Risky Business: Incorporating Informed Deception Detection Strategies in Violence Risk Assessments

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Although the relevance of deception detection is well established in police investigations and the courtroom, it has been less salient in the context of psychological risk assessments at various levels of the legal system such as sentencing, preventative detention hearings, and conditional release. During the interview component of risk assessments, the implementation of strategies to detect lies is vital to ensuring that accurate predictions are made about an offender’s likelihood of perpetrating violence. In this paper, we discuss some of the challenges associated with attempting to detect deception in such high-stakes contexts. We then address the current understanding of the manner in which high-stakes deception is “leaked” behaviorally and active strategies that can be used to detect lies in risk assessment interviews. We suggest that recent advances in deception detection consistently be incorporated into existing violence risk assessment protocols. Further, the need for deception detection training among professionals who conduct risk assessments is emphasized.

Keywords: detecting deception, violence risk assessment, remorse

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While deception is a common aspect of human communication (e.g., DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; DePaulo et al., 2003; Hancock, 2007; Serota,
most lies are low-stake white lies that are of little consequence if undetected. These lies typically are told to oil the wheels of social interaction, to gain some type of minor personal benefit, or to spare the feelings of others (e.g., Abe, 2011; Vrij, 2008a). However, lies told in the context of the criminal justice system often are high-stakes and can have major consequences for both the liar and society (Porter & ten Brinke, 2010). For example, when guilty suspects lie successfully to police, they are afforded an opportunity to continue committing crimes, sometimes for many years. For example, Gary Ridgway was interviewed by police and passed a polygraph test early in the Green River Killer murder investigation in the United States allowing him to continue murdering women for decades before he was brought to justice. On the other hand, when an innocent suspect is perceived to be lying by an interviewer, the faulty assessment can lead to tunnel vision, biased credibility assessment in court, and, in numerous cases, a wrongful conviction. Given that suspect interviews are such a central evidence-gathering tool in investigations (Holmberg & Christianson, 2002; Vrij, Granhag, & Porter, 2010), the reliability of deception detection within this context is paramount.

The application of credibility assessment, however, does not end at the investigation, or even upon reaching a verdict at trial. Criminal defendants and convicted criminal offenders are interviewed for the purpose of gathering information relating to culpability, risk for future violence, remorse, and rehabilitation. The risks of being deceived in these contexts can be equally as potent as during investigation and trial. In terms of culpability, reactive, spontaneous offenses often are accompanied by a relatively light sentence compared to cold-blooded crimes (manslaughter versus first or second degree murder), providing a motivation for some violent offenders to lie about the nature of their offense. For example, about one-third of non-psychopathic and two-thirds of psychopathic murderers exaggerate how reactive or unplanned their crime was, framing it more as a crime of passion than a cold-blooded one (Porter & Woodworth, 2007). A recent study found, more generally, that the majority of violent offenders downplay the level of premeditation and instrumentality of their violent crimes (Laurell, Belfrage, & Hellström, 2014). Further, these claims are frequently believed – in particular, those by psychopathic offenders – and lead to undeserved lenient treatment in the legal system (Hakkänen-Nyholm & Hare, 2009). The perceived credibility of an offender’s stories relating to his/her crime and future plans has relevance when considering length of sentence and potential release into the community (Byrne, 2003). For example, an offender who provides a story of great remorse and plans to seek treatment and change his life in the future may receive less prison time or be more likely to be granted conditional release. Yet, lies frequently are not detected in these contexts. Despite their relatively high risk for re-offending, psychopathic offenders – who are prodigious liars and skilled emotional actors (e.g., Book et al., 2015; Porter, ten Brinke, Baker, & Wallace, 2011) – are far more likely to be granted conditional release than their less risky counterparts (Porter, ten Brinke, & Wilson, 2009). In fact, Ruback and Hopper (1986) found that parole decisions/predictions became less accurate after the board met with the offender than when only the file had been reviewed, emphasizing the need for better interviewing and credibility assessment strategies.

Thus, high-stakes lies with relevance to risk for violence are often successful. Empirical evidence suggests that most observers are near the level of chance when it
comes to detecting lies or emotional deception (i.e., accuracy rates of approximately 50-56%; Blair, Levine, & Shaw, 2010; Bond & DePaulo, 2006; Porter & ten Brinke, 2008), despite the commonly-held assumption that catching lies is common sense (e.g., Supreme Court of Canada in R. v. Marquard). Most recently, Evanoff, Porter, and Black (2014, in press) found that observers viewing extremely high-stakes lies (family members pleading for the return of a missing relative) were no better than chance at detection (cf. Wright-Whelan, Wagstaff, & Wheatcroft, 2015), despite that the liars were “leaking” much behavioral information indicative of deception (ten Brinke, Porter, & Baker, 2012). Moreover, the lie catcher’s confidence in his/her assessment bears little relation – and is sometimes inversely related – to the accuracy of the evaluation (Kassin & Fong, 1999; Meissner & Kassin, 2002). But what about psychologists and other mental health professionals? While it often is assumed that such “professional” lie catchers are better at detecting lies than laypeople, they are not (e.g., Hartwig, Granhag, Strömwall, & Vrij, 2004; Vrij & Mann, 2001) and experience on the job is unrelated to accuracy (e.g., DePaulo & Pfeifer, 1986; Porter, Woodworth, & Birt, 2000). Ekman and O’Sullivan (1991) found that psychiatrists performed at the level of chance in a passive lie detection task, and the classic study by Rosenhan (1973) found that malingerers nearly always fooled psychiatrists and hospital staff. Clinical psychologists with an interest in deception, on the other hand, have been found to do somewhat better (62.5-67.5% accuracy) than psychiatrists in a passive detection task (Ekman, O’Sullivan, & Frank, 1999). However, a recent study of forensic psychologists, forensic psychiatrists, and legal professionals found that they performed at the level of chance in detecting high-stakes deception prior to training (Shaw, Porter, & ten Brinke, 2013). In fact, a high level of self-reported emotional intelligence – which one might expect to positively relate to detection skills of particularly emotional lies because of an enhanced understanding of emotions – is associated with impaired lie detection (Baker, ten Brinke, & Porter, 2012).

Much of this research is based on “passive observation” in which observers’ credibility evaluations are based on viewing videos of people telling the truth or lying. While some researchers have found that informed passive observation/coding can lead to the identification of reliable behavioral cues to deception (e.g., Matsumoto, Hwang, & Sandoval, 2013; McQuaid, Woodworth, Hutton, Porter, & ten Brinke, 2015; Shaw et al., 2013; ten Brinke & Porter, 2012; Wright-Whelan et al., 2015), this skill must be complemented by active strategies to accurately unearth lies (Vrij, Hope, & Fisher, 2014). For example, Levine et al. (2014) found that expert investigators were extremely accurate (able to elicit confessions) at lie detection when they were given the opportunity to actively question criminal suspects, contradicting their performance when viewing videotaped speakers (Vrij & Mann, 2001; but see Vrij, Meissner, and Kassin 2015 arguing that the above study’s findings are “dangerously misleading”). As such, it is important to consider the pitfalls and promises of incorporating lie detection strategies into risk assessment interviews.

Incorporating Lie Detection Strategies in Violence Risk Assessments

Violence risk assessments typically (but not always) include an interview with an offender, affording the assessor an opportunity to observe and assess credibility beyond a file assessment. Most in the clinical-forensic field now agree that actuarial risk assessment
measures such as the Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 2006), Sex Offender Risk Assessment Guide (SORAG; Quinsey, Rice, & Harris, 1995), or clinical-actuarial risk assessment measures (i.e., Structured Professional Judgment tools; SPJ) such as the Spousal Assault Risk Assessment Guide (SARA; Kropp, Hart, Webster, & Eaves, 1995) and Historical Clinical Risk Management-20 (Douglas, Hart, Webster, & Belfrage, 2013, HCR-R 20;), among others, are critical components of any psychological risk assessment. Although not initially designed for risk assessment purposes the Psychopathy Checklist-Revised (PCL-R; Hare, 1991, 2003) frequently is used in this context (Hurducas, Singh, de Ruiter, & Petrila, 2014) and will be included in the discussion of such instruments. These clinician-scored tools are advantageous over the use of self-report scales because of the latter’s susceptibility to deceptive responding (e.g., Kelsey, Rogers, & Robinson, 2014). However, the results of these actuarial measures are informed by (as with the PCL-R), or complemented by (e.g., VRAG), an interview with the offender who is motivated to appear as a low risk, and may lie to achieve this goal. SPJ risk assessment tools may be vulnerable to attempts at deception because of the reliance on the clinician’s opinion and judgment; however, if adequately trained, this very feature affords clinicians the opportunity to identify signs of deception and incorporate signals of deception into their determination of risk level.

In most manuals accompanying each major actuarial risk tool, information concerning interviewing and credibility assessment is only mentioned in passing. For example, the Spousal Assault Risk Assessment Guide (Kropp et al., 1995) notes that the context of the interview motivates the offender to disclose information or to present information in a self-serving manner (leading to a recommendation for the assessor to rely primarily on collateral information), but provides no suggestions for assessing self-reported information. The PCL-R offers more guidance on the issue of deception; the purpose of the interview is described as to “allow the user to compare and evaluate the consistency of statements and responses, both within the interview and between the interview and the collateral/file information”, and to “provide the user with an opportunity to probe for more information and to challenge the individual on inconsistencies in his/her statements” (p. 18). In scoring items that consider “trait” deceptive behavior (Pathological Lying, Conning/Manipulative), assessors are instructed to consider discrepancies between information from the subject within the interview and in the collateral information. However, there is no guidance around how to assess credibility in the interview beyond looking for information discrepancies. And it is clear that the presence of psychopathy can be in the eye of the beholder. After accurately intuiting the presence of psychopathy in offenders based on viewing “thin slice” videos, observers’ initial perceptions are quickly charmed away with extended viewing (Fowler, Lilienfeld, & Patrick, 2009). Further, PCL-R scores and accordant risk assessment findings are strongly influenced by which side – the defense or prosecution – hired the expert evaluator (e.g., Blais, 2015; Murrie, Boccaccini, Guarnera, & Rufino, 2013), known as the adversarial allegiance effect. Particularly where there is little guidance on how to assess credibility, it may be that adversarial allegiance is fueled, at

\[1\] In general, the assessor is advised to always give the collateral information more credibility than the self-report in instances of disagreement, which seems to us to be a problematic approach. A careful assessment of credibility should result in a more fair and accurate conclusion than assuming that the offender is deceptive.
least in part, by unconsciously biased credibility assessments. This hypothesis is based on past research finding that unconscious biases can influence the interpretation of cues to deception (for example, an observer may be led to believe a target will be deceptive and then rely on stereotypical but false cues to deception such as averted eye gaze to support this preconception), and even lead to tunnel vision, in a credibility assessment context (see Porter, ten Brinke, & Wilson, 2009, for discussion); for example, Meissner and Kassin (2002) found support for the “investigator bias” such that those with more training and prior experience with criminals had a greater response bias for identifying the target as deceptive (versus truthful). However, a direct empirical investigation of the biasing nature of the adversarial allegiance on credibility assessments is necessary.

In conducting a clinical interview that informs or complements measures of risk, assessors must be informed about deceptive behavior and the use of strategies to facilitate credibility assessment. As advocated by many scholars in the field of risk assessment (e.g., Quinsey et al., 2006), multiple sources of information should be used in reaching a decision about a subject’s risk for future violence and an evaluation of his/her sincerity can serve as an additional source of information.

**Pitfalls in Detecting Deception in the Risk Assessment Interview**

The risk assessment interview is much more than a verbal information gathering session in which the assessor asks the offender questions and records his/her responses; it is a high-stakes context in which each player has great motivation to “perform” at a high level. Each “player” is trying to read the other but may not wish the other to be aware of the nuances of the evaluation or impression management strategies. Consciously or unconsciously, the assessor makes observations about the offender’s appearance, demeanor, response style (e.g., tone of voice), and response content that rightfully or wrongfully inform inferences about character and credibility (e.g., Zebrowitz & Montepare, 2015). The offender may be careful in trying to portray credibility to the assessor and be selective or dishonest in the information he/she provides to manage his/her impression, and more specifically, to appear to be a low risk for re-offense. Lying – about issues such as remorse, rehabilitation, sexual fantasies, violent ideation, future plans, drug use, etc. – in this context can be a complex undertaking and stressful for many offenders who may spend many more years in prison if deemed a high versus a low risk. Telling a lie requires that the offender concurrently fabricate plausible information, keep those details straight, and appear credible and emotionally sincere to a critical assessor. As such, deception in this context may be accompanied by strong emotions – fear, contempt and resentment, or even excitement – that must be inhibited and/or convincingly faked (e.g., Ekman & Friedman, 1975; ten Brinke & Porter, 2012). Before turning to the aspects of the offender’s behavior to which the assessor should attend in order to make informed conclusions about honesty, we address some challenges and observational pitfalls that can impair such evaluations (see greater elaboration in Vrij et al., 2010).

The “First Impression” problem. Typically, the first time the risk assessor and offender will meet is at the risk assessment interview. Upon meeting the offender, the assessor is subject to a host of first impressions about him/her that can powerfully influence later decision-making. Indeed, first impressions inform observers’ judgments about others’ character, personality characteristics, and intentions, and these intuitive,
split-second evaluations are predicated on specific appearance-related features, including facial features, emotional expression, attractiveness, posture, and race (e.g., Andreoni & Petrie, 2008; R. Bull & Rumsey, 1988; Callan, Powell, & Ellard, 2007; Stewart et al., 2012; Zebrowitz & Montepare, 2015). Within approximately 100ms long-lasting first impressions are formed about the individual, with confidence in such assessments increasing over time (Aviezer, Trope, & Todorov, 2012; Bar, Neta, & Linz, 2006; Porter & ten Brinke, 2009; Todorov, Said, & Verosky, 2011; Willis & Todorov, 2006). This evaluation appears to be a result of an automatic and subconscious process that focuses on structural characteristics of the face, with features such as higher eyebrows, rounder faces, wider chins, and larger eyes signaling trustworthiness (Bar et al., 2006; Todorov, 2008; Todorov, Baron, & Oosterhof, 2008; Vartanian et al., 2012; Willis & Todorov, 2006). Impressions of trustworthiness are positively related to ratings of ‘babyfacedness’, symmetry, and attractiveness (e.g., P. Bull, 2006; R. Bull & Vine, 2003; Zebrowitz & Montepare, 2015; Zebrowitz, Voinescu, & Collins, 1996). In contrast, faces that are identified as being untrustworthy often are associated with a certain type of crime. For example, research has found that observers consistently identify certain faces as ‘good guys’ or ‘bad guys’ (Goldstein, Chance, & Gilbert, 1984; Yarmey, 1993) and that the ‘bad guys’ subsequently become classified as more likely to belong to ‘rapist’, ‘armed robber’, or ‘murderer’ offender categories (R. Bull & McAlpine, 1998). Interestingly, observers do have a limited ability to sense whether a photo is of a criminal or non-criminal, but are unable to classify the type of criminal represented in the photo (Valla, Ceci, & Williams, 2011). This effect translated into real-world risk assessments can have a major impact on an assessor’s opinion of the offender, similar to the manner in which it has been documented to affect other legal decision-makers’ judgments.

Despite the error-prone nature of intuitive judgments of a target’s credibility, they can have a powerful influence in a variety of social situations, including legal decision-making (e.g., Gilron & Gutchess, 2011; Korva, Porter, O’Connor, Shaw, & Brinke, 2013; Langlois et al., 2000; Porter, ten Brinke, & Gustaw, 2010). Dangerous Decisions Theory (DDT; Porter & ten Brinke, 2009) posits that because first impressions are persistent and held with great confidence they strongly influence the manner in which information about the target encountered is interpreted later. More specifically, new information about the target will be interpreted to fit the original (sometimes erroneous) initial inference, potentially resulting in inaccurate evaluations. Consistent with Porter and ten Branke’s (2009) theory, O’Sullivan (2003) found that judgments of target trustworthiness were correlated with state judgments of truthfulness in the predicted manner (e.g., a target who is first judged to be trustworthy-looking is more likely to be classified as telling the truth). Further, Porter et al. (2010) found that mock jury members required fewer pieces of evidence to render a guilty verdict for an untrustworthy-looking defendant compared to a trustworthy-looking one. Such biased decisions, guided by unfounded knowledge and an emphasis on intuition, is a dangerous recipe for inaccurate judgments during assessments of one’s sincerity and subsequent tunnel vision in verdict decisions (Porter & ten Brinke, 2009). And, this pattern of biased decision-making is not confined to the laboratory; it plays out in alarming ways in actual courtrooms. In a study of real criminal sentences, Black homicide defendants with more racially stereotypical facial features – who are evaluated as more socially threatening than those with less stereotypical features – were more likely to receive the death penalty for their crime, relative to Black defendants with
less stereotypical features (Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006). In sum, first impressions of one’s trustworthiness can greatly bias critical legal decisions; assessors of risk should be aware of these biases to ward against unfair decisions.

**Decision-Making Biases.** Another pitfall associated with poor lie detection performance that may apply in risk assessment interviews is “default” biases regarding others’ honesty. Most laypersons hold a truth bias, tending by default to perceive others as being truthful (Levine, Park, & McCornack, 1999; Robinson, 1996). However, a different bias tends to emerge with professionals in settings where the base rate of lying is higher and the consequences of missed lies are more substantial. For example, police tend to exhibit a lie bias such that they are more likely to label a target as a liar than would be expected by chance alone (Garrido, Masip, & Herrero, 2004; Meissner & Kassin, 2002). This apparent lie bias is arguably a result of the base rate at which certain observers experience (or believe they experience) lies versus truths in their line of work, the obvious motivation to catch liars, and any guilt-presumptive training received (such as via the Reid technique). These findings would suggest that some interviewers in the risk assessment context may be biased by the particularly negative file information or simply by the context in which they are making the credibility assessment. Anecdotally, professionals in the clinical-forensic or correctional field will know “offender lovers” or “offender haters” – psychologists who may be particularly gullible or cynical, respectively, regarding the words coming out of the subject’s mouth during a risk assessment interview. While experience on the job tends to increase confidence in detecting deception, it does not improve accuracy – a dangerous combination that can fuel suggestive, high-pressure interviewing practices that may not necessarily result in the assessor receiving the most rich information (and have been found to make even innocent suspects confess in investigative settings; Meissner & Kassin, 2002; Shaw & Porter, 2015; Vrij & Mann, 2001). An awareness of where one’s biases may lie is necessary in order to minimize their influence on credibility assessments.

**Unreliable Cues and Training.** Most observers – professionals and laypeople alike – hold inaccurate beliefs about deceptive behavior leading to a reliance on stereotypical cues that lack empirical validation (Eichenbaum & Bodkin, 2000; Garrido et al., 2004; Global Deception Team, 2006; Strömwall, Granhag, & Hartwig, 2004; Vrij & Mann, 2001), likely contributing to their poor performance on deception detection tasks. Globally, the most commonly used cues include those perceived to be indicative of nervousness, such as gaze aversion and fidgeting, despite both being unrelated to deceit (Global Deception Team, 2006; Mann, Vrij, & Bull, 2004; Vrij & Mann, 2001; Wiseman et al., 2012).

Inaccurate beliefs and poor performance on lie detection tasks by legal professionals may partially be due to a lack of training, or the use of invalid training programs. Indeed, far too often it is assumed that detecting lies is a straightforward task resulting in many observers relying on their intuition to discern truths from lies. Even in the eyes of courts, determining the veracity of testimony is considered to be “common sense” (R. v. Marquard, 1993) and is the responsibility of the jury – individuals without any training in lie detection but who are assumed to be proficient at the task (R. v. Francois, 1994). Further, there is no standard training in lie detection for judges, despite the fact that credibility assessment is a “bread and butter” task for them. In fact, there seems to be little consensus among them in their beliefs about the best signals of deception, although the most common beliefs are exactly like those false cues mentioned above.
Because it appears that cues relied upon by most observers have little relation to actual deceit (Vrij, 2008a), the need for empirically-based training is critical. Importantly, recent studies and meta-analyses substantiate that empirically-based training is effective in enhancing lie detection ability (Driskell, 2012; Hauch, Sporer, Michael, & Meissner, 2014; Shaw et al., 2013).

While most legal professional groups receive little or no deception detection training, others do but their training lacks validity. The most widely utilized investigative interviewing approach for police officers is the Reid Technique (Inbau, Reid, Buckley, & Jayne, 2001) – a technique that assumes that lie detection is straightforward and that lying is associated with the same types of stereotypical cues mentioned earlier. Investigators are advised to have a guilt-presumptive approach and inform the suspect of their unquestionable involvement in the crime (Kassin et al., 2010; Shaw & Porter, 2015). The interviewer is advised to then speak “at” the suspect rather than engaging in questioning and answering, and rely on patience and various manipulative tactics to obtain an admission of guilt. Despite the widespread adoption of the Reid Technique, research has found that this training hinders deception detection accuracy (Kassin & Fong, 1999). As such, risk assessors utilizing confrontational techniques akin to the Reid Technique need to be aware of its downfall in regards to credibility assessments. Research suggests that training in deception detection techniques via the Reid technique may actually make people worse than chance in detecting lies, but increases their confidence in doing so (Kassin and Fong 1999; cf. Levine et al., 2014). This likely is because the procedure fails to consider scientifically validated cues (Walsh & Bull, 2010) and promotes an active reliance on simplistic, stereotypical (but non-valid) cues. For example, Vrij, Mann, and Fisher (2006) found that behaviors supposedly indicative of lying, such as nervousness and discomfort, were actually exhibited more often by honest participants than deceptive participants. In sum, the reliance on interviewing techniques and credibility assessment strategies with no empirical foundation can actively impair lie detection, a scenario that almost certainly has led to tunnel vision during legal decision-making and numerous wrongful convictions in North America (The Innocence Project, 2012). As such, confrontational interviewing approaches and attention to behavioral cues advocated by the Reid technique are ill-advised for evaluators who must detect deception in a risk assessment context.

Fortunately, there has been a recent movement to introduce new police training practices, such as the PEACE model (Snook, Eastwood, Stinson, Tedeschini, & House, 2010), which shows promise in truth gathering and whose principles could be translated to risk assessment interviews. According to the PEACE (Preparation and Planning, Engage and Explain, Account, Closure, Evaluation) model of interviewing, investigators initially learn as much detail as possible regarding the interviewee and prepare subsequent questions based on an analysis of existing evidence (Clarke, Milne, & Bull, 2011; Gudjonsson & Pearse, 2011; Milne & Bull, 1999; Snook et al., 2010). To apply this method of interviewing to a risk assessment setting, the assessor can engage the offender in a conversational, rapport-building dialogue and explanation of the interview process followed by non-coercive techniques to elicit information willingly provided by the offender regarding relevant risk factors specific to him/her.

As such, the PEACE model of interviewing is less aggressive and creates a more respectable dialogue between interviewer and interviewee resulting in increased comfort –
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an advantage for risk assessment interviews aimed at enhancing the information-gathering process. However, despite the promise of the PEACE model (and its advancements since its predecessor), there is little guidance for the detection of deception in this approach. We suggest, however, that the combination of PEACE model interviewing techniques and empirically-valid lie detection knowledge would well-equip those who must assess credibility in risk assessment contexts.

_Narrowed Focus and Lack of Behavioral Baseline._ Despite the non-existence of a “Pinnochio’s nose” (i.e., a smoking gun in the deception realm), observers tend to focus on and overemphasize the importance of information gathered from specific non-verbal channels (Mann et al., 2004; Porter et al., 2000); however, verbal cues to deception are important to consider (e.g., Vrij, 2008b; Vrij, Leal, Mann, & Granhag, 2011). Indeed, a large body of research indicates that a holistic approach is most beneficial and is associated with higher overall accuracy rates (Ekman & O’Sullivan, 1991; Vrij, Akehurst, Soukara, & Bull, 2004; Vrij, Evans, Akehurst, & Mann, 2004). In a large-scale meta-analysis, Hartwig and Bond (2014) found that the holistic use of multiple cues to deception led to a lie detection accuracy rate of 70% across various contexts. Importantly, because the would-be lie detector ideally attends to all channels of communication, he/she can compare potential deceptive displays to the baseline truthful behavior of the individual. This is particularly important because not only does a Pinocchio’s nose not exist but individual liars show idiosyncratic cues to lying in their nonverbal and verbal behavior (DePaulo & Friedman, 1998). These groups include people whose natural behavior may appear suspicious to others (e.g., introverts and socially anxious individuals to name a few; Vrij et al., 2010), an issue which may lead to credibility assessment biases. Similarly, biased credibility assessments may result from cross-cultural differences in behavior, such as whether it is socially appropriate to maintain eye contact during conversation (Ekman, 1972; Kupperbusch et al., 1999). This could lead to an incorrect assumption of risk, as an individual may be presumed to be acting guilty when he/she are merely abiding by their own cultural scripts. To ensure these biases are avoided, it is necessary to establish a baseline and consider cross-cultural differences for every interviewee.

_Poor Elicitation of Deceptive Cues._ There has been a recent movement in the deception literature calling for a change in the manner in which lies can be strategically detected (Levine, 2014; Vrij & Granhag, 2012), with an emphasis on specific interviewing techniques that elicit more cues to deception. Indeed, much of the research to date on nonverbal and verbal cues has focused on passive observation but active strategies are becoming increasingly acknowledged as being important (Levine et al., 2014). For example, Vrij and Granhag (2012) argued that strategies to increase cognitive load, capitalize on responses to unanticipated questions, and calculated use of evidence are particularly valuable. Paired with passive observations, more active strategies will help increase the rate at which lies are caught. Some scholars have even suggested the accumulated research from the past 40 years has led our understanding of deception towards a dead end and that more creative approaches must be taken to better elicit behavioral cues in the hopes of increasing accuracy rates (e.g., Levine, Shaw, & Shulman, 2010). Consequently, assessments of risk can be improved by using strategies to elicit more behavioral cues about an interviewee’s credibility.
Moving Forward: Promises of Detecting Deception in the Risk Assessment Interview

Passive Observation. Although there is no Pinnochio’s nose, there are a variety of verbal, behavioral, and facial cues reliably associated with high-stakes deception (e.g., Colwell, Hiscock-Anisman, & Fede, 2012; Griesel, Ternes, Schraml, Cooper, & Yuille, 2012; O’Sullivan, 2003; Vrij et al., 2010). In a widely-cited meta-analysis, DePaulo and colleagues (2003) found that liars provided fewer details, spent less time talking, told less plausible stories, and utilized fewer illustrators. More specific to high-stakes contexts, ten Brinke and Porter (2012) found with a sample of individuals pleading for the safe return of missing family members that deceptive individuals portrayed inadequate emotional displays (i.e., surprise and happiness rather than distress) and used fewer words overall but proportionally more tentative language, relative to their genuine counterparts.

Although offenders may have more practice in lying and maintaining their deceit for long periods of time (relative to the general public), research suggests that they too leak signals that can reveal their duplicity. In a study comparing autobiographical stories from offender and student samples, it was found that offenders engaged in more self-manipulations (e.g., covering their face) and less smiling during deception (Porter, Doucette, Woodworth, Earle, & MacNeil, 2008). Further, Klaver, Lee, and Hart (2007) found that offenders did not show a decrease in illustrator movements, in contrast to the pattern found more generally with non-offenders, but did find that certain linguistic patterns (e.g., decreased response time, fewer words spoke, and speech disturbances) and head movements revealed offenders’ lies. In general, an extensive literature suggests that there are salient differences between authentic and deceptive behaviors that can be relied upon during an empirically-based credibility assessment – even among criminal populations. Attention to these behaviors can be particularly informative when the baseline method can be employed (i.e., comparing the behavior during displays in question to typical behavior; Porter & ten Brinke, 2009; Vrij, 2008a). By attending to verbal and nonverbal cues to deceit during the interview, clinicians can use this information to score items on existing risk assessment tools, such as the PCL-R’s (Hare, 1991, 2003) pathological lying item; however, we argue that this information be incorporated to a greater degree than simply informing existing items, especially since very few specific items to lying actually exist in current risk assessment tools.

Impression Management via Emotional Displays. The formal risk assessment that accompanies later stages of the legal system provides unique opportunities to incorporate information gleaned from emotional displays (both sincere and insincere). There are a number of deception dimensions within the context of a formal risk assessment (e.g., false positive presentation, denial of criminality, and conning and manipulation) but here we focus on impression management attempts regarding one’s emotions. Although lying can occur at any time during the risk appraisal process, cues to emotional deception likely will be most apparent during the interview/information-gathering stage of a risk assessment (see Mills, Kroner, & Morgan, 2011). During this stage emotional clues can be apparent for hidden basic emotions, such as anger, happiness, and sadness, allowing a trained eye to identify inappropriate or inconsistent affect that reveals important information about an offender’s true emotions. For example, if the offender was convicted of a crime that involved a failed attempt of retaliation, he/she may claim that there will not be another attempt and may promise that any “bad blood” with the target is gone but may reveal
his/her true emotion through simultaneous displays of anger when discussing the target. The presence (or absence) of other basic emotions can also be assessed depending on the stage of the interview and topic at hand. For example, if an interviewer addresses an inconsistency in self-report and file or collateral information, or presents evidence that suggests the offender’s risk level is greater than expected, the offender may display signs of fear (Ekman & Friesen, 1969; Ekman & O’Sullivan, 1991; Frank & Ekman, 1997).

It must be acknowledged that it is possible (although not empirically known) that reciting one’s offence repeatedly over time while incarcerated may cause offenders to discuss their crimes in a progressively less emotional manner. The assessor should be cognizant of the amount of time passed since the crime and how often the offender has recounted the crime prior to the assessment. However, as found in other high-stakes deception contexts (ten Brinke & Porter, 2012), discordant emotion displayed by deceptive individuals is identifiable and is not likely to become less apparent over time. For example, a brief smirk by an offender while recounting his murder a decade after it occurred likely still indicates a lack of remorse.

In sum, attempts to receive a lenient sentence or undeserved release in risk assessment settings may be revealed by a focus on falsified and concealed emotions – behaviors that can be reliably detected (e.g., ten Brinke & Porter, 2012) and may provide important information regarding an offender’s risk for future violence. With training, an in-depth understanding of the way in which basic universal emotions manifest is a valuable addition to the assessor’s arsenal (see Ekman 2007 for a thorough discussion). Information gathered from attention to concealed emotions can be incorporated into existing risk assessment tools that have items related to intentions. For example, the pro-criminal attitude/orientation items in the Level of Service Case Management Inventory (LS/CMI; Andrews, Bonta, & Wormith, 2000) – a general recidivism risk assessment tool – can be informed by noted emotional discrepancies regarding whether the offender still holds a positive outlook on antisocial behavior and wants to participate in criminal activities in the future or if he/she is no longer in support of his/her past antisocial lifestyle. In sum, attending to emotional information that may be present during the assessment can help reveal the offender’s true emotions and intentions.

Remorse Appraisal. A moral emotion of particular importance in the criminal justice system is remorse. Remorseful expressions and apologies in sentencing contexts, in particular, are communicated in order to make reparations for past transgressions and to indicate to observers that the perpetrator understands the gravity of his/her wrongdoing; in turn, the perceived sincerity of emotional displays in sentencing and conditional release contexts is given considerable weight during the decision-making process (see Slovenko, 2006). Perpetrators who show remorse are considered to be good candidates for treatment and rehabilitation: “[The defendant’s] remorse, guilt, and shame should provide him with a strong motivation to work at changes that will prevent future acts of violence” (R. v. Strace, 2007). This is echoed empirically with numerous studies attesting to the relationship between perceived remorse and reduced punishments (Day & Ross, 2011; MacLin, Downs, Maclin, & Caspers, 2009; Pipes &

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2To facilitate the process of evaluating impression management of one’s emotions, it is highly recommended that interviews be videotaped to allow for later analysis.
Alessi, 1999; Taylor & Kleinke, 1992; Wiener & Rinehart, 1986) and a related emotion – guilt – being associated with reduced recidivism (Tangney, Stuewig, & Martinez, 2014).

Because of the importance of perceived remorse, leniency-seeking offenders may see the opportunity to manipulate a judge or clinician for a lesser sentence or lowered risk rating, by lying about or exaggerating their level of remorse. While legal decision-makers already attempt to critically evaluate these displays they often miss the mark by relying on cues that lack empirical support, such as assuming remorse from general admissions of guilt and responsibility (Weisman, 2004, 2009; Wood & MacMartin, 2007). Although accepting responsibility is a behavior that may result from remorse, remorse is not a necessity for the acceptance of responsibility because of the numerous motivating factors that may lead an individual to (selfishly) communicate it. This issue has likely contributed to the ambiguity and inconsistency identified in past remorse appraisals in the legal system (Ward, 2006).

Although the benefits associated with expressing remorse in a sentencing or conditional release hearing, or risk assessment interview, encourage some offenders to put on a false face, by having a keen eye for insincere emotional displays decision-makers can use this information to inform their risk assessment. Recent research has found support for unique expression patterns of remorse; ten Brinke, MacDonald, Porter, and O’Connor (2012) used the “unethical memory” paradigm during which participants were asked to provide narratives about an event for which they felt remorseful for and another that they felt no remorse. Findings indicated that genuine statements (versus false remorse) were characterized by emotional facial expressions representative of the basic emotions (e.g., sadness) with periods of neutrality between subsequent emotional expressions. In contrast, the researchers found that falsified remorse accounts were associated with increased speech hesitations and emotional turbulence (i.e., positive to negative emotion rather than a return to neutral; ten Brinke, MacDonald, et al., 2012) – features that, if detected, can inform appraisers. As such, with training, those assessing risk can look to these signs of sincerity to determine whether targets are genuinely remorseful and fully understand the gravity of their offence – important determinants of one’s propensity for future violence and recidivism during sentencing decisions. Although we speculate that real or false remorse will be predictive of an offender’s likelihood of re-offending, research to date has not directly examined this relationship. Tangney et al. (2014) found a related emotion – guilt – was negatively related to recidivism after one-year, potentially suggesting that a similar pattern between remorse and recidivism would likely be seen (i.e., reduction in re-offense rate). However, denial – which would presumably be accompanied by a lack of remorse – has not been found to be a risk factor for sexual violence (Hanson & Bussière, 1998; but see Lund 2000 for discussion of the limitations of this meta-analysis), suggesting indirectly that a lack of remorse may not be as strongly associated with recidivism as generally assumed.

Active Strategies to Elicit More Information About a Subject’s Credibility. Although observational/passive approaches to deception detection are important, complementary active strategies to elicit such cues through specific interviewing approaches have received considerable attention recently (Levine, 2014; Levine et al., 2014; Vrij & Granhag, 2012). More specifically, the incorporation of active strategies allows for more informed decisions surrounding risk for violence. These strategies can easily be incorporated into risk assessment interviews with the offender similar to the
manner in which they would be incorporated at other stages of the legal justice system. Despite the relatively recent surge of research into active deception detection strategies, the research to date suggests these approaches are worthy of risk assessors’ attention as they can enhance deception detection accuracy rates greater than reported by meta-analyses on passive observation.

**Interviewing Strategies.** A number of interviewing approaches have been put forth recently to elicit cues to deception, including the cognitive lie detection approach (Vrij et al., 2011) and Strategic Use of Evidence approach (SUE; Granhag & Hartwig, 2008), which can be employed during risk assessment interviews. Building on the understanding of lying as a cognitively demanding task (Christ, Van Essen, Watson, Brubaker, & McDermott, 2008), the cognitive lie detection approach emphasizes the value of increasing cognitive load to make cues to deceit more salient and consists of two approaches: imposing-cognitive-load and strategic-questioning. While discussing events that the offender may be motivated to lie about in the hopes of appearing at a reduced risk (e.g., altercations during incarceration or level of remorse), clinicians can incorporate certain strategies to impose greater cognitive demand similar to any interview setting (Vrij et al., 2011), including instructing the interviewee to maintain eye contact while discussing events of interest or asking them to complete a simultaneous, secondary task. Secondly, because liars often prepare their lies, assessors can catch offenders off guard by asking unanticipated questions (Vrij et al., 2011) – a method that has been found to enhance discrimination between truth-tellers and liars (Leins, Fisher, Vrij, Leal, & Mann, 2011). By using these types of strategies to increase cognitive demand the liar will have less control his/her verbal and behavioral communication.

Secondly, the Strategic Use of Evidence approach (SUE; Granhag & Hartwig, 2008) operates on the assumption that liars and truth-tellers will respond differently to pieces of evidence presented to them. The SUE approach can be translated to the risk assessment setting when a clinician would like to present information that may not have been disclosed to the offender and that relates to their risk level. For example, a clinician may want to discuss information received from an institutional informant. In this scenario, the SUE approach advocates that, following a free recall of the event of interest (if applicable), particularly incriminating evidence should be withheld initially but that specific questions concerning that evidence should be asked. Subsequently, the manner in which the offender responds can give insight into the credibility of his/her account. In a meta-analysis of this questioning approach, liars were found to be more likely than truth-tellers to provide contradictory evidence (Hartwig, Granhag, & Luke, 2014), avoid mentioning incriminating evidence, and deny having knowledge of incriminating evidence (Hartwig et al., 2004). Further, the reliance on statement-evidence inconsistency (which was relied upon by SUE trained interviewers more) resulted in an overall discrimination accuracy of 85.4%.

**Examining Intentions.** Perhaps most unique to conditional release settings, legal decision-makers can dedicate attention to the truthfulness of offenders’ stated intentions upon release. To date, the literature concerning deception detection has largely remained focused on detection of lies regarding past events (Granhag & Strömwall, 2004; Vrij, 2008b). However, there is emerging research that has made great strides in detecting lies about genuine and false future intentions (i.e., thought processes prior to actual action). The formation of behavioral intention requires episodic future thought (EFT) – the ability
to ponder a personal event that may potentially occur in the future (Schacter & Addis, 2007). These recent advancements in our scientific understanding of EFT processes (e.g., Addis, Wong, & Schacter, 2007; Hassabis & Maguire, 2007), and subsequently genuine intentions, can be capitalized upon to unearth false intent. Granhag and Knieps (2011) proposed that because forethought is used in planning intentions, those suspected of being deceitful can be questioned about the planning of their intended actions and, at this point, veracity can be assessed. For example, Granhag and Knieps (2011) asked one group of participants to formulate a plan for a mock criminal action in a local shopping mall. They were instructed to place a memory stick containing ‘illegal’ content in a store and prepare a cover story to lie about their intentions. Another group of participants were asked to formulate a plan for a non-criminal action (i.e., simply shopping for gifts). The researchers intercepted both groups of participants before they were able to carry out these actions (thus, allowing for an assessment of their EFT regarding their plans) and found that truth-telling participants (i.e., the non-criminal group simply buying a gift at the mall) reported using more mental images in the planning stages and had greater levels of detail of those mental images, compared to liars.

Further, Vrij and colleagues (2011) examined passengers’ true and false intentions provided at an airport about the nature of their trip; results indicated that narratives of false intentions were less plausible (but had equal degrees of detail) compared to narratives provided by truthful passengers – a finding that has subsequently been replicated (Vrij et al., 2011). Accounts of truthful intentions are also longer, more detailed, and clearer compared to deceptive accounts of planning phases (Sooniste, Granhag, Knieps, & Vrij, 2013). Further, questioning about the planning of intended actions appears to be even more valuable than questioning about the intentions themselves, with more behavioral differences emerging between truthful and deceptive accounts in the former (e.g., Granhag & Knieps, 2011; Sooniste et al., 2013). Subsequently, questioning offenders about their intentions upon release is a valuable approach and specifically inquiring about the planning of these intentions may not be as expected by the offender, leading to less scripted responses (Sooniste et al., 2013).

This emerging research on future intentions demonstrates that notable differences can be identified between truth tellers and liars – an approach that can be applied directly to predictions of an offender’s risk for future violence by evaluating displays while speaking to a clinician during a risk assessment (or directly to the parole board) about his/her plans upon release. For example, clinicians can examine whether a perpetrator is reporting genuine intentions to turn his/her life around or if his/her actual intent is to return to the previous antisocial lifestyle. Further, information gathered for an analysis of potential false intentions can be incorporated into existing risk assessment tools that have items related to intentions, such as the HCR-20 Version 3 (Douglas et al., 2013), which includes a risk management item that questions whether the offender’s plan lacks feasibility. However, it must be acknowledged that this approach would work best with those consciously and purposely lying about their intentions upon release, rather than those without the cognitive capacity to plan to reoffend or those who have no intention to reoffend but do so impulsively upon release.
Summary of Recommendations

The application of both observational skills and active strategies for deception detection discussed here to the assessment of risk for future violence is recommended for all risk evaluators to ensure deserving offenders receive release and those adept at putting on a false face do not. In general, information gathered from the observation of cues to deception can be used as an information-extracting tool during any interview with an offender. When cues to deceit are present, clinicians should identify them and probe further with additional questions that might clarify any suspicious behavior (while further assessing his/her displays during a response). Further, clinicians should accompany observational approaches with more recent active strategies of lie detection.

To encourage more widespread use of deception detection techniques in violence risk assessment interviews, it is recommended that reports produced by clinicians should consistently include a section addressing the offender’s credibility based on an empirically-supported evaluation. Ultimately, this will equip those charged with the difficult task of predicting future violence with another piece of important information, thereby increasing the predictive accuracy of these judgments. We further encourage researchers to continue to tackle these important issues, to move the study of deception detection forward, and to contribute to more reliable legal decision-making.

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