May the choice be with you: Assisting practitioners with selecting appropriate psychometric assessments for the medico legal arena

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Abstract

Purpose

Fraudulently claiming symptoms of mental disorder can be very lucrative for those in society who are willing to do so. One context that lends itself well to those willing to fraudulently claim symptoms of mental disorder is the road traffic accident (RTA). Previous research has indicated that the assessment practices of those charged with investigating psychological damages in the United Kingdom are not suitable in terms of detecting malingering. This article provides a 'practitioner ready review' that outlines the structured psychometric assessment tools that are recommended and validated by academic research for aiding with the detection of feigned mental disorder.

Approach

The article takes a primarily conceptual approach utilising a narrative literature review which is aimed at the forensic practitioner who conducts assessments for psychological damages in contexts where malingering may be of concern.

Findings

The findings of the present article will be of use not only to forensic practitioners but also will be of interest to those who instruct assessments in similar contexts, those who conduct research within this area, and those who interpret reports written by forensic practitioners such as the courts.

Value

To the author's knowledge the present article is the first of its kind, which attempts to bridge the gap between academic literature and professional practice to assist forensic examiners incorporate suitable psychometric instruments within their practice. As a result, the article makes a substantial contribution to the improvement of forensic reporting in the disciplines of psychology and psychiatry.

May the choice be with you: Assisting practitioners select appropriate psychometric instruments for the medico legal arena

In the United Kingdom (UK) over the past five years there have been several changes in the medico legal arena with perhaps the biggest changes affecting the reporting of personal injury claims following road traffic accidents (RTA). In 2015, the UK government introduced their Medco portal alongside implementing changes in the Criminal Courts and Justice Act, specifically section 57 (CCJA, 2015). Such changes are the result of the seemingly dishonest society that medico legal practitioners now operate within. At present, such changes have only directly affected the practices of the reporting of whiplash injuries but this shift in mind-set whereby fraudulent claims will be entirely struck out of court along with contempt of court proceedings being sought, surely has many implications for the future of psychological reporting.

Although the rate of fraud for RTAs has continued to soar (ABI, 2012; ABI, 2014; ABI, 2015; AVIVA, 2015) very little academic attention in the UK has been paid to this issue despite the highly lucrative incentives for claims of mental disorder (Blinded, Blinded, Wood & Wood, 2016; Judical College, 2013). When an individual fraudulently claims mental disorder, this is known as malingering and it is defined by the DSM-5 as *"the intentional production of grossly or exaggerated physical or psychological symptoms, motivated by external incentives"* (APA, 2013 pp 726). Blinded and Blinded (2016) recently explored the matter and provided evidence that fraudulently claiming symptoms of mental disorder following RTAs is viewed (here in the UK at least) with very little severity. The findings identify that a large percentage of individuals are willing to exaggerate symptoms for a higher pay out alongside falsely attributing previous symptoms to an accident that played no role

(Blinded & Blinded, 2016). Indeed, this provides evidence that methods are certainly warranted to detect malingering by plaintiffs claiming psychological damages following RTAs. The findings described above led the same authors to conduct a review of the assessment methodologies being employed by medico legal professionals to assess psychological damages (Blinded, Blinded & Blinded, 2018). The review which was based on 37 UK medico legal professionals' methodologies questioned how malingering was being assessed, with one of the main problems identified being the professionals' choice of psychometric instruments (Blinded, Blinded & Blinded, 2018). The authors' challenge medico legal professionals to consider whether the instruments that they are administering are fit for purpose by only using instruments that: are not accessible online, have the capability to assess malingering, and are supported by peer reviewed research (Blinded, Blinded & Blinded, 2018).

It is important to outline to the reader the context in which psychometric assessments might be used within the present arena. Following a RTA, a claimant who attests that they are suffering with a mental disorder may seek legal assistance to claim for financial compensation. To do so, the claimant's solicitor will be required to obtain a medico legal report to provide evidence of the attested mental disorder within court. It is at this point where a medico legal assessor would be instructed to complete the medicolegal report and although there are guidelines for report writing produced by professional governing bodies such as the British Psychological Society (BPS, 2015), there are no set guidelines for undertaking the assessment. As a result, some assessors simply conduct a clinical interview, some assessors also require claimants to complete psychometric testing, and some assessors interview a claimant's friend or family member (Blinded, Blinded & Blinded). Furthermore, it is important to acknowledge that the inclusion of a psychometric assessment is simply to

support medicolegal professionals' clinical decision making and although not a requirement set by the court the present article would argue that the inclusion of a psychometric assessment is necessary for a rigorous medico legal assessment.

Rather than provide a systematic review, the present article aims to contribute literature which is of a practical use and can be used to guide practitioners' decision making for choosing an appropriate test. Blinded and colleagues (2018) briefly mention four psychometric instruments and these will be the focus of the present article: the MMPI-2/ MMPI-2-RF (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989; Ben-Porath & Tellegen, 2011); the PAI (Morey, 1991); the SIRS/ SIRS-2 (Rogers, Bagby & Dickens, 1992; Rogers, Sewell & Gillard, 2010); and the M-FAST (Miller, 2001). It is important to reiterate that the present paper only seeks to assist professionals choose a test suitable for identifying feigned emotional distress and does not include instruments for identifying feigned neurological impairment. Furthermore, it is imperative that any of the instruments discussed in the present article are incorporated into a rigorous assessment process whereby the examiner is employing a best practice clinical interview whilst examining all available collateral evidence. Furthermore, the present article aims to support medico legal professionals achieve the challenge set by Blinded and colleagues (2018) by providing a 'practitioner ready review' which outlines instruments that meet their criterion. At the time of writing the four assessments included in the present article are the only assessments discussed due to no additional assessments being found that can provide an indication of feigned psychopathology and which are supported by considerable academic research. Moreover, it is important to reiterate before introducing the four assessments that the paper does not aim to outline a definitive assessment but rather help practitioners navigate the minefield of potential

psychometric assessments by introducing only assessments that are supported by academic literature as useful tools to aid with detecting malingering within the medico legal arena.

The Structure Interview of Reported Symptoms (SIRS-2)

The Structured Interview of Reported Symptoms (SIRS) was developed by Rogers and colleagues' in 1992 and later revised to a second edition in 2010 (Rogers, Sewell & Gillard, 2010). The SIRS since its creation has been regarded as the 'gold standard' in the assessment of malingering (Boccaccini et al., 2006) and in a survey of medico legal clinicians in the United States the tool was the second most recommended structured instrument for detecting malingering (Lally, 2003), and the most used within assessors from the United States practices' (Archer et al., 2006). Despite this, Blinded and colleagues (2018) found that the tool was not used by any UK medico legal professional for the assessment of psychological damages following RTAs. Notably suggesting that what has been rated as the gold standard for the detection of malingering has not quite made its way over this side of the Atlantic.

The SIRS contains 172 clinician rated items that are administered during a clinical interview, the 172 items assess eight malingering strategies (Rogers et al., 1992). The instrument is not available online and is specifically designed to assess malingering. With regards to its support from academic literature the picture becomes a little unclear. The original SIRS is validated by peer reviewed literature; a meta-analysis conducted by Green and Rosenfield (2011) examined 26 different studies published between 1990 and 2009 and revealed a very large effect size for the SIRS total score in differentiating malingers from genuine respondents across a variety of disorders and cognitive impairments. Green and Rosenfield's (2011) meta-analysis provides substantial support for the use of the tool to aid in the detection of malingering, however, their findings do suggest a reduction in the claimed sensitivity and

specificity rates of the tool to that advertised within the manual from 99.5% to 89% for specificity and from 78% to 74% for sensitivity. However, such sensitivity and specificity rates are impressive and exhibit a more accurate representation of the tool's ability. Specifically, the SIRS received validation in compensation cases assessing major depressive disorder, PTSD, and other anxiety disorders (Rogers et al., 2009); providing evidence for its suitability within RTA medico legal evaluations.

Despite the success of the original SIRS the current literature on the revised version advocates that the original SIRS should be used by practitioners as opposed to the modified edition. The revised version has received substantial criticism within academic literature and the criticisms mainly focus around the lack of clarity regarding the validation of the revised version (e.g. Rubenzer, 2010; DeClue, 2011). Furthermore, several articles have recently demonstrated that the original SIRS performs significantly better when it comes to sensitivity (Green, Rosenfield & Belfi, 2012; Tarescavage & Glassmire, 2016). As a result, it is suggested here that until substantial research emerges to support the SIRS-2, practitioners should employ the well supported original version. Practitioners should, however, be aware that the SIRS must be completed within a clinical interview and can be rather time consuming for implementation, scoring, and interpretation. Furthermore, the tool is a specific test to determine malingering and although it has substantial support for its use in detecting many feigned disorders it is not a comprehensive test of psychopathology and additional psychometric testing may be required.

The Minnesota Multiphasic Personality Inventory 2 (MMPI-2) and the MMPI-2-RF

A structured instrument that does not need an introduction is the Minnesota Multiphasic Personality Inventory-2 (MMPI- 2, Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer,

1989). In Lally's (2003) study, the MMPI-2 was rated as the most recommended structured tool for the assessment of malingering, marginally ahead of the SIRS. The MMPI-2 contains 567 true or false questions which takes between 60 to 90 minutes to complete (Butcher et al., 1989). The MMPI-2 is a psychometric instrument that can assess adult psychopathology comprehensively through the examination of self-reported symptoms. The tool however, can be used to assess malingering as it consists of validity scales which identify malingering strategies.

The MMPI- 2 has received a wealth of research regarding its effectiveness in differentiating malingered and genuine responses, and support has been found in many studies for the different validity indicators proving to be effective in identifying feigning (e.g. , Arbisi, Ben-Porath, & McNulty, 2006; Bagby, Marshall, Bury, Bacchiochi, & Miller, 2006; Bury & Bagby, 2002; Elhai et al., 2001, 2004; Lange, Sullivan & Scott, 2009; Nelson, Sweet, & Demakis, 2006; Rogers et., al 2003; Tolin, Steenkamp, Marx, & Litz, 2010). In 2011 Ben-Porath and Tellegen released the revised format (MMPI-2-RF) which reduced the number of items to 338 making the instrument significantly less time demanding and more psychometrically sophisticated (Chmielewski, Zhu, Burchett, Bury, & Bagby, 2017). Again, the MMPI-2-RF has proven to be effective in assessing malingering with several studies providing support of this (e.g. Marion, Sellbom, & Bagby, 2011; Rogers, Gillard, Berry, & Granacher, 2011; Sellbom & Bagby, 2011; Wygant et al., 2011; Youngjohn, Wershba, Stevenson, Sturgeon, & Thomas, 2011). Chmielewski et al (2017) recently investigated whether the shortened restructured version matched the original MMPI-2 in terms of its capability to detect malingered psychopathology. Chmielewski and colleagues (2017) found that all the MMPI-2-RF validity scales perfumed as well and in some cases better than the MMPI-2, and this is particularly remarkable considering that it has 229 items less. Similarly,

Gervais, Ben-Porath, Wygant, and Selibom (2010) reported that the MMPI-2-RF was superior when investigating malingered memory impairments. As a result, it is argued here that the literature suggests that both the MMPI-2 and the MMPI-2-RF are well validated tools that are not accessible online and have the capability of detecting feigned responding with the latter being preferable due to efficiency.

The Personality Assessment Inventory (PAI)

A further structured instrument that has gained popularity and like the MMPI-2 is a comprehensive assessment of psychopathology is the Personality Assessment Inventory (PAI; Morey, 1991). The PAI consists of 344 four point likert scale questions which measure both psychopathology but also incorporates several validity scales that are designed to detect malingering (Morey, 1991). A meta-analysis conducted by Hawes and Boccaccini (2009) examined 36 research articles investigating the ability of the PAI validity indicators in detecting exaggerated psychopathology. Hawes and Boccaccini (2009) report that the effect sizes evidenced in their meta-analysis compare favourably with the meta-analysis conducted by Rogers and colleagues (2003) using the MMPI-2. The results indicated that two of the validity scales: the Negative Impression Management and the Malingering index scale were of use in identifying over-reported psychopathology (Hawes & Boccaccini, 2009).

Since Hawes and Boccaccini's (2009) meta- analysis, studies have continued to provide support for the PAI's ability to detect malingered psychopathology (e.g. Hopwood, Orlando & Clark, 2010; Thomas, Hopwood, Orlando, Weathers & McDevitt-Murphy, 2013). Clinicians in the present context would perhaps want to choose the instrument that performs the best in differentiating malingered PTSD from genuine PTSD. The reason for this is due to the cause and affect nature of PTSD and RTAs (Hall & Hall, 2006). The symptoms

associated with PTSD such as anxiety are the most likely symptoms to arise as the result of a RTA (Blinded, Blinded, Wood, & Wood, 2016; Blinded, 2017) as opposed to schizophrenia for example. Therefore, researchers have examined which of the two tools are better at discriminating malingered PTSD. In terms of sensitivity to identifying malingerers the MMPI- 2 has proven to be superior (e.g. Eakin et al., 2006; Lange et al., 2010). To the author's knowledge no studies to date have examined the difference between the MMPI-2-RF and the PAI in the detection of malingering therefore based on Lange et al's (2010) findings and those of Chmielewski et al's (2017) suggests that the MMPI-2-RF may compare favourably. Never the less, the PAI is an academically validated instrument that is not accessible online and certainly has the capability of assisting the clinician to identify malingering.

The Miller Forensic Assessment Tool (M-FAST)

The three structured tools outlined above share one limitation in common which is of significance in the writing of medico-legal reports and this is the time-consuming aspect of administering the assessments. A shorter instrument that is not available in full online, has the capability of detecting malingering, and has support from academic research is the Miller Forensic Assessment of Symptoms Test, otherwise known as the M-FAST (Miller, 2001). This instrument is the shortest of the specifically designed malingering detecting assessments taking ten minutes to administer (Miller, 2001). The instrument is a structured interview that includes 25 items including: 15 true or false questions, five likert frequency questions, two yes or no questions and three interviewer rated questions (Miller, 2001).

The M-FAST has proven to perform well in the assessment of malingering when compared to the SIRS (Vitacco et al., 2008). The M-Fast has proved to be effective in differentiating

malingerers from genuine populations (Jackson, Rogers & Sewell, 2005). In a simulated study where participants were asked to feign PTSD, the M-FAST identified 68% of those feigning the disorder and proved to be robust enough to be unaffected by participants coached with accurate mental disorder knowledge (Guriel-Tennant & Fremouw, 2004). However, when the M-FAST was combined with the 100-item self -report Trauma Symptom Inventory the combined use of the validity scales resulted in a correct classification rate of 89% (Guriel-Tennant & Fremouw, 2004). Guy, Kwartner and Miller (2006) provided evidence of the M-FAST's robustness regarding its ability to detect a variety of malingered disorders including major depressive disorder and PTSD. More recently, Ahamadi et al (2013) demonstrated that the M-FAST was excellent in identifying malingered war related PTSD at a rate of 92%. To the author's knowledge there has not been a systematic review of the M-FAST but clearly from the literature available this test meets the criteria set by Blinded and colleagues (2018) and would be of use within the UK medicolegal arena. Having said this, it must be acknowledged that the tool is not a comprehensive test of psychopathology and strictly speaking is a screening tool.

So, which tool to use?

It is thoroughly acknowledged that the four instruments included are not the only assessments that can be used to detect feigned psychopathology. Other instruments such as the Structured Inventory of Malingered Symptomology (Smith & Burger, 1997; Widows & Smith, 2005) would meet the criteria but based on a recent meta-analysis by Impelen, Merckelbach, Jelicic and Merten (2014) suggests that the tool would not be effective in civil forensic contexts as milder symptomology are not assessed. The four assessments included are the only assessments that following a narrative review of the literature are appropriate for the medico

legal setting, meet the guidelines set by previous research, and are extensively supported by academic literature.

To answer the question of which test to use, assessors need to consider their current assessment practices and determine how they wish to implement changes. For example, if one would like to replace their current battery of psychometric instruments to incorporate a singular instrument that would significantly improve assessment validity whilst providing an extensive overview of claimants' psychopathology endorsements, the MMPI-2RF or the PAI are recommended with the former being favourable. Should clinicians simply wish to add to their method the SIRS would be recommended, however, if time does not allow for this then the M-FAST would be suggested. For the clinician who is willing to re-consider their entire assessment process the approach suggested by Taylor (2006) is encouraged. Taylor suggests that the M-FAST should be used prior to a clinical interview to screen for potential malingers, if the results of the M-FAST, clinical interview, and collateral evidence suggest malingering the SIRS and MMPI-2-RF should be administered (Taylor, 2006). Indeed, this is a very onerous method of assessment but it certainly would provide sufficient evidence to include in the medicolegal report should malingering be suspected. Future research investigating the most efficient ways to incorporate the instruments discussed above into a battery would prove useful in helping clinicians make a firm choice on what assessment or assessment combinations to use. In short, diligent examiners who wish to thoroughly assess malingering should incorporate at least one of the tools outlined within this article safe in the knowledge that the instrument has been extensively validated by academic research.

Considerations

MAY THE CHOICE BE WITH YOU

Any discussion of psychometric tools irrelevant of the context in which they are deployed must be accompanied by a consideration of their limitations alongside a cursory warning. Despite this article demonstrating the support within academic literature, it must be acknowledged that no tool can truly identify malingers from genuine respondents. The use of any of the psychometric instruments discussed above should only be used as evidence to assist a clinician make a suitable decision regarding a claimant's attested mental disorder. The use of psychometric instruments must complement existing methods of assessment including a thorough clinical interview and a review of all collateral evidence (medical records, witness reports, other expert reports, corroborative interview etc.).

Summary

The present article has addressed a significant gap within the medico legal literature by offering a 'practitioner ready review' that can support clinicians adopt an appropriate psychometric instrument which is supported by academic research. Likewise, the present article may be useful for the meticulous instructing party and the court to evaluate whether a rigorous consideration for malingering has occurred within the psychological reports that they instruct, or admit in to evidence. Indeed, this article demonstrates a link between academia and professional practice, which is often overlooked despite the necessity and impact that such dissemination can have. To conclude, it is simply not acceptable based on the amounting evidence of fraud occurring within the medico legal arena (particularly related to RTAs) that assessments do not thoroughly consider malingering. This article has provided examiners with the appropriate knowledge to ensure that their assessments cannot be criticised for failure to investigate such dishonest responding which is undoubtedly a significant economic burden.

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