

Residual effects of feigning: An investigation based on self-report and behavioural data

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ABSTRACT

In this explorative study, residual effects of feigning were investigated on the basis of self-report as well as behavioural data. Participants therefore provided self-reported estimates of their hearing abilities and conducted a difficult sound detection task (informational masking paradigm). Participants were manipulated in order to feign hearing symptoms voluntarily. The influence of the character trait fantasy proneness on the frequency of feigning was observed. The manipulation did not lead to the hypothesized behaviour. No relationship was found between fantasy proneness and a tendency to feign symptoms. Residual effects of feigning were not found for self-reported, but well for behavioural data. In combination with previous findings, this result provides additional evidence for the existence of residual effects of feigning and shows possible directions for future research.

Keywords: residual effects of feigning, fantasy proneness, informational masking paradigm

INTRODUCTION

A doctor has reliable and objective measures to assess the physiological state of his/her patients. When a psychologist does the anamnesis of his/her patients, he often has to rely on the patient's self-report and self-evaluation. Those involve the patient's subjective experience and interpretation of his/her state and symptoms and opens the way to exaggeration or downplaying of symptoms. It is the psychologist's task to determine the accuracy of the information he/she receives. Inconsistency of information obtained from different measures can indicate unreliable reports, as do high scores on symptom validity scales, like the Minnesota Multiphasic Personality Inventory (Bush et al., 2005). Nevertheless, it happens that symptoms are reported untruthfully. Several studies show that there is a number of patients who frequently fail symptom validity tests (Kemp et al., 2008; Locke, Smigielska, Powella & Stevens, 2008; Dandachi-FitzGerald, Ponds, & Merten, 2013; Chafetz, 2008). These findings suggest that patients' symptom reports should not always be taken at face value.

There are different reasons why patients exaggerate or invent symptoms. Many people exaggerate a disease from time to time as an excuse to avoid unpleasant occasions. When a person intentionally reports symptoms for personal gain, this is called malingering (American Psychiatric Association, 2013). In contrast, a person is diagnosed with factitious disorder when physical or psychological symptoms are falsified in the absence of external rewards (American Psychiatric Association, 2013). Malingering and factitious disorder are differentiated from somatic symptom disorder, where the patient presents him- or herself with somatic symptoms that cannot be medically explained, but is himself convinced of the symptoms and actually experiencing the illness (American Psychiatric Association, 2013). The difference between those conditions is the patient's belief and intentions. A malingering or factitious patient is deceiving others, while somatic symptoms can be seen as self-deception.

However, a link has been suggested between self- and other deception. The term "imagination inflation" refers to the effect that confidence in the occurrence of an event increases when the event is only imagined (Garry, Manning & Loftus, 1996). When a patient is feigning symptoms, imagination of the respecting disease is necessary. This might lead the patient to rate the existence of the symptom as more likely. Investigating the "residual effects of feigning", Merckelbach, Jelicic & Pieters (2011) made students deliberately feign symptoms on a malingering scale (the Structured Inventory of Malingered Symptomatology, Smith & Burger, 1997, Merckelbach & Smith, 2003). Those students continued to report more symptoms later on, when instructed to answer honestly, in comparison to a control group (Merckelbach et al., 2011). Deliberately feigning symptoms thus seems to induce residual effects: people may end up believing their own fabrications, which results in elevated symptom reporting.

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A possible explanation for these results is the mechanism of cognitive dissonance. Intentionally misreporting symptoms usually does not fit a person's general belief of being healthy and honest. The dissonance between action and belief brings about the experience of a state of conflict (Merckelbach & Merten, 2012). As the feigning cannot be undone, the only way to reduce the cognitive dissonance is to accept them as real. This leads to the question whether the distinction between factitious disorder as well as malingering and somatic symptom disorders can be drawn clearly. The general tenor is that patients with somatoform disorders fabricate symptoms non-consciously, whereas malingering and factitious disorder are seen as deliberate creation of symptoms (Merckelbach et al., 2011). To investigate the relationship between the two conditions, further research concerning the residual effects of feigning is necessary. Merckelbach et al. (2011) showed such residual effects for commonly feigned conditions, like amnesia, neurologic impairment, psychosis, affective disorders, and low intelligence by means of the Structured Inventory of Malingered Symptomatology (SIMS) (Merckelbach & Smith, 2003; Smith & Burger, 1997). However, there are many more situations in which feigning can take place. Moreover, taking the SIMS as measure, Merckelbach et al. (2011) showed residual effects by means of self-report, which is subjective and can be difficult to interpret. Additionally, the external validity of this study can be questioned, as participants were explicitly instructed to feign an illness. To make the findings more applicable to real-life situations, it is necessary that participants make the choice to feign by themselves, without the instruction to do so. Therefore, the present study addresses the topic in a different manner. First of all, participants are put in a situation which should tempt them to fake symptoms by choice. Residual effects will then be investigated by means of a behavioural task in addition to self-report measures. For a therapist to figure out whether symptom reports can be taken as true or should be considered more carefully, it is helpful to know whether some groups of patients are more prone to feigning symptoms than others. That way, patient profiles can give a hint to what extend a patient's statements about his/her condition need verification. A character trait that could possibly be associated with feigning is called phantasy proneness. Wilson and Barber were the first to come up with the trait. Interviewing subjects who were excellently responding to hypnosis, they found that these individuals had a profound fantasy life and vivid sensory experiences, their fantasies were often as "real as life" and they had lively memories of their early and recent life experiences (Wilson & Barber, 1982). Fantasy proneness has also been related to false positive response confabulation (Merckelbach,

Muris, Horselenberg & Stougie, 2000). It will therefore be investigated whether fantasy proneness can also be related to feigning, in so far as participants who obtain high scores for fantasy proneness are more prone to feigning symptoms.

METHODS

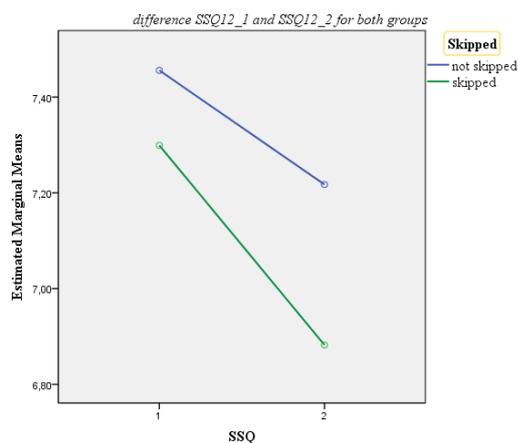
To assess the level of fantasy proneness, participants filled out the Creative Experiences Questionnaire (CEQ; Merckelbach, Horselenberg & Muris, 2001), a short self-report measure of fantasy proneness. Their hearing abilities were measured by means of pure tone audiometry. To trigger their desire to feign symptoms, participants were then told that the following hearing task could negatively affect their hearing abilities for up to one week. They were told that taking part could lead to tinnitus-like symptoms. A short clip was played illustrating a tinnitus. Subsequently, the experimenter mentioned that the test can and should be skipped by participants who already experience symptoms of hearing impairment, and that, if this is the case, participants should indicate this clearly on a hearing impairment symptom list (The SSQ12_1). The purpose of this manipulation was to provoke the desire to avoid the hearing test and thereby trigger the feigning of symptoms on the following self-report questionnaire. Participants had to indicate whether they wanted to skip the task (check the "skip task" or "do not skip task" box) after which they were asked to answer several questions related to hearing abilities. This resulted in two groups: a feigning (those who wanted to skip the task) and a non-feigning (those who did not want to skip the task) group. The announced unpleasant hearing task was not conducted. The experimenter told participants in the non-feigning group that there was a problem with the program and that the task had to be skipped. Participants were handed a scale on current emotions (dissonance scale), including questions about guilt and nervousness, to measure cognitive dissonance. Participants then performed the auditory detection task as a behavioural measure to assess residual effects of feigning. The task was to detect target sounds out of masker sounds (informational masking). After this, they were handed the second version of the SSQ12 (SSQ12_2), as a self-report measure. Participants were interviewed eventually, to investigate whether they were aware of the manipulation.

RESULTS

None of the participants showed impaired hearing on the pure tone audiometry. 30% of participants indicated that they want to skip the manipulation task. None of the participants noticed that he/she was manipulated and that the pretended unpleasant

hearing task was non-existent. A repeated measures ANOVA did not show a significant interaction effect between group (feigning/ non- feigning) and time of measurement (first measurement with the option to feign symptoms, second measurement at the end of the experiment) of the SSQ12 ($p = 0.45$). There was a significant main effect for SSQ12, with lower scores, and thus poorer rated hearing abilities on the SSQ12_2 compared to the SSQ12_1 ($p = 0.01$). A trend can be seen for the scores of the feigning group declining more than those of the non- feigning group (see figure 1).

Figure 1



The scores for both groups on the SSQ12_1 as well as for the SSQ12_2 differed non-significantly. A comparison of the two groups considering reaction time for the informational masking paradigm yielded no significant result. Looking at the means, participants who skipped the manipulation task obtained longer reaction times than those who did not skip. The t- test for both groups on d- prime was significant with a large effect size, with participants who skipped the manipulation task obtaining lower scores (performing worse) than those who did not skip ($p = 0.04$, Cohen's $d = 1.07$). Comparing group scores on the CEQ lead to no significant results on the t- test and a small effect size ($p = 0.74$, Cohen's $d = 0.17$). Scores on the CEQ did not differ a lot between participants. Likewise, the two groups did not show significantly different result when tested for cognitive dissonance by means of a t- test ($p = 0.89$). The obtained effect size was small as well (Cohen's $d = 0.07$). All participants, regardless of group, indicated none or only slight experiences of guilt.

DISCUSSION

The purpose of the present study was to investigate residual effects of feigning by means of different measures. Therefore, self- report as well as behavioural measures were deployed. Additionally, the relationship between the trait fantasy proneness and a tendency to feign symptoms was explored. A first assumption was that participants who decide to

skip the manipulation task would score lower on the SSQ12_1. It was stated as a prerequisite for being allowed to skip the task that one has already experienced at least slight hearing difficulties. Participants were told to decide whether or not they want to do the task and to fill in the hearing questionnaire accordingly. An effect of the choice to skip or not to skip on the score on the SSQ12_1 has not been found. People who skipped the manipulation task indicated a similar level of hearing ability on the SSQ12_1 as people who decided to do the task. The intention behind the manipulation was to make people feign by indicating lower hearing abilities on the hearing scale. It can thus be said that the manipulation did not lead to the intended effect. People did not voluntarily feign symptoms. Moreover, skipping the manipulation task did not lead to the experience of guilt. Almost all of the participants indicated to have no feelings of guilt at all. Perceived guilt was used as a measure of cognitive dissonance, which has been assumed to be the mechanism underlying residual effects of feigning (see Merckelbach & Merten, 2012). This assumption can thus not be confirmed by this experiment. Nevertheless, it can be argued that by indicating their intention to skip the task, participants accepted the general prerequisite that only people who have hearing difficulties are allowed to skip. By making this choice they thus accepted general hearing difficulties, even if they did not directly indicate those symptoms themselves. Nevertheless, the following findings have to be evaluated with caution.

To investigate residual effects of feigning via self-report measures, participants filled out the hearing scale twice. Interestingly, both groups, feigners and non- feigners, indicated lower hearing abilities on the second compared to the first hearing scale. This effect was even more profound for feigners (see figure 1). The first hearing scale was administered prior to and the second one immediately after the auditory detection task. The auditory detection task was designed to be demanding and hard. It was difficult for most participants to understand the task in the beginning and nobody performed perfectly. This difficult task probably let people lose confidence in their hearing abilities. Further, it might have confirmed feigners in actually having problems with their audition, which in turn led them to indicate even more symptoms on the following hearing scale.

Concerning the behavioural measure, an effect of feigning was found. Those participants who feigned symptoms (those who decided to skip the manipulation task) performed worse on the auditory detection task and needed more time for detecting a target sequence. This can be seen as proof for residual effects of feigning on a behavioural measure. As this, the finding provides an additional

proof for what previous studies already suggest: Feigning symptoms leads to residual effects that influence self-evaluation and as well behaviour. The finding of residual effects on a behavioural measure rules out participants' tendency to answer consistently as a possible explanation for the effect. Moreover, residual effects of feigning have been suggested for physical in addition to psychological symptoms. They should be considered in medical settings like in psychological ones. At the same time, the obtained results could also be ascribed to actual poorer hearing abilities of some individuals that have not been detected by the audiometry. However, there was no difference in ratings for feigners and non-feigners on the first hearing scale, which makes this explanation unlikely. Another possible explanation for the findings could be that some of the participants just were not motivated to take part in the experiment. As a result, they wanted to skip the manipulation task to save time and did not put a lot of effort into performing well on the auditory detection task. This might also explain why no difference between the two groups on the first hearing scale was found. But, opposed to this, most feigners indicated in the exit interview that they decided to skip the manipulation task because they did not want to experience the supposed hearing symptoms.

CONCLUSION

The hypothesis that fantasy-prone individuals have the tendency to feign symptoms more often has to be rejected. There was no difference in scores of fantasy-proneness for feigners and non-feigners. It has to be mentioned that the sample was quite homogenous in relation to fantasy-proneness. A more diverse sample might show different results.

All in all, even though it has not been proven that the manipulation worked as intended, a clear trend can be seen for people feigning hearing symptoms to subsequently rate their hearing abilities as worse and perform worse on a behavioural (hearing) task. In combination with previous studies, which clearly found residual effects of feigning on self-report measures, it can be assumed that this trend has not been found haphazardly.

The present study shows several limitations, like a small sample size and an insufficient manipulation. Eventually, this study can be seen as a rather explorative investigation. Results will have to be proven by further examinations with more participants and improved methodology.

ROLE OF THE STUDENT

The topic of this bachelor thesis was discussed by Shalina Görg with her supervisors Isabella Niesten and Lars Hausfeld. They helped her on the way to a testable hypothesis. The setup of the experiment was designed in a steady exchange. The experiment was conducted by Shalina Goerg.

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