Symptom validity in clinical assessments

Knowledge valorization

This dissertation focuses on symptom validity in psychological assessments of clinically referred patients in a hospital or mental health care setting. This valorization paragraph aims at describing how the obtained knowledge from our research can be made valuable for clinical and social use.

Societal relevance

The implications of poor symptom validity are extensive and can be subdivided in first, second and third order effects (Armistead-Jehle, & Green, 2016). First order effects are the direct consequences for the patient and the clinician. The consequences of poor symptom validity are invalid diagnostic data, and therefore inconclusive assessment. When poor symptom validity is not taken into account, it can lead to incorrect diagnosis and treatment advice. This can potentially worsen the patient's status.

Second order effects entail the consequences for treatment benefit and loss of work capacity. It is hypothesized that poor symptom validity is associated with poor treatment adherence and increased disability claims. The few studies that have examined the relation between symptom validity and treatment outcome found a higher treatment dropout rate in patients who exhibited poor symptom validity during the pre-treatment assessment (Goedendorp, Van der Werf, Blijenberg, Tummers, & Knoop, 2013; Greene, 1988). An association between invalid responding and disability seeking has been repeatedly found. An example is the study of Chafetz, Prentkowski, and Rao (2011) on symptom validity in patients with a low IQ (Full scale IQ < 80). In their study the patients who were evaluated for parenting abilities did not fail the performance validity test (PVT), whereas half of the group patients that was applying for disability benefits did fail the PVT. Bianchini, Curtis, and Greve (2006) even found a dose-response relation in their study. The patient group that was applying for a high incentive compensation failed validity testing more frequently than the patient group that was applying for a limited incentive compensation. The group of patients with no incentive rarely failed validity testing.

From research standpoint poor symptom validity contaminates clinical trials. A real relation between two variables can become obscured, and consequently an additional number of participants are needed to detect the relationship (Rienstra, 2015). For example, Rienstra and colleagues found that the relationship between verbal learning performance and hippocampal atrophy in patients seen in a memory clinic for diagnosis of mild cognitive impairment was absent in the group patients that exhibited underperformance (Rienstra et al., 2013). Also, in a sample of self-reported sexual abuse victims the usual relation between trauma severity and mental health problems was largely absent in the group responders that evidenced symptom over-reporting (Merckelbach, Langeland, De Vries, & Draijer, 2014). In conclusion, poor symptom validity entails the risk of mistaken conclusions (no or weak relationship exists) and waste of research time and money.

Third order effects entail the consequences for society at large such as erroneously awarded disability payments, lost work productivity, increased health care costs, and consequently higher premiums for health insurance. For example, a link has been found between poor symptom validity and an increased number of emergency department visits and inpatient hospitalizations (Horner, VanKirk, Dismuke, Turner, & Muzzy, 2014). The true financial burden of poor symptom validity is unknown. For the United States Chafetz and Underhill (2013) estimated the costs of erroneously awarded disability benefits in the group of adult mental disorder claimants for selected Social Security programs at $20 billion in 2011. The real costs will be even higher since the costs of loss of work productivity and health care utilization were not taken into account.

Target audience

The results described in this dissertation are relevant to various stakeholders who are involved in diagnostic decision-making. First and foremost, the results are relevant for the patients. Those patients who exhibit poor symptom validity during the psychological assessment are expected to benefit more from detection of poor symptom validity than from erroneous diagnosis. Clinicians are important stakeholders, since on them rest the burden of interpreting the diagnostic data and behavioral observations gathered during interview, test data and inspection of the medical file. They need to draw conclusions based on these data, the knowledge they have on the brain-behavior relationship, and psychometric qualities of the tests used. Symptom validity is a necessary perquisite to interpret the collected data. Researcher and funders of research are stakeholders. From both a scientific and efficiency point of view, establishing the validity of the obtained data in clinical trials is of utmost importance. Finally, the results are relevant to the society at large that bears the financial burden of poor symptom validity in the form of increased health insurance premiums, loss of work productivity and amount spent on disability aids and benefits. Societal support for the health care and social security system is dependent on a sense of fairness that is strengthened by taking the validity of symptom reporting into account.

Innovation / Products

The results in this dissertation are among the first that are based on large, naturalistic samples of clinically referred patients in several health institutions (i.e., five hospitals and one mental health care institution). Also, opposed to most studies on this topic, we took both dimensions of symptom validity – symptom over-reporting and cognitive underperformance - into account. Further, as far as we know, our study is the first to examine the practices and beliefs regarding symptom validity of clinicians in

Western-Europe and compare our findings to the survey-studies conducted in the United States, Canada, and the United Kingdom. The main product of this dissertation is the implications that our findings have for the psychological assessment of clinically referred patients.

Implementation

In order to facilitate the process of dissemination of the results to clinical practice several endeavors have been undertaken. First of all, all studies have been published in international, peer-reviewed journals. Several articles have been published in the Dutch journal for Neuropsychology [Tijdschrift voor Neuropsychologie]. All study results have been presented in international and national symposia. Also, the results have been processed in a chapter on Symptom validity in a Dutch textbook on rehabilitation psychology (Ponds & Dandachi-FitzGerald, 2016). Further, the data have been incorporated in the guideline on neuropsychological medico-legal assessment from the Dutch Institute for Psychology section Neuropsychology (2016). In order to further disseminate the results, it would be beneficial to incorporate our findings in a brief manual on symptom validity in clinical psychological assessment. Also, systematic education on symptom validity in the master of psychology and in the post-graduate training programs (i.e., training for health care psychologist and training for clinical psychologist and clinical neuropsychologist) is recommendable. Finally, the results of this dissertation have contributed to new research projects that examine the intervention of feedback on poor symptom validity, and that aim to gain more insight into the dynamics operating behind poor symptom validity.