

High Risk of False Classification of Injured People as Malingers by the Structured Inventory of Malingered Symptomatology (SIMS): A Review

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Abstract

Background: Tests that purport to measure malingering such as the Structured Inventory of Malingered Symptomatology (SIMS) are associated with a risk to the public. The magnitude of this risk can be operationalized as the frequency of false positives, i.e., proportion of persons classified as malingers and thus denied therapy and other medical benefits.

Method: This review deals with the outcomes of studies of content, divergent, and criterion validity of the SIMS. We calculated an average risk to the public caused by the rates of false positives in published SIMS data on several clinical groups: psychiatric patients, survivors of high impact motor vehicle accidents (MVAs), and trauma-exposed war veterans.

Results: (1) Content analyses demonstrated that almost all SIMS items describe medical symptoms, but these are fallaciously scored by the SIMS as indicative of malingering.

(2) Calculations of divergent validity suggest that the SIMS measures the presence of medical symptoms rather than their malingering. For instance, SIMS total score correlates positively and highly with PCL-5 measure of PTSD ($r=.60$). The SIMS Amnesic Disorder scale correlates positively with Rivermead measure of post-concussive symptoms ($r=.42$). The SIMS Neurological Impairment scale correlates positively with neuropsychological symptoms measured by Post-MVA Neurological Symptoms (PMNS) scale ($r=.41$).

(3) Criterion validity results of a recent meta-analysis indicated no significant capacity of the SIMS to differentiate legitimate patients from malingers. Furthermore, published SIMS data indicate extremely high rates of false positives: 82.7% of US veterans with PTSD, 78.3% of patients injured in high impact MVAs, and 72.0% of legitimate psychiatric inpatients. An average risk to the public (i.e., the risk for genuine medical patients to be falsely classified as malingering) as suggested by the weighted mean for these SIMS data is 78.8%. Patients with more medical symptoms are significantly more likely to be fallaciously classified by their SIMS scores as "malingers" than their less symptomatic counterparts.

Discussion and Conclusions: The SIMS is a fatally flawed psychological test with alarmingly high iatrogenic rates. Its use constitutes malpractice.

Keywords: malingering, risk to public, SIMS, neuropsychology, neurology

INTRODUCTION

The Structured Inventory of Malingered Symptomatology (SIMS)^[1,2] is a widely used test for detection of malingering medical symptoms.

Various issues with the SIMS were raised by recent publications with respect to its validity and to the risk of harm posed by this test to patients with genuine injuries or genuine illness.

METHOD

This review of SIMS studies evaluates (1) if the SIMS items have adequate content validity, and (2) if SIMS scores have a reasonable concurrent, or divergent validity, and criterion validity, and (3) the degree of risk to the public (i.e., to genuinely injured or genuinely ill persons) presented by the SIMS.

Furthermore, this article also reviews whether or not the SIMS has ever been validated in a manner consistent with the test standards stipulated by the American Psychological Association (APA),^[3]

RESULTS

Content Validity of the SIMS

Content validity of a test can be defined as the congruence of the content of its individual items with the intended purpose of a test.^[3] In the case of the SIMS, the intended purpose is to differentiate malingerers from legitimate medical patients. The content analyses of SIMS scales^[4,5,6,7] showed that their items list almost only legitimate medical symptoms, but falsely score their presence as indicators of malingering. The SIMS consists of 75 items. The items are divided into 5 scales: the Psychosis (P), Affective Disorders (AF), Neurologic Impairment (NI), Amnesic Disorder (AM), and Low Intelligence scale (LI) scale. Each of these 5 SIMS scale consists of 15 items.

The AF scale lists only legitimate symptoms of depression or those associated with depression.^[5]

The NI and AM describe mainly legitimate neuropsychological symptoms^[6] such as impaired memory, tinnitus, impaired attentional focus, and peripheral neuropathy (numbness, reduced control over the limbs, paresthesia such as the formication syndrome). Such symptoms are not uncommon in war veterans after repeated exposure to explosive blasts or also in persons injured in high impact motor vehicle accidents (MVs).

SIMS P scale consists mainly of items describing symptoms of psychosis or also beliefs that may be endorsed by patients with acute or severe psychosis.^[4] Almost all medical symptoms listed in these AF, NI, AM, and P scales could be endorsed by patients and by malingerers at similar rates,^[4,5,6] but are scored fallaciously by the SIMS as indicators of malingering. Briefly, the SIMS differentiates reporters from non-

reporters of medical symptoms, but it has no capacity to differentiate legitimate patients from malingerers.

The Low Intelligence scale (LI) of the SIMS consists mainly of arithmetic and logical reasoning tasks and of tasks assessing general knowledge on which patients tired by chronic illness, or those with the post-concussion syndrome (e.g., some war veterans), or persons whose attentional focus is disrupted by chronic pain may perform worse than uninjured persons.^[7] Since malingerers feigning cognitive deficits intentionally fail many tasks on SIMS Low Intelligence (LI) scale, the LI scale cannot differentiate the malingerers from legitimate patients.

Some SIMS items could be identified as inappropriate even by non-psychologists as having no capacity whatsoever to differentiate malingerers from non-malingering patients: *"I am depressed all the time," "I have trouble sleeping,"* or *"I have difficulty remembering the day of the week."*

A 2019 study^[8] examined the content overlap of SIMS with items of the Rivermead Post-Concussion Symptoms Questionnaire^[9] and also with those of the Post-MVA Neurological Symptoms scale.^[10] The tabular summaries indicated that more than 50% of the 75 SIMS items are descriptive of symptoms in post-concussion and whiplash spectrum,^[8] but are fallaciously scored in the SIMS as indicators of malingering. This iatrogenic bias affects clinical groups in which post-concussive or post-whiplash symptoms (or similar neuropsychological pathology) are prevalent:

- (1) war veterans exposed repeatedly to explosive blasts,
- (2) survivors of high impact motor vehicle accidents (MVs),
- (3) patients with incipient signs of certain major neurological conditions (e.g., multiple sclerosis, Parkinson's, Alzheimer).

Convergent and Divergent Validity of the SIMS

Convergent validity is the extent to which the test correlates with other tests that measure the same construct, i.e., in this case, malingering. However, there is no perfect test to diagnose malingering. Intelligent, well informed malingerers can memorize and feign relevant symptoms of some narrowly defined medical

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conditions without being detected by the existing tests. Furthermore, the detection of malingering of “any” medical symptoms or “any” medical conditions by one brief psychological test is an unrealistic goal. There is an enormous scope and variety of medical conditions. Some of medical conditions are still inadequately defined.

Divergent validity can be defined here as a lack of positive correlations to existing tests with which the SIMS should be correlated inversely. For instance, the SIMS should not correlate positively with standard measures of memory impairment, low intelligence, post-concussive or whiplash symptoms. Positive correlations would imply that the SIMS measures genuine medical pathology rather than malingering, or that the majority of patients endorsing such common medical symptoms are mostly malingers (a rather unlikely case).

For instance, the SIMS should not correlate positively with the clinical diagnosis of PTSD or with scores on the PTSD Checklist for DSM-5, known worldwide as the PCL-5.^[11] The available evidence in this respect is very damaging for the SIMS. With respect to diagnoses of PTSD, an excellent statistical study by Erika Wolf’s team^[12] included 171 US veterans of whom 99 were clinically assessed as having probable PTSD and 72 as probably without PTSD. The SIMS cutoff of > 14 points (i.e., the cutoff recommended in SIMS manual) classified 82.7% of the former and 41.8% of the latter as malingers. This finding is consistent with our view of the SIMS as a list of legitimate medical symptoms on which more medically ill patients are likely to obtain higher scores, i.e., they are more likely to be classified as malingers. From these proportions published by Wolf’s team, we calculated the extent of systematic bias of the SIMS to classify patients with PTSD as malingers: the corresponding correlation coefficient is $\phi = .42$ ($p < .001$).

Correlations of the PCL-5 to SIMS scales calculated by Erika Wolf on her sample of 171 veterans were all significant ($p < .001$): .60 to the total SIMS score, .58 to Affective Disorder, .54 to Amnesic Disorder, .52 to Neurological Impairment, .46 to Psychosis, and .35 to Low Intelligence (Dr. Wolf, personal communication, August 13, 2020). These positive correlations indicate that US veterans with more symptoms of PTSD are, in fact, significantly more likely to be branded by SIMS psychologists as malingers.

Of methodological concern is also the overlap of item content of SIMS Neurologic Impairment (NI) and Amnesic Disorder (AM) scales with those of Rivermead Post-Concussion Symptoms Questionnaire^[9] and also with those of the Post-MVA Neurological Symptoms scale (PMNS).^[10] Our calculation of data from 23 survivors of high impact MVAs (see sample description in Cernovsky et al., 2020^[13]) showed that the SIMS Amnesic Disorder scale (i.e., the scale listing various aspects of memory impairment) correlated positively with the Rivermead ($r = .42$, $p = .022$, 1-tailed) and that the SIMS Neurologic Impairment scale (that lists neurological symptoms often encountered in patients with whiplash injuries) correlated positively with the PMNS scale ($r = .41$, $p = .036$, 1-tailed). Experts in statistics might also consider that these correlations underestimate the fallacious nature of SIMS Neurologic and Amnesic scales due to the well-known adverse impact of restricted score range on sizes of correlation coefficients.

Criterion Validity of the SIMS and its Rates of False Positives

The purpose of the SIMS is to differentiate malingers from legitimate medical patients. There is surprising paucity of any adequate data in the SIMS manual^[2] with respect to direct statistical comparisons of SIMS scores of legitimate patients to those of malingers. Since the SIMS is mainly a list of legitimate medical symptoms that are absurdly scored in the SIMS as indicators of malingering, such lists are endorsed by legitimate patients and malingers at similar rates. Tests with unusually high frequency of false positives may raise the suspicion of a fraud, when administered by psychologists rewarded financially (e.g., by car insurance companies) for being “especially skilled” in detecting malingers.

Statistical rates of SIMS false positives among legitimate medical patients were examined in three major clinical groups: genuine psychiatric patients,^[14] US veterans with probable PTSD,^[12] and persons injured in high impact motor vehicle accidents (MVAs).^[13] The outcomes of these studies were as follows.

(1) The team led by Richard Rogers^[14] analysed data from 107 psychiatric inpatients, described in following words: “On average, the inpatient had been hospitalized at the treatment facility for just over a

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week ($M = 7.81$ days, $SD = 5.36$) before participating in the study. Nearly half of these patients (48% or 44.4%) had experienced multiple traumas, both childhood and adult, with large numbers having been diagnosed with post-traumatic stress disorder (83% or 77.5%). In addition, mood disorders predominated, with major depressive disorder (44% or 41.1%) and bipolar I disorder (35% or 32.7%) being the most common."^[14]

These psychiatric patients were divided into a group of 54 patients instructed to respond honestly and a group of 53 instructed to feign greater degree of disability than they have. The reader may recall that the cutoff for total score recommended in the SIMS manual is > 14 points. The data collected by Rogers's team indicated that, "With this inpatient sample, the recommended SIMS total cut score of >14 functioned poorly, because most genuine responders also exceeded this cut score (i.e., specificity = .28). Even at a 25% base rate, more than two thirds (positive predictive power, PPP = .70) of those identified will be genuine responders. At least for these inpatients, a much higher SIMS total cut score (> 44) is required to achieve a very high specificity." Briefly, the rate of false positive in this sample of genuine psychiatric patients, i.e., the proportion of those misclassified by the SIMS as "malingerers," was 72.0%.^[14]

With respect to using the cutoff score of > 44 points, it was characterized by Rogers's team^[14] as having "miniscule sensitivity," i.e., negligible clinical usefulness.

Table 1. proportions of survivors of high impact MVAs misclassified as malingerers

SIMS scales:	Cutoff score:	% misclassified as malingerers by the SIMS
SIMS total score	>14 points	78.3%
SIMS Affective Disorder (AF)	>5 points	82.6%
SIMS Neurologic Impairment (NI)	>2 points	73.9%
SIMS Amnestic Disorder (AM)	>2 points	73.9%
SIMS Low Intelligence (LI)	>2 points	65.2%
SIMS Psychosis (P)	>1 point	47.8%

The reader might wonder why almost a half of these 23 patients were also misclassified as "malingering psychosis" by SIMS P scale. The answer lies in the content of P scale items and in its uncommonly low cutoff score (> 1 point). While many P items describe blatantly psychotic symptoms, some others could be endorsed even by mentally healthy persons who do

not have any intent to feign psychosis, see a detailed discussion in Cernovsky et al.^[4] For instance, the Item 28 "I believe that the government has installed cameras in stop lights to spy on me" may be endorsed by some residents of large urban areas where these cameras have indeed been installed in the effort to enforce compliance with traffic regulations.

(2) The study by Erika Wolf's team^[12] included 99 US veterans clinically assessed as having probable PTSD. As already mentioned, the SIMS cutoff of > 14 points classified 82.7% of them as malingerers. This rate is approximately twice higher than the rate of 41.8% found by Wolf's team in veterans assessed clinically as probably without PTSD.

(3) Recent meta-analysis compared SIMS data^[13] of instructed malingerers to data of healthy normal controls, and to data of patients with mild injuries from car accidents, and to patients injured in high impact car accidents. Patients injured in high impact MVAs had SIMS scores similar to persons instructed to feign post-MVA symptoms (with some exceptions). These both groups had significantly higher SIMS scores than normal controls and also than those of patients with mild injuries from car accidents.^[13]

High impact car accidents are usually associated with subsequent post-concussion and whiplash syndrome. As already explained, more than 50% of SIMS items overlap, in their content, with post-concussive and whiplash symptoms. This explains the high proportions of SIMS false positives among such injured patients, see Table 1 (the data is from a sample described in the meta-analytic study.^[13])

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Furthermore, even samples of normal, presumably mentally healthy persons (including also samples of university students) without any motivation or intent to malingering obtain scores in the malingering range. This has been demonstrated in a meta-analytic study by Cernovsky and Fatahi^[15] in which proportions of false positives of normal controls were estimated via z score location of SIMS cutoff points as follows: 41.7% for Low Intelligence (LI) scale, 28.8% for Psychosis (P), 24.8% for Affective Disorders (AF), 17.9% for Amnesic Disorders (AM), and 15.9% for Neurologic Impairment (NI).

Estimate of Average Risk to Public (Genuine Medical Patients) Presented by the SIMS

Risk to the public can be estimated by averaging published data on frequencies of false positives of trauma exposed US veterans with probable PTSD,^[12] persons injured in high impact accidents,^[13] and Rogers's genuine psychiatric patients.^[14]

Table 2. Risk posed to public (i.e., to genuine medical patients) by SIMS use

Sample:	Risk to comparable clinical groups
Rogers's genuine psychiatric inpatients (N=54)	72.0%
Wolf's US veterans with probable PTSD (N=99)	82.7%
High impact MVA survivors (N=23)	78.3%
Weighted average risk to public (based on N=176)	78.8%

Thus, the average risk to public, when sustaining injuries in high impact car accidents, or when developing PTSD or psychiatric illness requiring hospitalization, is estimated here at 78.8%. However, such estimates may vary extensively from sample to sample, and depending on the severity of the injuries or of symptoms, and also according to the type of medical symptoms. Certainly not all medical symptoms are listed in the SIMS.

Pseudovalidations of the SIMS

The original "validation" of the SIMS^[1,2] compared only college students instructed to feign medical symptoms to those instructed to respond honestly. Since almost all SIMS items list legitimate medical symptoms, students reporting more of such symptoms (i.e., the instructed malingerers) scored higher on the SIMS than those reporting few or no symptoms (i.e., the honest responders). From a logical perspective, this "validation" of the SIMS only shows that this test differentiates reporters from non-reporters of medical

From a logical perspective, almost everybody could be, one day, injured in a car accident or other vehicular accident and may be "assessed," on request from the car insurance company, by a hired SIMS psychologist. Similarly, many persons may develop PTSD after exposure to trauma and many other persons develop other psychiatric symptoms due to internal biochemical imbalance. Such persons with legitimate medical symptoms are at special risk to be branded as malingerers by the SIMS and thus deprived of timely therapies and of other insurance benefits.

The proportions from already published studies are listed in Table 2. The bottom row of the table indicates the estimated average risk, calculated as the weighted mean (i.e., with a correction for sample sizes). The specificity of SIMS with the cutoff of 14 reported in Rogers et al.^[14] was .28. This implies the rate of false positives of 72.0%.

symptoms, but it provides no sufficient evidence that the SIMS could also differentiate malingerers from legitimate patients. No adequate samples of legitimate medical patients were involved in such attempts at demonstrating the validity of the SIMS.

The authors of the SIMS (i.e., Glenn P. Smith and Gary K. Burger)^[1] named their untrustworthy validation procedure "an analogue validation." Although their "analogue" procedure does not meet standards of the American Psychological Association for test validations,^[9] it has been since adopted by some other authors. Particularly noteworthy is a study by Parks, Gfeller, Emmert, and Lammert^[16] which attempted to validate the SIMS for detecting feigned post-concussion syndrome and the PTSD: a logically bizarre project, given that about a half of SIMS items overlap with post-concussive symptoms and those of PTSD. This overlap was not even discussed by Parks's team. Instead, they concluded that "*the SIMS Total score produced the highest sensitivities for the PCD symptoms and PCD + PTSD symptoms groups*

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(.89 and .85, respectively), and to a lesser extent, the PTSD symptoms group (.69).” Their study reported no reasonable specificity data: there were no genuine patients involved in that study. Such studies have no relevance to detection of malingers when assessing potentially legitimate medical patients.

Concerns About SIMS Use on Severely Ill Psychotic Patients

The SIMS is used widely in forensic settings to detect malingering of psychiatric illness. Such fallacious diagnosing of malingering via SIMS deprives severely ill forensic inmates of psychiatric therapy. If eventually released from jail, they are likely to be re-incarcerated and thus become a financial burden to society because their psychiatric illness prevents them from adjusting socially.

Unfortunately, the SIMS is also fallaciously used on US veterans who developed severe psychiatric illness during their military duty and should have access to medical therapies, rather than being punished for being ill via court-martial.

From a logical perspective, psychiatric symptoms such as delusions, hallucinations, and thought disorder make it more likely that the patient would endorse or misinterpret many more than only 14 of the 75 SIMS items. The SIMS manual^[2] (pages 18-19) by Smith and Widows describes a case history of a 20 year old African American college student, a male charged with robbery and malicious destruction of an occupied dwelling by the use of explosives. At the time of his psychological assessment via SIMS, this patient had been already hospitalized for one month in a forensic psychiatric unit. The psychological evaluation was to determine his psychiatric diagnosis and criminal responsibility. According to description in the SIMS manual, this patient had unstable occupational history and reported hearing “voices” since the age of 10 or 11, telling him to kill himself or others, and in fact, was seen at a hospital emergency room for superficial burns to his face four months prior to his incarceration. He reported command hallucinations telling him to light a puddle of gasoline on fire in order to burn himself. This patient’s total SIMS score was 20 points and his SIMS Psychosis scale score was 10 points: both scores are well within the “malingering” range. Presumably in effort to support the SIMS diagnosis of this particular patient as a malingerer, the SIMS manual mentions

that this patient “had demonstrated no response to a one-month trial of antipsychotic medication during his inpatient hospitalization.” However, experienced clinicians know that severely psychotic patients might often need more than 6 months before they adequately improve even on excellent antipsychotics such as clozapine.

The SIMS manual also indicates that this patient’s diagnosis of malingering was supported by his scores on the Structured Interview of Reported Symptoms (SIRS)^[17] and on the Personality Assessment Inventory (PAI)^[18], however, these tests have not been adequately validated for diagnosing so severely psychotic patients in an acute episode of illness. With respect to the SIRS, a meta-analytic study by Green and Rosenfeld^[19] concluded that “genuine patient samples were significantly more likely than nonclinical samples to be misclassified by the SIRS as feigning.”

Of methodological concern in this context is also the relationship of SIMS scores on the Psychosis scale to scores on the other four SIMS scales and to total SIMS score. Correlational data reported by the team led by Richard Rogers^[14] indicated that all of these intercorrelations in a sample of their 54 genuine psychiatric inpatients (those instructed to respond honestly) were significant: .70 to Amnesic Disorder, .67 to Neurologic Impairment, .65 to the Low Intelligence, .49 to Affective Disorder, and .87 to total SIMS score. It is noteworthy that the highest correlation is with SIMS total score: patients with high psychosis scores (those reporting acute and severe psychotic symptoms on the SIMS) are very likely to be also misclassified as malingers by their total SIMS scores.

Rare Symptoms (RS) and Symptom Combination (SC) Scales

Of methodological interest is an innovative study by Rogers’s team which was based on comparing 2 groups of their genuine psychiatric inpatients of whom 54 were instructed to respond honestly and 53 instructed to feign a more extensive psychiatric disability than they really have.^[14] This innovative methodological procedure was not intended to validate the existing SIMS scales, but was instead developed in order to create new experimental SIMS scales, via statistical analyses of existing SIMS items and of their paired combinations. The scales are now known as the Rare

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Symptoms (RS) scale and Symptom Combination (SC) scale. For the RS scale, the following procedure was used: *“The rare symptoms (RS) scale was created by identifying SIMS items endorsed by less than 10% of genuine responders but more than 25% of feigners.”*

^[14] The SIMS RS scale developed by Rogers contains 15 SIMS items. The second strategy used by Rogers was based on identifying unlikely combination of symptoms, those frequent in feigners but infrequent in the honest group: *“The correlations of all SIMS pairs were first calculated. Pairs of items were selected on two criteria: (a) they were uncorrelated or negatively correlated for genuine responders; and (b) they are positively correlated for feigners and accounted for more than 10% of the variance (phi coefficient >.35).”*

^[14] The SC scale contains 13 pairs of SIMS items. Although this Rogerian methodological procedure is very promising, it has been unfortunately used, so far, solely on existing SIMS items which represent various legitimate medical symptoms. As a consequence, the correlational data of the RS and SC scores to the already previously existing SIMS scales (i.e., to SIMS false measures of malingering) are disappointing because they are all significant and in the positive direction. Specifically, intercorrelations of RS scale to the original SIMS scales in Rogers’s sample of 54 genuine psychiatric inpatients (those instructed to respond honestly) were .83 to total score, .76 to Low Intelligence, .73 to Psychosis, .52 to Neurologic Impairment, .47 to Amnesic Disorder, and .40 to Affective Disorder. ^[14] Similarly, the intercorrelations of SC scale to the original SIMS scales were .82 to total score, .61 to Low Intelligence, .62 to Psychosis, .73 to Neurologic Impairment, .57 to Amnesic Disorder, and .46 to Affective Disorder. ^[14] This suggests that the RS and SC scores are probably higher in patients with greater number of legitimate medical symptoms than in their less symptomatic counterparts.

A damaging statistical evidence against the RS scale comes also from an ANOVA: the RS scores of survivors of high impact car accidents did not differ significantly from Rogers’s psychiatric patients instructed to exaggerate. Both groups scored significantly higher than psychiatric patients responding honestly.^[20]

DISCUSSION

The available data suggest that the estimated risk to public (i.e., to genuine medical patients) presented by SIMS use is 78.8%, but for obvious reasons, such

estimates may vary from sample to sample and depending on the type and severity of the injuries or of medical symptoms. For instance, certainly not all medical symptoms are listed in the SIMS. Patients with symptoms listed in the SIMS (and fallaciously scored as indicative of malingering) are at especially high risk. Too many of these legitimate medical symptoms are encountered frequently in clinical groups such as war veterans after exposure to head and spine trauma in explosive blasts, or patients with a major neurological illness, or persons injured in high impact vehicular accidents.

As already explained, more than 50% of SIMS items overlap with those of post-concussion syndrome and of post-whiplash syndrome.^[8] Symptoms somewhat parallel to the concussion or whiplash syndrome are also present in certain other disabling major neurological conditions.

The reader may consider that not only the Neurologic Impairment and Amnesic Disorder scales of the SIMS but also its Low Intelligence (LI) scale fallaciously classifies patients in these clinical groups as “malingerers” because it includes arithmetic and logical reasoning tasks on which persons with the post-concussion syndrome (and those with similar neuropsychological symptoms) may perform poorly, without any intent to malingering.^[7] Of interest in this respect are, for instance, results of statistical studies of LI scores of injured motorists.^[13]

The SIMS systematically classifies more symptomatic medical patients as “malingerers” than their less symptomatic peers. This bias is statistically significant. With respect to PTSD in US veterans, this bias was calculated as equivalent to phi coefficient of .42. Veterans assessed as experiencing a probable PTSD are about twice more likely to be misclassified as “malingerers” by the SIMS than veterans clinically considered as probably free of PTSD.

Very damaging to reputation of the SIMS are its significant correlations, in US veterans, with their scores on the PCL-5 measure of PTSD: the correlation to total SIMS score is high.

The evidence shows that the SIMS is a fatally flawed psychological test with items absurdly inappropriate for its stated purpose of differentiating malingerers from genuine patients.

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It is not clear why the authors of the SIMS (Glenn P. Smith and Gary K. Burger) included almost only items in the SIMS that describe many legitimate medical symptoms such as those of depression or common neuropsychological symptoms (tinnitus, peripheral neuropathy, memory and concentration problems such as difficulty recalling today's date or which day of the week it is), and why the SIMS authors believed that these items, when endorsed, are to be scored as indicative of malingering. On the contrary, it is obvious from our review that high SIMS scores may indicate important impairments of overall daily functioning.

CONCLUSIONS

Patients with more medical symptoms are significantly and systematically more likely to be falsely classified by the SIMS as "malingerers" than their less symptomatic counterparts.

The SIMS should no longer be used on veterans, on patients injured in vehicular collisions, and on patients who complain of neurological symptoms that may represent an incipient major neurologic condition. Indeed, there is no justification to use the SIMS on any patient population.

Available data suggest that the risk presented to these clinical groups may be estimated at 78.8%. Thus about 3 out of 4 such legitimate medical patients are falsely denied timely therapies and other benefits. Future use of the SIMS needs to be considered as iatrogenic malpractice.

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