Training Law Enforcement Officers to Identify Reliable Deception Cues With a Serious Digital Game

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ABSTRACT

Extant research indicates that professional law enforcement officers (LEOs) are generally no better than untrained novices at detecting deception. Moreover, traditional training methods are often less effective than no training at all at improving successful detection. Compared to the traditional training, interactive digital games can provide an immersive learning environment for deeper internalization of new information through simulated practices. VERITAS—an interactive digital game—was designed and developed to train LEOs to better detect reliable deception cues when questioning suspects and determining the veracity of their answers. The authors hypothesized that reducing players’ reactance would mitigate resistance to training, motivate engagement with materials, and result in greater success at deception detection and knowledge. As hypothesized, LEOs playing VERITAS showed significant improvement in deception detection from the first to the second scenario within the game; and the low-reactance version provided the most effective training. The authors also compared various responses to the game between LEOs and a separate undergraduate student sample. Relative to students, findings show LEOs perceived VERITAS to be significantly more intrinsically motivating, engaging, and appealing as a deception detection activity.

KEYWORDS

Deception Cues, Deception Detection Training, Digital Games, Law Enforcement Officers

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INTRODUCTION

The average human can identify the difference between truth and deception at about a 54% accuracy rate in laboratory settings (Bond & DePaulo, 2006). These odds are only slightly better than flipping a coin, but they can be improved significantly with skilled questioning and careful post-hoc analysis of the content of deceptive versus truthful statements (Levine, 2014). Although most people are more likely to encounter deception when the stakes are low and the consequences relatively minor, certain professionals regularly encounter high-stakes deception that is often accompanied by much more severe consequences. Law enforcement officers (LEOs), intelligence analysts, and others in similarly specialized fields are required to make frequent high-stakes veracity assessments that may severely impact their well-being and safety, along with their livelihoods and the lives of others.

Many programs have been developed over the years to train high-stakes lie-detectors such as LEOs to distinguish between deceptive and truthful behaviors. However, studies have shown that LEOs often remain no better at detecting deception than average untrained people (Granhaug & Vrij, 2010; Talbot, 2012). To make matters worse, some training practices within law enforcement have been known to reduce deception detection accuracy (Kassin & Fong, 1999; Vrij & Mann; 2005). Moreover, LEO’s confidence in their own skill at detecting deception is often much higher than warranted by their actual abilities (DePaulo, Charlton, Cooper, Lindsay, & Muhlenbruck, 1997). Thus, due in part to an inflated sense of self-confidence, LEO trainees are often insufficiently motivated to seek out and attend to deception detection training opportunities. Even when initial motivation is high, traditional trainings can be tedious, boring, and wholly ineffective. This limited success with training programs has prompted some experts to question whether training provides any real benefit, or whether reliable deception cues forming the basis of many training programs are too difficult to identify or extricate. To overcome these training challenges, we investigate interactive gaming as an approach to deliver research-based deception detection techniques.

Interactive digital games incorporating both intrinsically and extrinsically motivating designs can maximize the appeal of experiential learning environments, allowing learners to explore, observe, experiment, and reflect upon their behavior. In the case of deception detection, immersion in a game-based training environment can be especially effective at helping players overcome their automatic reliance on incorrect cues, stereotypes, and “gut” reactions that can be misleading during deception detection efforts. Concerning LEOs—who may be resistant to training, or unaware that it is even needed—the appeal of well-designed digital games can encourage engagement with the materials, and thereby decrease reliance on biased, decision-making heuristics that are associated with poor deception detection (Heuer, 1999). At least one study has shown digital game-based learning (DGBL) to be effective at improving LEO’s interviewing skills associated with verbal deception detection (Dando & Bull, 2011). Moreover, video games can provide both intrinsic and extrinsic forms of motivation (Peng, Lin, Pfeiffer, & Winn, 2012; Ryan, Rigby & Przybylski, 2006; Tamborini et al., 2010) to encourage trainees to learn as a means of meeting the challenges offered by interactive game environments.

Deception Detection Training

Meta-analyses of deception detection training show a moderate effect on accuracy rates in general. However, the specific type of training can have a significant effect on these results (Dando & Bull, 2011; Docan-Morgan, 2007; Driskell, 2012; Hauch, Sporer, Michael & Meissner, 2014). In his summary of 18 different training studies, Vrij (2008) reports average detection accuracy improvement to be less than 5% —from 53% before training to 58% after training. Concerning LEO populations, Vrij and Mann (2005) argue that police officers are often given erroneous information mixed in with their training, which can include outdated or unreliable methods of detecting deception. Training that combines information about the correct, relevant cues (such as tension, vocal fluency, and the logic and content of verbal answers) with a component allowing trainees to practice their skills with immediate
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