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A Multi-Method Approach to the Detection of Fabricated Symptoms

Irena Boskovic

SUMMARY

Malingering is defined as the intentional false presentation of symptoms driven by an external incentive, which can be financial (e.g., compensation), legal (e.g., diminished criminal responsibility), or involve other types of personal gain (e.g., to obtain medication). Malingering occurs on a non-trivial scale in both civil and criminal contexts, and has serious legal and social ramifications. The aim of this thesis was to examine whether a multi-method assessment of symptoms might enhance the detection of symptom fabrication, and whether an assessor's cultural background impacted their perceptions of malingering.

In this thesis, three different methods for detecting malingering were tested across a total of eight studies. Specifically, we tested a novel lie-detection tool, the Verifiability Approach (VA) in order to investigate whether the VA could contribute to the credibility assessment of physical symptom reports. The logic behind the VA is that people who are telling the truth should produce more verifiable details - information that can, in principle, be checked – compared with liars. Liars, in contrast, tend to avoid verifiable information and report non-verifiable details. Next, we critically examined the utility of a controversial task, the Modified Stroop task (MST), a reaction time measure of attentional bias among patients, in the detection of malingering. The MST involves the presentation of disorder-related and neutral words that are shown in different colors. The task is to color-name the words while disregarding their semantic meaning. The idea behind the MST is that genuine patients should show prolonged reaction times (RT) when presented with disorder-related, compared with neutral words (i.e., the MST effect). We also applied a newly developed measure of over-reporting, the Self-Report Symptom Inventory (SRSI), in order to investigate symptom endorsement among experimental malingerers. The SRSI includes two scales of symptoms: genuine (plausible) symptoms and pseudosymptoms (unlikely complaints). The rationale behind the SRSI is that genuine patients will endorse more of genuine and fewer of the pseudosymptoms, whereas malingerers will overendorse both types of symptoms. Finally, we investigated whether the cross-cultural background of practitioners influences their view on exaggerated symptoms.

In the first experimental chapter (Chapter 2), we report the findings of research designed to test the VA with respect to the detection of fabricated symptom statements. We investigated the extent to which people with genuine symptoms compared with instructed malingerers differed in the provision of checkable details. In Study 1, we examined statements of students genuinely suffering from various physical symptoms (e.g., headache, backpain), and students instructed to malingering such experiences. We found that malingerers, relative to truth tellers, produced longer statements that contained fewer verifiable details. In Study 2, we repeated the task, but participants were informed that their statements would be inspected for verifiable information. Providing this additional information to participants led to non-significant differences between instructed malingerers and truth tellers in terms of both verifiable and non-verifiable information, and the overall length of statements. In Study 3, we experimentally induced symptoms (physical exercise) in one group of students (truth tellers), whereas two other groups received instructions

to malingering having been engaged in physical exercise. Participants were not informed about the type of information they should provide. The results confirmed our findings from Study 1. We observed longer statements containing more non-verifiable information for both malingering groups relative to the control group. In other words, an extensive amount of non-verifiable details was indicative of fabricated symptom reports in both Study 1 and Study 3.

In Chapter 3, we tested whether a reaction time task, the MST, used in combination with the SRSI, might assist in the detection of malingered anxiety-related symptoms. In Study 4, we focused on test-anxiety relying on a within-subject design. Students who were not suffering from test anxiety were asked to first genuinely respond to the MST task and the SRSI, and seven days later they were instructed to mangle having test-anxiety and to repeat the tasks. We found that students in the latter session produced the MST effect typically found in genuine test-anxiety patients, while the MST effect did not emerge in the first session. Participants in the second session overendorsed genuine symptoms and pseudosymptoms related to anxiety, compared with the first session, which led to a detection rate of 77% of test anxiety malingerers. In Study 5, we investigated PTSD-related symptoms, and included three groups of participants: 1) participants with current high impact aversive experiences, 2) participants with low impact aversive experiences, and 3) actors, who also had a low impact history but were asked to simulate being under the effects of a high impact of aversive experience. The MST effect did not emerge in any of the groups. However, the actors produced longer response latencies than both high and low impact groups. Actors also overendorsed items of the SRSI, thus 89% of these malingerers were successfully detected as such. Problematically, however, 27% of the honest group were also classified as malingerers.

In Chapter 4, we focused on the SRSI alone, and its utility for detecting malingered physical (pain-related) and psychological (anxiety-related) symptoms (Study 6). In a between subjects design we included an honest comparison group and two groups of instructed malingerers (pain and anxiety symptoms). The malingerers of pain and malingerers of anxiety endorsed more genuine symptoms and pseudosymptoms than participants in the honest group. Also, both malingerer groups over-endorsed symptoms corresponding to their alleged conditions. The detection rates reached 48% for simulators of pain, and 73% for simulators of anxiety, suggesting that the SRSI has a low sensitivity to simulated physical complaints.

In Chapter 5 (Study 7), using a combination of the VA and SRSI, we wanted to examine malingerers' strategies in fabricating exposure narratives and symptom reports in a PTSD-related condition. In a between subjects design, we experimentally induced the PTSD-like symptoms in honest comparison group, using a Virtual Reality (VR) paradigm. The other group was not exposed to the VR, but was instructed to simulate that experience (malingerers). We applied the VA to examine the veracity of their exposure narratives, and our findings were consistent with the general results reported in Chapter 2. Malingerers produced longer statements containing more non-verifiable details, whereas the honest group included a higher proportion of verifiable information. The quality of the symptom reports was investigated using the subscales of the SRSI describing genuine and pseudosymptoms pertaining to anxiety and PTSD complaints. Malingerers endorsed more both genuine symptoms and pseudosymptoms than the honest group. Applied together, the features of the VA and the SRSI subscales correctly classified 76% of participants, which supports a multi-method approach within the symptom validity assessment.

Finally, in Chapter 6 (Study 8), we investigated whether the cultural background of practitioners affected their plausibility judgments concerning various symptoms. We included Western and non-Western practitioners, and presented them with a mix of atypical symptoms, dissociative symptoms, and every-day complaints. Their task was to rate the plausibility of each symptom in terms of exaggerated or authentic. There were no significant differences between culturally diverse practitioners in how they judged the plausibility of various symptoms. All practitioners rated atypical and dissociative items as significantly less authentic than every-day complaints, but they did not distinguish between atypical symptoms and dissociative symptoms.

In sum, our results indicated that, with certain adjustments, the VA might contribute to symptom validity assessment. The MST, however, was shown to be an unreliable detection tool, the use of which should be avoided to detect symptom fabrication. The SRSI appears to be a promising method for detecting symptom over-reporting. Furthermore, combining the VA and the SRSI led to adequate detection rates of instructed malingerers, indicating the benefits of combining different methods in symptom validity assessment. However, further research is necessary to establish the generalizability of our findings to different samples, such as patients.