FEEDBACK REPORT FOR PARTICIPANTS

Individual Differences in Detecting Deception Across Contexts

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Research Project conducted by:

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INTRODUCTION & GOALS OF THE PROJECT

Examining what makes a person better at detecting deception than others remains an important topic of research because of the severe consequences of liars getting away with their deceit in some high stakes' situations. For instance, studies in personnel psychology demonstrated that most job candidates use tactics that are intended to impress interviewers (Levashina & Campion, 2007; Weiss & Feldman, 2006) and that deceptive impression management may interfere with interviewers' evaluation and allow less qualified candidates to be hired (Roulin, Bangerter, & Levashina, 2015). In a law enforcement context, the inability to detect deceit could send a criminal free while wrongfully convicting an innocent. Despite the gravity of such circumstances, law enforcement officers and judges were not found to be more accurate than college students at detecting deception (Bond & DePaulo, 2006). However, to date, ability or accuracy across context were never examined. So, what makes a person better than others at spotting lies? Predominantly, people have a truth-bias toward others, however, this bias has been shown to vary according to suspiciousness. In other words, more suspicious people perceive others more as lie tellers than less suspicious people (Bond & DePaulo, 2008).

In this study, we first examined if the Dark Triad (DT – Narcissism, Machiavellianism, Psychopathy) personality traits, cognitive ability, trust, and Belief in a Just World (BJW) are related to higher accuracy in deception detection across three different contexts (i.e., job interview, student excuses, and witness interview). Primarily, we looked at whether the ability to detect deception varies based on individual differences but can be translated across three different contexts of deception. Secondly, we investigated the moderating effect of cognitive ability between trust as well as DT and the ability to detect deceit. Next, we looked at age and gender as moderators in the relationship between trust and ability in detecting deception. Finally, we examined the mediating effect of trust in the relationship between BJW and ability to detect deception.

PARTICIPANTS, DATA COLLECTION, & ANALYSES

Phase 1 was comprised of an online survey administered in Qualtrics. Participants who agreed to partake in the study received a monetary compensation of USD $2.00. The four scales used were the short measure of the Dark Triad (SDT), comprised of the 9-item Machiavellianism sub-scale, the 9-item narcissism sub-scale, and the 9-item psychopathy sub-scale (Jones, & Paulhus, 2014), the 6-item Generalized Trust Scale (Carter & Weber, 2010), the 6-item General BJW scale (Dalbert, 1999), and the 16-item International Cognitive Ability Resource, which is an open-source measure of cognitive ability (Condon & Revelle, 2014). Participants were also asked to rate themselves on how good they are in telling lies on a 5-point Likert-type scale (Jonason et al., 2014). Finally, the participants were asked to complete demographic information (e.g., age, ethnicity).

Phase 2 of the survey took place one week after Phase 1. Participants were compensated monetarily for their participation (i.e., at least USD $4.00, with an opportunity to obtain USD $1.00 as a bonus). The main survey consisted of 30 short videos, lasting between one to four minutes each. There were three types of videos. The first was the "*Interviews*" which asked the interviewee (sender) "Tell me about a project for which you had to work as part of a team to achieve a common goal. What kind of team was it, what was the goal, and what happened?" The interviewees (senders) were experienced students from an MBA program in a Canadian university. The second type of video shown was "*Excuses.*" Eight undergraduate students from a Canadian university were asked about an alibi for a social situation for which they were unable to honor the commitment. The last type of video is "*Witness.*" Ten videos showing adults interviewed by an experimenter regarding what they saw in a room they were in with one of the videos showing an explosive device and incriminating evidence. After watching each video, participants were asked to indicate if they believe the person in the video is honest or deceptive. They were also asked to rate their confidence level.

A total of 440 participants answered the survey at Phase 1. However, following cleaning and screening, 350 participants' data were used to conduct main analyses in Phase 1 and 230 for Phase 2. Data was analyzed at the aggregated level.

Phase 1	Phase 2
- 209 males and 140 females (1 other) - 280 identified as Caucasian and 70 were another ethnicity. - 310 participants reported being employed. - 230 reported having a university degree.	- 141 males and 88 females (1 other) - 177 identified as Caucasian and 53 were another ethnicity. - 202 participants reported being employed. - 147 reported having a university degree

MAIN FINDINGS

Overall, participants were able to detect deception only around chance level, across contexts. More precisely, detection accuracy was around 53% in job interview, 51% for excuses, and 54% for witness statements. Interesting detection accuracy in one context was unrelated to accuracy in another context. That is, people better at spotting lies in an interview were not better (or worse) at detecting lies in witness statements or for excuses.

We also found very small and largely non-significant relationships between detection accuracy and individual differences. Although the results from this study were, nearly entirely, non-significant, they were not surprising. Given most of the previous general research on deception detection accuracy and that people are only slightly better than chance, albeit significantly, this study simply continues to contribute to the overwhelming support of this notion (Bond & DePaulo, 2006; Bond & DePaulo, 2008; Mann, Vrij, & Bull, 2004). Specifically, our results show that when controlling for gender and ethnicity, only narcissism proved to be significantly related to one's accuracy in detecting deception. Non-significant results were found for cognitive ability, trust, and BJW. Moreover, cognitive ability did not moderate the relationship between any of the DT traits and lie detection accuracy, nor did it moderate the relationship between trust and deception detection accuracy.

The results of this study did not provide any further clarity to the conundrum regarding one's age and trust and their ability to detect deception as not only was the relationship between age and lie detection accuracy not related but its ability to moderate between trust and detection accuracy was also not significant. Furthermore, individual difference did not manifest itself when the

participant's sex was taken into consideration as a moderator between trust and accuracy in lie detection. Lastly, the mediation of trust on BJW was found to be non-significant

The contribution of this study to the current knowledge in lie detection is to eliminate wasted efforts in looking for individual differences in accurately detecting lies. The current study investigated four main potential sources of individual differences, as well as five additional interactions amongst those four while also including age and gender, in the hopes of identifying individual traits, which could help to improve lie detection accuracy. However, only the DT traits, demonstrated significant results to varying degrees; they were only significant for the total accuracy score across all contexts, and they did not allow for improved accuracy in detecting lies in a specific interview context. This suggests that the overall DT traits, as well as Machiavellianism, narcissism and psychopathy may have some real-world application (which would need to be further investigated). Differences in other individual traits, such as, BJW, trust, age and gender do not improve one's ability to detect deception more accurately. A broader implication of this study is the extension of this idea that it is possible that individual traits in general do not improve lie detection accuracy. Another important implication of this current study is the idea that accuracy in deception detection is not an innate individual trait possessed only by a few but is potentially trainable and accessible to more people given the right training such as those provided by Hartwig, Granhag, Stromwall and Kronkvist (2006). A final implication of this study is that while Hartwig et al. (2006) demonstrated that providing training to identify correct cues to deception improved accuracy in detection, that a "one-size fits all" training may not be useful, rather a more tailored training that considers the specific situations and context that individuals would be exposed to would be of more benefit as found in Mann et al.'s (2004) study.

If you have any question about this research or our findings, please contact nicolas.roulin@smu.ca.