empirically derived and focused on clinical presentation. Finally, I have proposed a preliminary model for the classification of malingerers which combines clinical data with corroborative evidence.

Diagnostic classification is firmly embedded in its theoretical substrates. Theories both organize our assumptions regarding etiology and provide a template for core symptomatology. DSM III and DSM III-R,[1,2] faced with divergent schools of thought on the very nature of diagnosis, sought to bypass these fundamental differences by proposing an atheoretical approach. This abrogation of theory, although politically expedient, obscured but did not lessen the conceptual underpinnings which define the parameters of psychiatric syndromes and mental disorders.[3] Malingering as a nonpathological response style (V code) is no exception; explanatory theories of malingering have largely dictated both its classificatory model and specific indices.

Rogers[4] has outlined the two existing models of malingering, namely pathogenic and DSM III-R, and also proposed an adaptational model. I will discuss the merits of each approach and their relevance to inclusion/exclusion criteria for the classification of malingering. In combining the clinical literature on the detection of malingering with the adaptational model, I will recommend a revision of our DSM III-R indices and the testing of a new classificatory model.

Pathogenic Model

The pathogenic model[5–8] postulated that malingering was an ineffectual at-

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tempt to control psychotic and neurotic processes by consciously reproducing underlying psychopathology. This tension between unconscious illness and conscious production of symptoms exemplifies the inherent difficulties in formulating distinct boundaries on conscious/unconscious and voluntary/involuntary dimensions which are necessary to classify malingerers under the pathogenic schema. Rogers, Bagby and Rector[9] offered an expanded discussion of the pathogenic model and its inherent diagnostic difficulties for the closely related disorder of factitious disorder with psychological symptoms.

The pathogenic model has fallen into some disfavor for at least three reasons. First, many malingerers do not evidence the hypothesized deterioration while others' continued impairment is dismissed as spurious. Second, Miller's now-disputed work on accident neurosis[10, 11] provided a compelling economically based motivation which competed with the pathogenic hypothesis. The salience of economic motivation is captured in the plethora of pejorative terms for fraudulent claims in civil cases, e.g., "greenback neurosis" and "compensationitis."[12] Third, with the advent of deinstitutionalization, emergence of patients' rights and improvements in mental health service delivery, the previously held Catch-22 logic, "you have to be crazy to want to appear mentally ill" was partially eroded.[13]

Hay's research[14] provided some indirect support for the pathogenic model through his review of chart diagnoses. Unfortunately, he was unable to secure sufficient numbers of malingerers with this archival approach and resorted to an informal questioning of his colleagues. Of the six "classified" malingerers, five were subsequently diagnosed with Axis 1 disorders. Interpretation of this finding is constrained by the lack of objectivity, because the result may reflect biased reporting by his colleagues (e.g., Hay does not report a single case which was originally diagnosed as mentally disordered and subsequently found to be malingering). If these methodological limitations are overlooked, it would be possible to infer that there was an underlying disorder and that the feigned symptoms represented part of a prodromal phase. An alternative explanation is that malingerers with upwards to 10 years experience had simply become more proficient at malingering!

The pathogenic model of malingering does not appear to be a compelling explanation for either etiology or motivation. Of course, mental illness and malingering are not mutually exclusive. It would stand to reason that a psychiatrically disordered individual feigning mental illness would capitalize on his/her experiences. Co-occurrences, by themselves, do not indicate any causal or etiological relationship. However, available evidence[15, 16] would suggest that suspected malingerers with well-documented borderline personality disorders might represent a special case, supportive of the pathogenic model, because feigned symptomatology of primarily a factitial nature is at least antecedent to periods of further deterioration

and the emergence of psychotic symptoms.[9]

DSM III-R Model

DSM III and DSM III-R categorically rejected the pathogenic explanations and choose instead to focus on the criminological aspects of malingering, implying a willful antisocial motivation which is reminiscent of nineteenth century views. As noted by Geller and his colleagues,[17] malingerers were previously regarded unsympathetically as unimpaired individuals who were trying to "beat the system" for either legal or economic reasons. The implicit assumption of the DSM III-R model is that socially deviant individuals (i.e., those with antisocial personality disorders) are likely to fabricate illness when embroiled in the courts (i.e., medicolegal evaluations) and evidence poor compliance with assessment and treatment attempts (i.e., uncooperativeness). Only one of the four indices escapes entirely from this moralistic/criminological perspective (i.e., discrepancies with objective findings).

DSM III-R Indices Because of its criminological focus, DSM III-R indices deemphasize clinical presentation in favor of background and situational factors. This relative inattention to clinical data may have two unwanted effects: (1) useful clinical indicators of malingering are overlooked, and (2) current detection of malingerers, even if valid, may be confounded unnecessarily by background and situational variables. I have previously offered an extended critique of the DSM III-R indices.[4] I will synopsize this discussion in the following paragraphs.

Empirical evidence to justify the use of antisocial personality disorder (APD) as an indicator of malingering is meager. Although it is true, by definition, that APD persons may lie and deceive,[2, 18] research is far from clear whether such individuals either do so more than patients with other disorders[16, 19] or more frequently engage in malingering than other persons in similar circumstances.[4] In addition, the very heterogeneity of the APD diagnosis[20] with its seemingly innumerable symptom variations would strongly suggest that APD should not be used, because it is unknown which subset of APD persons (if any) are likely to malinger.

Uncooperativeness with assessment and treatment might better serve as an indicator of state hospital patients than malingerers. Chronic psychiatric patients are often uncooperative, resulting in involuntary hospitalization and noncompliance with medication. An unknown percentage of patients actively deny symptoms in order to avoid further treatment (e.g., even such blatant symptoms as command hallucinations may be disclaimed; see Rogers et al.[21]). Paradoxically, these patients would also need to be considered as potential malingerers.

Discrepancies with objective findings is an unnecessarily ambiguous criterion (i.e., "discrepancies" may include such nonmalingering phenomena as confabulation, memory distortion, and even denial of symptoms) predicated on an unproved assumption that "objective"

findings do exist. If objective findings are available, then the whole exercise of identifying would-be malingerers becomes irrelevant. Rather than rely on imprecise reporting of subjectively experienced symptoms, clinicians would gather the necessary objective findings, independent of the patient's account. As exemplified by Rogers and Cunnien,[22] corroborative, *not* objective, data may prove useful in the assessment of patients' actual impairment, although inconsistencies are hardly firm evidence of any form of dissimulation.

Situational variables probably exert a considerable influence on individuals' self presentation and may increase the likelihood of malingering (see the discussion below on the adaptational model). Medicolegal evaluations as a criterion is both too broad in its inclusion of forensic cases where malingering is unlikely (e.g., child custody cases) and too narrow in its exclusion of other adversarial assessments (e.g., feigned illness in educational and military settings).[4]

Testing the DSM III-R Model I conducted a simple archival study of DSM III-R indices in relation to the classification of malingerers on an inpatient forensic unit (METFORS). Malingerers (N = 24) were originally identified by the clinical staff as part of a larger program for the study of malingering[23, 24] and evidenced marked differences in symptom endorsement when compared with psychiatric patients. In addition, a random sample of patient records (N = 113) were also reviewed for the presence of DSM III-R indices. Two research assistants re-

viewed summary data from clinical records (court evaluations, psychiatric and psychological reports, social work histories); they were blind to the purpose of the study, inasmuch as they were led to believe that it was a "survey of nonconformity."

DSM III-R has indicated that a "high index of suspicion" should be exercised in any case with two or more indices. Because my entire sample is forensic, all meet at least one criterion (i.e., medicolegal evaluations). In addition, 57.0-percent of the sample had two or more indices, providing a reasonable test of the DSM III-R model. As summarized in Table 1, the use of "two or more indices" provides only a modest improvement in the true positive rate (from 13.6 to 20.1 percent) but at an unacceptable high false positive rate (79.9 percent).

Table 2 provides a summary of each DSM III-R indicator in relationship to the classification of malingering. At least within a forensic sample, the presence of APD does not appear to signal a

Table 1
Effectiveness of DSM III-R Indices in Classifying Malingerers

Number of DSM III-R Indices	True Positives (%)	False Positives (%)
1	8 (13.6)	51 (86.4)
2	13 (20.0)	52 (80.0)
3	2 (18.2)	9 (81.8)
4	1 (50.0)	1 (50.0)
2 or more	16 (20.1)	62 (79.9)

Malingerers were independently classified by clinicians with differences in response styles corroborated on the SIRS; because clinicians were knowledgeable of the DSM III-R indices, these percentages may reflect an over-estimate of true positives. The category of four indices has an insufficient sampling (n = 2) to draw any conclusions.

Table 2
Frequencies and Percentages of DSM III-R Indices for Malingering and Inpatient Groups

DSM III-R Indices	Malingerers (%)	Inpatients (%)	Chi Square	p
Antisocial personality disorder			.01	.94
Present	5 (3.8)	20 (14.6)		
Absent	19 (13.9)	93 (67.9)		
Uncooperativeness			4.04	.05
Present	4 (2.9)	43 (31.4)		
Absent	20 (14.6)	70 (51.1)		
Discrepancies			35.84	.00001
Present	15 (10.9)	11 (8.0)		
Absent	9 (6.6)	102 (74.5)		

Because all patients were referred by the courts, we could not examine the usefulness of "medicolegal evaluations."

greater likelihood of malingering. Contrary to expectations, uncooperativeness was *not* associated with malingering. Quite the opposite, *bona fide* patients, mostly psychotic, were more frequently uncooperative with assessment and treatment than were malingerers (31.4 percent vs. 2.8 percent). Of the three indices which could be tested, discrepancies with objective findings appeared moderately useful. By itself, it achieved a true positive rate of 62.5 percent (15 of 24 malingerers) with a false positive rate of 42.3 percent (11 of the 26 who met the criterion were not malingerers). These data would suggest that "discrepancies" may be worth retaining in revised classifications of malingering.

The usefulness of the DSM III-R model is brought into question by this study, although its conclusions can be questioned on methodological grounds. As noted previously,[25] "ground truth" can not be established for malingerers (i.e., even an "admission" may be nothing more than a variation of the Epimenides paradox). Despite the efforts to classify malingerers, some malingerers may have been missed, thus skewing the

data. Furthermore, some clinicians who preferred diagnoses for bona fide patients may have been reluctant to raise the possibility of a coexisting classification of malingering. Because of these limitations, I view these results as tentative although hardly encouraging of the DSM III-R model.

Adaptational Model

The adaptational model is an extension of decision theory in which choices are made in risky situations on the basis of expected utility and likelihood.[26] It is postulated that malingerers perceive their circumstances as both adversarial and risky. In response to this, would-be malingerers seek the most advantageous choices to maximize their chances of success, in whatever manner they may wish to define it. Malingering is one of many options that may be considered. The process is seen as "adaptive" (i.e., seeking the most effective manner of achieving one's goals), although the end result may not always be so (e.g., miscalculation of the probabilities). The designation of this framework as an adaptational model emphasizes this adaptive process.

Research data in support of the adaptational model are tentative.[4] An increased incidence of malingering has been observed. In military settings,[27] under more adverse circumstances, particularly during periods of heavy combat,[7] and in criminal forensic settings,[28, 29] particularly when defendants are faced with very serious charges,[30] many more individuals feign mental illness than under comparatively benign circumstances.

Several studies have attempted experimental manipulations of adversarial situations and their effects on malingering. Braginsky, Braginsky, and Ring[31] studied highly institutionalized schizophrenic patients, some of whom wished to remain hospitalized indefinitely. Under relatively neutral instructions (i.e., a routine evaluation to review patient privileges) those who desired to stay in hospital reported similar levels of psychopathology as those who were not so motivated. However, when faced with adversarial circumstances (i.e., an evaluation to determine discharge), highly institutionalized patients reported substantially more psychopathology and produced more impaired speech than did the less institutionalized group. Wilcox and Krasnoff[32] found comparable results in a similar study of highly institutionalized VA patients with more MMPI fake-bad profiles under adverse (i.e., threat of discharge) than neutral conditions.

Walters[33] examined a naturally occurring experiment with federal inmates completing the MMPI under a neutral condition (i.e., attending groups) and two adversarial conditions (i.e., evaluations of mental illness to justify single cell request and parole assessments). As expected, validity indicators of the MMPI were unremarkable under the neutral condition. When confronted with adversarial conditions, inmates appeared to adapt to the circumstances: fake-bad indicators were prevalent when mental illness might achieve the desired result (a single cell); fake-good indicators were prominent when adjustment was the obvious goal (release on parole). Several investigators[34, 35] have found similar results with forensic groups in which the likelihood of dissimulation depends on the adversarial nature of the particular assessments (e.g., pretrial appear more likely to malinger than posttrial).

The adaptational model shows considerable promise as a conceptual framework for understanding malingering. Importantly, it avoids the mad (pathogenic) versus bad (DSM III-R) dichotomy. The adaptational model would suggest that inclusion criteria should focus on the adversarial nature and more centrally on the clinical presentation. Available research would suggest the incidence of malingering rarely exceeds 3 to 8 percent, even under adversarial conditions.[4] Therefore, our attention must be focused more on *how* an individual presents (clinical features and reported symptomatology) than *when* (adversarial versus nonadversarial).

Classificatory Model

Two conclusions would appear to emerge from the foregoing discussion of conceptual models. First, these models

play an influential role in how we classify malingerers. Second, the current DSM III-R model, largely because of its criminological emphasis, does not appear to capitalize on a growing body of empirical research. I plan to distill from the studies of malingering a new classificatory model based on a multimethod cross-validation approach.

The absence of "ground truth" is one of the most vexing problems of malingering research; the veridicality of our classification is always open to question. To circumvent this problem, most malingering research has relied exclusively on simulation designs in which subjects are asked to feign mental illness under experimental instructions. Unfortunately, this research is particularly vulnerable to the simulation-malingering paradox,[36] which occurs "when we ask subjects to comply with directions to fake, in order to study individuals who fake when asked to comply." One solution is to only accept results where there is a convergence of findings between studies of actual malingerers and simulators. This approach attempts to compensate for the shortcomings of both known group design (i.e., uncertainty in classifying malingerers) and simulation design (i.e., questionable generalizability from simulators to malingerers).

Research by Johnson and his associates[37] underscored the need that research findings should be cross validated by combining interview-based and psychometric methods. These investigators found virtually no relationship between the two methods in an early study of VA patients. Before adopting any inclusion criteria for malingering, its usefulness should be demonstrated on both methods.

I will emphasize a series of studies carried out at METFORS, Clarke Institute of Psychiatry, because they appear to be the first to combine simulation and known group designs as well as integrate structured interview and psychometric methods. The first of these studies[23] examined differences in how simulators and suspected malingerers responded to a structured interview (i.e., the SIRS) as compared with psychiatric and community samples. In addition, The M test[38] and with select samples (i.e., simulators, community controls, and outpatients) the MMPI were also administered. The second study[39] employed a simulation design to examine differences on the SIRS and M test between simulators and honest responders in a correctional population. The third study,[40] which is in the data analysis stage, compared SIRS and M test results on coached and uncoached simulators to university controls and the psychiatric inpatients reported in the first study. I will also distill findings from other psychometric studies as they relate to clinical indicators of malingering. In an effort to keep this discussion clear and concise, I will organize the research data according to specific indicators which appear to be the most effective and stable:

Rare symptoms Items within this strategy are very infrequently endorsed by clinical populations. This method was first adopted with the MMPI in which a set of 64 items were selected for the F scale which were endorsed by no

more than 10 percent and often less than five percent of the normative samples.[40] The F scale reflected very atypical symptoms and highly idiosyncratic attitudes, beliefs, and self-descriptions. Although potentially confounded by atypical psychopathology or random responding, the F scale remains the standard measure of malingering on the MMPI.[42] Our studies[23, 39, 40] confirmed that the RS (rare symptoms) scale of the SIRS was a consistent discriminator between feigners (simulators and suspected malingerers) and community, clinical, and correctional samples. In one study,[23] we found a close association between the RS and F scales (i.e., $r = .79$), suggesting a convergence of structured interview and MMPI-based methods.

Indiscriminant Symptom Endorsement Based on case studies, Rogers[43] observed that some malingerers evidently adopted the strategy that "more is better" as observed in the sheer number of endorsed symptoms. This strategy of assessing indiscriminant symptom endorsement was adapted to the MMPI[44] with those endorsing 64 percent or more critical items being suspected of malingering. In one of our studies,[24] we found an endorsement of MMPI critical items exceeding 66 percent was typically indicative of malingering. On the SIRS, an endorsement rate on a subset of 32 items exceeding 61 percent was highly suggestive of feigning.

Blatant Symptoms Both MMPI literature[45] and clinical case studies[43] suggest that malingerers are more likely to endorse a high percentage of symptoms which are "obvious" indicators of

psychopathology. On the MMPI, the ratio obvious and subtle items[44] has proven a productive strategy for the detection of malingerers. Our research on the SIRS suggested that a pattern of blatant symptoms was strongly indicative of malingering, irrespective of the setting (community, clinical, or correctional).

Improbable Symptoms The clinical literature suggested that malingerers often report fantastic or preposterous symptoms.[43] Based on the SIRS, we found that feigners were likely to endorse several improbable symptoms, but that these almost never reported by psychiatric samples or other controls. Research on the MCMI-II[46] has suggested that the VI (validity index), consisting of absurd items may have considerable utility in identifying simulators. In addition, there is weak evidence from the M test[38] that a high proportion of improbable symptoms may be indicative of feigning.

Classificatory models often become self-confirming as research becomes narrowly defined by the inclusion/exclusion criteria. In suggesting a tentative model for the classification of malingerers, it is not to delimit efforts in the detection of malingerers or to constrain further conceptualization. Indeed, research from the SIRS would suggest several additional strategies worthy of more complete investigation, namely symptom combinations (i.e., unusual pairings of coexisting symptoms) and symptom severity (i.e., reporting an unusually large number of symptoms of extreme or "unbearable" severity). These have not been

Table 3
Tentative Model for the Classification of Malingering

A. A pattern of self-reported symptoms which would included at least one of the following:
  1. Endorsement of an unusually high number of rare symptoms (i.e., symptoms which are very infrequent in *bona fide* patients).
  2. Endorsement of an unusually high number of blatant symptoms (i.e., symptoms which are immediately recognizable by nonprofessionals as indicative of severe psychopathology). It is often useful to ask regarding symptoms which are not obvious signs of mental illness (e.g., early morning awakening) for the purposes of comparison.
  3. Nonselective endorsement of symptoms which appear to be improbable based on the sheer number.
  4. Endorsement of absurd and preposterous symptoms. This criterion should only be applied to individuals who appear coherent and relevant in their speech, because some grossly psychotic patients also may endorse absurd responses.
B. Corroboration of dissimulation through one or more of the following:
  1. Collateral interviews which suggest that the individual's self-report is strongly indicative of feigning (e.g., family provides evidence of relatively good adjustment in contrast to self-described "gross impairment").
  2. Pronounced differences between reported prior episodes and their clinical documentation. Differences should be dramatic and strongly suggestive of feigning (e.g., claims of multiple suicide attempts requiring medical interventions while hospitalized, when there is no evidence in the clinical record of any suicidal ideation or gestures).
  3. Unequivocal evidence of feigning on standardized measures such as the MMPI and the SIRS.
C. Evidence based on self-report or collateral interviews that the individual's motivation for feigning was *not* exclusively a desire to be a patient or an attention-getting device in a borderline patient.

included in the current model because of the lack of psychometric data which I employed as a prerequisite for inclusion in this preliminary model. Bearing these caveats in mind, a new classificatory model of malingering is proposed in Table 3.

I have adopted the phrase "unusually high number" to reflect differences in assessment style which are likely to result varying levels of symptom reporting and endorsement. On one hand, when malingering indices are spontaneously reported, they provide convincing evidence of dissimulation, because the symptoms in question are generated entirely by the suspected malingerers. On the other hand, structured approaches, such as the SIRS and MMPI, offer standard comparisons which may allow for the accurate identification of those feign-

ing mental illness. Because of these respective advantages, I have advocated the combined use of both unstructured and structured approaches. Importantly, this model is limited to the exaggeration/fabrication of psychopathology and should not be applied to purported neuropsychological deficits where the emphasis is on decrements in cognitive functioning rather than the generation of feigned symptomatology.

As a diagnostician and applied researcher, I fear unbounded enthusiasm as much as unnerving silence. With this article, I hope to renew interest and debate in how we understand malingerers and how we classify them. Much more needs to be done to test competing models, both classificatory and explanatory, of malingering and related response styles.

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