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Mental Health Malingering and the Fraudulent Motor Insurance Claimant

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Abstract

Malingering is the intentional production of false or grossly exaggerated symptoms in order to obtain an advantage. Although it has been estimated that over 800,000 claims for personal injury in Road Traffic Accidents (RTA) were filed in the UK in 2012, no approximation exists for how many involved malingering. This study attempts to understand what influences a psychiatrist to conclude that a claimant's symptoms are not caused by an RTA and thus suggests the claimant is malingering. This article describes a study of Personality Assessment Inventory scores alongside collateral forms of evidence for 100 RTA claimants; all individuals seeking compensation for damages to their mental health. The results suggest that up to 40% of these claims could be categorised as not being the result of the RTA. Significant differences emerged between those claimants diagnosed as having a mental disorder as a result of the RTA and those claimants who were classified as not having a mental disorder as a result of the RTA in regards to: employment status, level of injuries and scores on the paranoia scales of the PAI. The study emphasises how the assessment process is idiosyncratic and in need of further research.

Keywords: Malingering, Motor Insurance Fraud, Personality Assessment, Mental Illness

Introduction

It has been suggested that lying is a fundamental aspect of human behaviour (Vrij, 2008; Porter & Brinke, 2010) and that, on average, each of us will lie twice a day (DePaulo et al., 1996). Some go as far to suggest that lies are so necessary that, perhaps, without them our social world would collapse (Vrij, 2008; Roach, 2010). This is important if one considers forensic contexts to be rich in both motivations and opportunities to lie, with success in deceit arguably the most common means by which justice is denied or delayed (Roach, Pease, & Clegg, 2011). We concern ourselves here with the high-stake, fraudulent act of malingering. Here an individual claims insurance compensation for a mental disorder caused by a motoring accident, where it was either not caused by the accident, or was never present in the first place.

Recent estimates suggest fraud costs United Kingdom (UK) insurers as much as £2.1 billion per annum (NFA, 2013). Malingering refers to the "intentional production of false or grossly exaggerated symptoms motivated by external incentives" (American Psychiatric Association, 2013, p.726). Given that a high percentage of people who have been involved in accidents now claim

for personal injury (Transport Committee, 2013), malingering affords a highly lucrative and alternative avenue for potential fraudsters to exploit. Surprisingly, research on malingering in insurance claims is limited. The present study attempts to understand what factors may lead a forensic psychiatrist to conclude that a Road Traffic Accident (RTA) is not the cause of a claimant's mental disorder using the Personality Assessment Inventory (PAI) (Morey, 1991). Presented within this article is a first attempt by researchers to offer an overview of how practitioners might approach the task of detecting malingered mental disorders following an RTA. Indeed, this is an important subject to research considering that the UK Government has recently highlighted the increasing issue of malingering with regard to whiplash claims in motor accidents (Transport Committee, 2013). This can be partly seen by examining government statistics which indicate that, between 2006 and 2011, the number of reported RTAs fell by 20%, whilst at the same time there was a 60% rise in RTA personal injury claims (Merton et al., 2013).

From an estimated 819,137 personal injury claims following RTAs in 2012, 58% referred to whiplash, with the remaining claims being for more severe physical injuries and damages to an individual's mental health (Transport Committee, 2013). Although whiplash is considered a less severe type of physical injury, which most commonly occurs as a result of a collision, there does not currently exist a definitive diagnostic test for this. This may go some way towards explaining why, despite estimates indicating that the number of fraudulent and exaggerated claims are very high, the average pay-out per claim is relatively low at £2,500 (Transport Committee, 2013). Cumulatively, whether lots of relatively small fraudulent claims exist or fewer large ones might make little difference to the total cost to the insurance industry.

When compared with claims for whiplash, damages to mental health appear to have a much higher pay out. A simple search of financial compensation success stories gives some indication in the difference between mental-health claims and whiplash claims, with some mental-health "success stories" indicating financial compensation in the region of £100,000 for a claim for post-traumatic-stress disorder accompanied by a loss of earnings.

Such findings have led researchers to explore the issue of malingering following an RTA through an examination of the UK public perception. Indeed, a number of particularly concerning findings emerged, which reinforces the need for research in this area to understand how professionals detect malingering in practice. It was revealed in Cartwright and Roach's (2016) research that as much as 25% of individuals would be likely to exaggerate genuine symptoms of mental disorder for additional financial compensation (partial malingering) (Cartwright & Roach, 2016). Furthermore, 21% of participants alluded that they would be likely to attribute genuine symptoms of mental disorder to an RTA, knowing that the RTA was not responsible for their mental disorder (false imputation). In addition, the research evidenced that the disorder to be hypothetically malingered did not significantly affect the participants' stated intentions; thus malingering is no more likely to occur in whiplash claims than in PTSD, for example. Indeed, this presents a variety of implications for forensic psychiatrists and psychologists who are charged with the assessment of mental disorder following an RTA. Cartwright and Roach's (2016) research evidences that malingering following an RTA is perceived with little severity and, as a result, it is argued here that it is likely to occur in practice significantly more than one believes.

Establishing fraud base-rates for motor accident claims, whether for whiplash or mental disorder is, however, problematic. The approach taken by Cartwright and Roach (2016) offers a different insight into the likely extent of malingering within practice and the results generated indeed support different approaches to estimating the likely occurrence. Mittenberg, Patton, Canyock, and Condit (2002) surveyed a sample of clinicians about their experience with malingering claimants and estimated that, in approximately 29% of personal injury cases, the claimant was thought to be malingering. Although a review of the extent to which malingering occurs in different situations is not provided here, research indicates that the rate at which malingering occurs differs according to the context in which an individual is claiming mental disorder (Mittenberg et al., 2002; Aronoff et al., 2007).

In the current article, it is hypothesised that clinicians find it hard to spot or refute fraudulent or exaggerated symptoms of mental disorder because (as with whiplash complaints) the system is very much reliant of self-reported symptoms. Although admirably sympathetic, the system is, however, in our opinion, unbalanced, leaving itself wide open to claims by malingerers feigning (or exaggerating) mental disorder, arguably, even more so than it is to fraudulent claims for whiplash injuries. In sum, we posit that the system has so few checks and balances that it is particularly attractive to the individual prepared to malinger. As a result, this article seeks to offer an insight into how claimants are assessed following their involvement in an RTA.

Spotting the malingerer?

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM–5; American Psychiatric Association (APA, 2013) is one avenue to which professionals have turned in order to help identify malingerers. According to Rogers (2008), even though the DSM-5 has more often than not been used by clinicians to diagnose malingering, it has been shown to misclassify over 80% of malingerers (Rogers & Vitacco, 2002).

The DSM-5 (APA, 2013) description of malingerers characterises a criminological model with which malingering is committed by an "antisocial person" (Rogers, 2008). Hall and Hall (2006) suggest that malingerers often show some signs of Axis II traits or some kind of Personality Disorder. In addition, Polatin et al., (1993) and Mannion, Dolan, and Adams, (1996) highlight that individuals with certain personality types or psychiatric disorders are more likely to exhibit symptom magnification. Although, to date, research investigating malingering has been equivocal with its support of the premise that Antisocial Personality Disorder facilitates malingering (e.g. Rogers, 1990; Kucharski et al., 2006; McDermott & Sokolov, 2009; Poythress, Edens, & Watkins, 2001).

The ease of spotting malingerers can indeed be inhibited by the type of malingering the individual in question is demonstrating. Resnick (1977) has suggested three types of malingering: pure malingering, partial malingering, and false imputation. Pure malingering occurs when the individual fabricates symptoms. Partial malingering occurs when the individual exaggerates real symptoms that are experienced. False imputation, on the other hand, is where an individual accurately reports symptoms but knowingly attributes the cause of the symptoms to an event that actually played no role. It is suggested that partial malingering is the most common form (Kleinman & Stewart, 2004). What is important to note here is that the ease of spotting malingering may depend on the type being displayed. Hall and Hall (2006) suggested that partial

malingering and false imputation are much harder to detect due to the individual often having direct experience of the symptoms that he is reporting.

To use a variety of forms of evidence is consistently viewed as the best method in spotting malingered psychopathology (Resnick, West, & Payne, 2008, pp. 123). Though, within the personal injury arena, aspects of evidence which could be highly useful, such as a claimant's previous medical history or previous claim behaviour, may be missed due to a lack of data-sharing among all parties concerned (Transport Committee, 2013). In general, psychological and psychiatric experts may additionally use a psychometric assessment tool in combination with a structured clinical interview.

To summarise, despite the high estimates of fraudulent claims, there is a paucity of research that examines fraudulent mental disorder claims as a result of motoring accidents. The present study represents a first attempt to address this neglect by presenting an empirical descriptive study of a sample of individuals claiming financial compensation for mental disorder caused by an RTA. The present article investigates the methods utilised in practice and asks the question "How well equipped are medico-legal examiners in detecting malingered mental disorder?" Consequently, it is hoped that, by trying to achieve a more comprehensive understanding of assessment within this arena, progress can be made with regard to deterring and identifying fraudulent claims.

Materials and Methods

Participants

The participants included within this article consist of 100 RTA claimants, 47% of whom were female and 53% were male with a mean age of 39 years (SD = 11.0; Range = 14 - 63). All participants were referred to a consultant forensic psychiatrist between 2009 and 2013 for an assessment of the psychological impact of the RTA. Prior to assessment, each participant gave written consent for his or her anonymised details to be used for research purposes. From what was known (85% of the cases), the mean time spent in education by participants was 12 years (SD = 2.6; Range = 8 - 19). Of this group, 37% were married, 33% single, 27% divorced and 3% fitted into the category labelled other. In terms of employment, 86% of individuals were employed at the time of the accident. Of the participants, 61% had received minor physical injuries as a result of the accident and 39% could be classified as having complex injuries involving hospitalisation.

Procedure

Out of the 100 cases, the participants were split using the forensic psychiatrist's decision regarding whether the individual's psychological state was caused by the RTA. Out of the 100 cases, 60% were coded for the analysis as suspected genuine claimants and the other 40% were labelled not attributable to the RTA (NATTR). Within the 40 NATTR claims, four claimants were included as they were labelled by the psychiatrist as clearly malingering. Thereby, these individuals had no symptoms of mental disorder and were just attempting to feign symptoms (pure malingering). A further 28 claimants were included based on the fact that the psychiatrist concluded that the disorder that they were claiming to have was not initiated by the RTA. Rather, these individuals were vulnerable to mental disorder and, regardless of whether the individual had the accident or not, the individual would have had a past of psychological problems. Subsequently, these

individuals could not be classified as having a genuine mental disorder caused by the accident. The remaining eight claimants of the NATTR group contained individuals who could not be diagnosed by the forensic psychiatrist as having a genuine mental disorder caused by the accident but were not obviously malingering. Therefore, on the basis the psychiatrist could not classify these claims as having a genuine mental disorder caused by the RTA, these claims were included in the NATTR group. Furthermore, the rationale for splitting the claimants into the two aforementioned groups is based on the fact that the forensic psychiatrist's task was to determine whether the claimants' reported mental disorder was attributable to the RTA.

The forensic psychiatrist's decision for each claimant was based on a variety of evidence that shall now be described. The evidence used to generate a decision often consisted of three psychometric assessment tools: The Personality Assessment Inventory (PAI, Morey, 2007; the Trauma Symptom Inventory (TSI, Briere et al., 1995); and the Beck Depression Inventory (BDI-II, Beck et al., 1961). Alongside psychometric assessments, the psychiatrist conducted structured interviews with the claimants and examined collateral evidence provided by the instructing party. Consequently, this was the evidence utilised to construct the expert witness report for the instructing party. It is important to reiterate here that the diagnoses given by the forensic psychiatrist are not being argued to be wholly accurate due to the vulnerabilities that have been outlined in articles relating to clinical judgment (Neal & Grisso, 2014; Murrie et al., 2013). Rather, this article is concerned with the methods utilised by this professional to construct a diagnosis in an arena where malingering is of concern.

Materials

The present study used the information from the PAI (Morey, 1991), which all claimants completed. In addition to the PAI, various demographic information and information about the individuals' claims were coded to be used in the analysis. The PAI itself consists of 344 Likert-type items that require the individual to respond by endorsing either: false, not at all true, slightly true, mostly true, or very true. Out of the 344 questions, 22 non-overlapping scales emerge, which assess the validity of the claimant's responses, clinical interpretations of the individual's responses, interpersonal attributes of the individual's personality, and scales which predict treatment complications (Morey, 2007). In addition, the PAI includes supplementary scales that can be useful within various contexts. For example the PAI includes a specific malingering scale (MAL; Morey, 1996), and the Rogers Discriminant Function (RDF; Rogers et al., 1996), which is also used for detecting malingering.

Research evaluating the use of the PAI in general has received a mixed conclusion. Some research provides support using certain validity indicators to detect malingering (e.g. Liljequist, Kinder, & Schinka, 1998; Scragg, Bor, & Mendham, 2000; Sullivan & King, 2010; Morey, 1996), whilst some articles suggests otherwise (e.g. Calhoun et al., 2000; Liljequist, et al., 1998). Hawes & Boccaccini (2009) conducted a meta-analytic review of the PAI validity scales for detecting over-reported psychopathology. Hawes and Boccaccini (2009) indicated that simulation methods of malingering research achieved a higher overall effect size in comparison to criterion research methods across the three validity scales, thus indicating that the PAI is less effective in ecologically valid studies.

Analysis

Alongside descriptive statistics, independent samples *t* tests and *chi* square analyses were employed to examine whether any group differences emerged among the NATTR group and those diagnosed by the psychiatrist as having a mental disorder as a result of the RTA. It was hypothesised that significant differences would emerge between the two groups that would be indicative of the psychiatrist's decision making. In addition, Cohen's *d* effect sizes were calculated.

<div align="center">

Results

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Inferential statistics were first conducted using the demographic data displayed in Table One. This was done in order to examine whether the two groups of claimants could be distinguished using demographic data alone. An independent samples *t*-test was conducted to examine whether any differences were present based on the claimants' ages. No significant difference emerged between the suspected genuine (*M* = 40, *SD* = 10.7) and the NATTR (*M* = 36, *SD* = 11.4) groups in terms of age *t* (92) = 1.80, *p* = .08, *d* = 0.36. In terms of the claimants' gender, a *chi*-square test of independence revealed no relation between gender and the grouping of the claimants (genuine or NATTR), χ 2 (1, N = 100) = 2.42, *p* = .12. An independent samples *t*-test revealed that, in the cases in which it was possible to extract the level of the claimants' education, there was no significant difference between the suspected genuine group (*M* = 11.6, *SD* = 2.6) and the NATTR group (*M* = 11.9, *SD* = 2.6) in the years of education that they had completed *t* (83) = .46, *p* = .65, *d* = - 0.12.

An important variable to consider in the present analysis was the claimants' employment status at the time of the RTA. The *chi*-square analysis revealed a significant difference between the two groups, χ2 (1, N = 100) = 10.09, *p* = .001, indicating significantly higher numbers of unemployment in the NATTR group as opposed to those diagnosed with having a mental disorder as a result of the RTA. A further *chi*-square test was undertaken to measure whether any differences were present between the two groups in terms of the type of injuries the claimants had suffered. Claimants were categorised by the psychiatrist as either having a minor injury as a result of the RTA or a severe injury. A significant *chi*-square test, χ2 (1, N = 100) = 5.49, *p* = .02, revealed a higher occurrence of minor injuries were found in the NATTR group as opposed to the genuine group. It is important to acknowledge at this point that, in terms of the types of mental disorder diagnosed or attested by the claimant, a wide variety of conditions were observed with many claimants presenting high levels of psychiatric co-morbidity.

A further area of interest from the data displayed in Table One was to examine whether the amount of time between the date of the accident and the date of the psychiatric assessment differed between the two groups. An independent sample *t*-test revealed that the NATTR group had a longer period of time between the accident and the assessment (*M* = 1433, *SD* = 465.1) than the genuine group (*M* = 1285, *SD* = 437.0). This, however, did not reach a significant level, *t* (98) =1.61, *p* = .11, *d* = 0.33. The final area for exploration using the data displayed in Table One relates to whether claimants differed in having returned back to work at the time of the examination. A *chi*-square test was conducted and no significant difference emerged between the two groups, χ2 (1, N = 100) = 1.79, *p* = .18.

Detailed in Table 1.0 is the general demographic profile of the individuals within each group of the present study that may be of use to other medico-legal examiners.

Table 1.0: *Demographic information for genuine claimants and those whose mental disorder was not attributable to the RTA (NATTR)*

	NATTR	Suspected Genuine
Age	$M = 36$	M = 40
Gender	62.5% male	53% female
Years in education	11.9	11.6
Employed at the time of the accident	72.5%	95%
Not returned to work by the time of the examination	77.5%	65%
Marital status		
Married	37.5%	36.7%
Single	30.0%	35.0%
Divorced	25.0%	28.3%
Other	7.5%	
Minor injuries	62.5%	48.3%
Days between accident and psychiatric examination	1432.95	1285.33

NATTR Group N= 40 Suspected Genuine Group N= 60.

Personality Assessment Inventory

The study analysed the PAI scores to examine whether there were any differences between the two groups on the PAI that would be indicative of why they were attributed to one group of claimants as opposed to the other. As recommended by Morey (2007), individuals at this stage of the analysis who scored greater than 73 on the INC validity scale and higher than 75 on the INF scale were excluded. Excluding these individuals allows for the assumption that the claimants completing the PAI were answering the PAI questions consistently and accurately.

As Table Two highlights, there was a significant difference found between the NATTR group ($M = 56.9$) and the suspected genuine group ($M = 50.9$) on the scores they obtained on the paranoia scale, thus demonstrating that the NATTR group scored significantly higher on the paranoia scale than the suspected genuine group. No significant differences, however, were found on the further ten clinical scales, the six validity scales or the two interpersonal scales of the PAI ($p = .052 – .879$).

Table 2.0: *Independent sample T-tests results between the two groups of claimants on the PAI*

PAI Scale	NATTR T-Score		Genuine T-Score		t	P	d
	M	SD	M	SD			
ICN	53.3	7.7	54.7	9.4	-.79	.43	-.11
INF	56.0	8.8	54.2	8.6	-.95	.35	.21
NIM	62.8	15.5	60.4	12.2	-.85	.40	.20
PIM	47.4	13.0	46.7	13.1	-.26	.80	.05
MAL	54.3	13.9	60.0	13.7	1.97	.05	-.41
RDF	51.8	13.8	48.8	14.4	-1.03	.31	.21
SOM	73.3	13.7	68.6	8.8	-1.91	.06	.41
DEP	78.0	15.7	79.6	17.4	-.46	.65	-.10
ANX	66.9	16.5	66.0	15.3	-.29	.78	.06
ARD	67.2	17.5	66.7	14.6	-.15	.88	.03
MAN	47.4	10.0	44.8	10.8	-1.17	.24	.25
PAR	56.9	12.4	50.9	9.4	-2.69	.01	.55
SCZ	61.8	16.6	58.3	10.1	-1.25	.21	.26
ANT	47.5	8.5	45.9	7.7	-.92	.36	.20
BOR	60.8	13.6	59.0	11.1	-.74	.46	.15
DRG	52.2	10.5	49.6	6.8	-1.30	.20	.29
ALC	49.9	10.8	47.0	8.7	-1.42	.16	.30
WRM	45.3	12.7	47.4	11.0	.84	.40	-.21
DOM	44.9	13.9	47.1	10.9	.88	.38	-.18

N= NATTR 39, N= 55 Suspected Genuine. PAI scale abbreviations: Negative Impression Management (NIM),Positive Impression Management, Infrequency (INF), Inconsistency (INC), Malingering Index (MAL), Rogers Discriminative Function (RDF), Somatic Complaints (SOM), Depression (DEP), Anxiety (ANX), Anxiety Related Disorder (ARD), Mania (MAN), Paranoia (PAR), Schizophrenia (SCZ), Antisocial Features (ANT), Borderline Features (BOR), Drug Problems (DRG), Alcohol Problems (ALC), warmth (WRM) and Dominance (DOM).

After analysing the PAI scores in general, the study explored the paranoia subscales, as the Paranoia scale scores were significantly different between the two groups. Detailed in Table Three are the results of the independent samples *t* tests, which were conducted for the paranoia subscales: Hypervigilance, Persecution, and Resentment. As can be seen in Table Three, the suspected NATTR ($M = 54.2$) group scored significantly higher than the genuine group ($M = 49.4$) on the PAR-H subscale. A similar finding was also apparent on the PAR-P subscale with NATTR claimants ($M = 54.0$) obtaining significantly higher scores than the genuine claimants ($M = 49.3$). With regards to the PAR-R scale, the NATTR claimants ($M = 60.0$) once again scored significantly higher than the suspected genuine claimants ($M = 54.2$).

Table 3.0: *Mean scores for the paranoia subscale in the suspected genuine and the not attributable to the RTA groups, using the T-test.*

PAI Sub- Scale	NATTR T Scores		Genuine T Score		*t*	*P*	*d*
	M	*SD*	*M*	*SD*			
PAR-H 'Hypervigilance'	54.2	11.7	49.4	9.9	2.14	.04	0.43
PAR-P 'Persecution'	54.0	11.2	49.3	9.6	2.17	.03	0.45
PAR-R 'Resentment'	60.0	14.1	54.2	10.8	2.24	.03	0.46

NATTR Group N=39, Suspected Genuine Group N=55.

A further area to explore was the usefulness of the PAI validity scales for detecting exaggeration and malingering in the two groups of claimants. As can be seen in Table Four, the percentage of claimants that could be categorised into the two groups according to the cut-off scores suggested in the PAI manual (Morey, 2007) was low.

Table 4.0: *Percentage of claimants within each group scoring higher than the PAI validity scale cut off scores according to the PAI manual (Morey, 2007)*

PAI validity scales	Groups	
	Genuine N=55	NATTR N=39
NIM >73T	20%	25.6%
MAL >84T	14.5%	10.3%
RDF >59T	16.4%	28.2%

Discussion

The present article raises many important concerns for those charged with assessing the veracity of RTA claimants. The key finding raised here is that very few significant differences emerged between those who were diagnosed as having a genuine mental disorder following an RTA and those categorised as having no disorder attributable to the RTA. As a result, the findings of this article suggest that the decisions made by the psychiatrist must have been made based on different evidence, as the PAI only discriminated between claimants in regard to their scores on the PAR scale. Thus, it could be argued that the assessment method employed is idiosyncratic due to being based on the experience and opinion of the examiner due to the absence of a robust detection technique.

The present study utilised the psychiatrist's final decision as a criterion variable with which to distinguish genuine claims of mental disorder from those that were not caused by the RTA and, although it is acknowledged that this is far from reliable and at risk of being dismissed as being too "circular," the authors are not aware of any other means by which the decision-making of assessors in such cases can be explored. On a more positive note, the present study does provide some insight into which factors may have contributed to the formation of the forensic psychiatrist's decision. Furthermore, on a basic level, simply describing the diagnostic outcome of the 100 RTA claimants assessed in this study should be of particular interest to other medico-legal examiners. Future research would prove to be beneficial by providing a more thorough understanding of the differing types of symptoms and disorders displayed by claimants and diagnosed by practitioners.

Consistent with Resnick's (1977) suggestion that there appears to be three different patterns of malingering, the data used in this article empirically supports such claims. Out of the 100 RTA claims, 4% of the claimants could be classified as fitting the category suggested by Resnick (1977) as using a pure malingering strategy. The highest proportion of claims that were categorised as NATTR were submitted by individuals labelled in this study as vulnerable, which could be argued to reflect the strategies of partial malingering and false imputation. Having said this, it is essential for further research to explore the demographics of such claimants in further detail since, from the data used in this study, it was not possible to explore these claimants in further detail. Due to the imbalance of claimants included in the present study, whereby only 4% were suspected of pure malingering and 28% were suspected of malingering potentially through a partial malingering or a false imputation strategy, it wasn't deemed possible to statistically examine the efficacy of the PAI validity indicators in detecting the different strategies of malingering. Future research would be encouraged to overcome this limitation. In addition, it is also important to reiterate that those who were labelled "vulnerable to mental disorder" by the psychiatrist in the present study indeed may not have been consciously malingering at all. There may have been a variety of reasons for why they were attesting that the RTA caused their current disorder, or it may be the case that the RTA exacerbated their symptoms. However, from the data utilised within this article, it was impossible to investigate this further. Future research adopting a differing methodology is certainly warranted. Nonetheless, for the purpose of this article, the aforementioned claimants' mental disorders were not attributable to the RTA according to the psychiatrist and thus were dealt with in this way during the analysis.

Finding only one significant difference on the PAI demonstrates that the PAI and assessments like it should not be used as the only source of assessment in order to consider the possible presence of malingering. This study argues that psychometric assessments must only be used as an adjunct to a detailed clinical interview and full consideration of collateral and background information. Had the psychiatrist only used the PAI, claimants included in the present sample as not having a mental disorder attributable to the RTA would have simply been missed and thus may have received high amounts of compensation, which they did not necessarily warrant. This is an important finding, considering that the PAI has three dedicated exaggeration scales (MAL, RDF, & NIM). However, when viewing claimants as either having a mental disorder attributable to the RTA or not having a mental disorder attributable to the RTA, these were ineffective. As a result, this indicates that, perhaps, viewing claimants in such a way is not appropriate; future research investigating the three levels of malingering specifically would be useful. Although the PAI has dedicated scales for detecting malingering, the assessment is not a dedicated test for malingering. Such tests do exist but to the authors' knowledge no empirical tests of such instruments have been

conducted within a similar arena. Future research would prove beneficial employing a dedicated malingering assessment such as the SIRS 2 or the M-Fast to first corroborate the assessor's decision and second to assess whether such tests would be better equipped to assist examiners.

What the DSM-5 (APA, 2013) argues is that a malingerer is essentially a deceptive and antisocial individual who may be bordering on an antisocial personality disorder. The findings of this article certainly do not support this theory empirically. The PAI allows for the examination of antisocial features of an individual's personality and consequently no significant differences were found between genuine claimants and those who were suspected of malingering due to their attested mental disorder not being the result of the RTA. Whilst it is probably the case that individuals with traits associated with antisocial personality disorder might be more likely to feign symptoms for a financial reward, it is also probably the case that many individuals who are prepared to exaggerate the extent of their injuries in an insurance claim are not necessarily antisocial in other respects. Consequently, the criminological model of malingering suggested by the DSM-5 is not supported here and thus provides evidence that perhaps the adaptational model suggested by Rogers (2008) is a more robust explanation of malingering. Essentially, Rogers (2008) argues that individuals malinger to make the best of a bad situation through a cost-benefit analysis and rational choice. The results of this article would seem to support this theory and thus the implication suggested here is that the information given in the DSM to guide practitioners regarding malingering is potentially not useful and in need of revision.

Two significant differences did, however, emerge between the two groupings of claimants based on the demographic information and claims-related data. The suspected malingering group, whose mental disorder was not attributable to the RTA, were significantly more likely to have incurred minor injuries than those diagnosed as having a disorder as a result of the RTA. Consequently, this would suggest that claimants who receive minor injuries are more likely to be classified as malingerers than claimants who have incurred more serious injuries. This may possibly be due to the simple reason that more serious physical injuries are a sure pay-out, whereas the claimant who has incurred less serious injures has not had as much of an opportunity to present injuries that can be compensated and thus may engage in a malingering strategy. Previous research has indicated that this financial pressure is an important contributor to the commission of malingering (Rohling, Binder, & Langhinrichsen-Rohling, 1995; Miller, 1976); the findings of the present article support this as there were significantly more unemployed claimants within the suspected malingering group.

A further area where the two groups of claimants significantly differed was on the paranoia scale of the PAI. The paranoia scale and its subscales are suggested to be useful in assessing the level of trust which an individual is likely to approach in life circumstances; the PAR-R and the PAR-H sub-scales measure bitterness, hostility, and a tendency to distrust others (Morey & Hopwood, 2006). Therefore, individuals who score higher on these scales are likely to demonstrate the aforementioned personality constructs. Therefore, we hypothesise that elevated paranoia scales in RTA claimants, particularly the resentment scale (PAR-R), may reflect the claimant's attitude towards the party "responsible" for causing the RTA. This consequently may explain, in part, an individual's decision in choosing to exaggerate his or her symptoms as the claimant wishes to persecute the party they believe to be responsible for his or her suffering. This is something that future research is encouraged to explore, as scholars have attested that rationalisations are a pertinent component in theories of fraudulent criminal behaviour (e.g. Cressey, 1953).

A final area that is important to acknowledge is the limitations arising from the sampling technique used in this article. This article is by no means suggesting that the findings of this paper are representative to RTA assessments in the UK as the findings are simply based on the decision of one forensic examiner. It is more the case that this article has sought to offer a descriptive insight into how such claimants are assessed in practice. It is essential that future research seek to overcome this limitation.

The present study indeed provides important insights into some of the key factors, which may lead a medico-legal examiner using similar methods of assessment to conclude that an RTA is not the cause of a claimant's declared mental disorder. As documented throughout, the main limitation of this study is that, without the use of a gold-standard criterion variable, identifying malingers from a sample such as the present one is an impossible task. This therefore reiterates the main conclusion of this study: investigating mental disorder claims in which there exists a clear motive to be dishonest is a confounded task that requires substantial and ecologically valid research. Therefore, future research should work collaboratively with forensic professionals in order to understand the limitations of psychometric assessment tools such as the PAI and how professionals arrive at their conclusions. Consequently, future research should examine the clinical interview in order to offer further insights into the determination of malingering, with the aim of reducing the amount of claims that possibly go undetected each year, resulting in a huge loss to the economy.

Undoubtedly, this article has shone light on a previously under-studied area and the authors of the present article invite scholars and practitioners to draw conclusions as to whether the assessment of mental disorder in this arena is appropriate. Future articles critiquing the assessment methods as opposed to descriptively portraying the process would certainly be beneficial. On a simplistic level, the present article has offered descriptive statics that may be of use to practitioners working in this arena.

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