Several Reasons Why You Should Not Use the Behavior Analysis Interview

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What is the Behavior Analysis Interview?

The Behavior Analysis Interview (BAI) is an interview protocol sometimes used by the police to differentiate between guilty (deceptive) and innocent (truthful) individuals. The BAI is a component of John E. Reid and Associates' *Reid Technique of Interviewing and Interrogation*, which is the most popular police interrogation method in the US. The firm, which was founded in 1947, asserts in its website that it has trained officers from NATO and from over 30 countries all over the world (e.g., Canada, Germany, Japan, México, Oman, Tanzania; see https://reid.com/75-years-of-excelence). In 2013, journalist Douglas Starr noted that John E. Reid & Associates trained more interrogators than any other company in the world, and that their clients include police forces, private security companies, the military, the F.B.I., and the Secret Service. The Reid Technique (including the BAI) is also described in Inbau, Reid, Buckley, and Jayne's (2013) book, *Criminal interrogation and confessions*, which is currently in its fifth edition (the first edition dating back to 1962).

The origins of the BAI are in the 1940s, when John Reid, a law-school graduate and polygraph expert, came to the idea that truthful and innocent suspects could differ not only in their physiological reactions but also in their verbal and nonverbal behavior (Inbau et al., 2013; Leo, 2008). The BAI is not a formal interrogation for suspects but a seemingly friendly interview for individuals whose involvement in the crime under investigation is uncertain. The crucial part of the BAI is a set of 15 "behavior-provoking questions." Guilty and innocent persons are expected to react differently to these questions. For instance, the first behavior-provoking question is "What is your understanding of the purpose for this interview?" According to Inbau et al. (2013), while innocent individuals will provide a direct answer to this question using realistic language, guilty interviewees will give a naïve or evasive reply, or will make a vague comment. There is no empirical research supporting the BAI guilt/innocence indicators; yet, if the BAI interviewer concludes the interviewee is guilty, then the interviewee can be formally interrogated as a suspect with Reid's nine-step interrogation technique. This technique is specifically designed to elicit a confession, and has been criticized because of being guilt-presumptive and psychologically coercive (e.g., Kassin, 2022). Thus, if the BAI indicators of guilt/innocence are not valid, the suspect might be in jeopardy. Misclassifying an innocent suspect as guilty can trigger a chain of unfortunate events leading to false confessions, wrongful convictions, and the inability to serve justice (see Leo & Drizin, 2010).

In-house Research on the Behavior Analysis Interview

The BAI guilt/innocence indicators are not based on peer-reviewed research findings but on the intuitions of John Reid and his secretary, who observed the demeanor and actions of suspects who were to be polygraphed (Kassin, 2022; Leo, 2008). However, at some point John E. Reid and Associates' personnel conducted two empirical studies. In the first study, Horvath et al. (1994) showed 60 videotaped BAIs collected by five interviewers to four BAI-trained observers. The observers' accuracy rates in judging the suspects' veracity were high (78% for truthful suspects and 66% for deceptive suspects). However, this study had many limitations. One such limitation is that there was no control group of untrained observers; therefore, it is unclear whether the high accuracy rates had anything to do with the BAI training. Even more crucially, the interviewees' guilt or innocence could not be established with certainty—which jeopardizes the full study—and some of the ground-truth criteria used may have artificially increased the reported accuracy rates, as they were similar to the

suspect's innocent or guilty reactions according to the BAI (for more detail, see Masip et al., 2011, p. 595). In a subsequent study conducted with ten of Horvath et al.'s interviews, Blair and McCamey (2002) found that BAI training increased detection accuracy; however, it is unclear whether Blair and McCamey's classification rates reflect accuracy or bias. Furthermore, their study shares with Horvath et al.'s the ground-truth problem noted above.

Independent Research on the Behavior Analysis Interview

Behavioral scientist working independently from John E. Reid and Associates have conducted more rigorous research on the BAI, and their outcomes reveal a much less favorable picture. First, to address the ground-truth problem, Vrij et al. (2006) randomly assigned participants to either a guilty or an innocent condition. Those in the guilty condition committed a mock crime. Subsequently, all participants were interviewed with the BAI protocol. Vrij et al. found no significant differences between guilty and innocent participants' reactions to most of the BAI behavior-provoking questions. For the four instances where significant differences emerged, these were opposite to Inbau et al.'s assertions. A subsequent study conducted in the same laboratory revealed additional limitations of the BAI (Vrij et al., 2007). Specifically, the BAI elicited fewer verbal deception cues than an alternative information-gathering interview. Moreover, police officers judging the interviewees' truthfulness did not do better (though they were more confident) when a BAI was used compared to when the alternative information-gathering interview was used.

The Behavior Analysis Interview and Faulty Common-sense Stereotypes

Proponents of the BAI question the above findings on the grounds that in laboratory studies the stakes are lower than in actual criminal cases (Buckley, 2012; Horvath et al., 2008). However, no matter the setting (real life or the lab), for the BAI to effectively differentiate between guilty and innocent individuals, the expected behavioral reactions need to be valid guilt or innocence indicators rather than faulty common-sense notions. A series of studies conducted by Masip et al. tackled this question. In their first, exploratory experiment, the participants were allocated to either an informed group (who received information about the BAI guilt/innocence indicators) or an uninformed group (who received no information about the BAI). Then, all participants read the transcripts of two BAIs, taken from Inbau et al.'s book, and indicated which transcript corresponded to the guilty suspect. Unsurprisingly, virtually all the informed group participants were accurate. However, seven out every ten participants in the uninformed group were also able to identify the guilty suspect (Masip et al., 2011, Study 1). These outcomes suggest the BAI guilt/innocence indicators are a matter of common sense.

This notion was explored further in Masip et al.'s (2011) Study 2. The participants, all of whom were unfamiliar with the BAI, read the description of a serious crime followed by the 15 BAI behavior-provoking questions. After each question, all the possible suspect's responses to that question expected by the BAI proponents were listed. After reading each response, the participants had to indicate on a scale how innocent/guilty would a suspect be if the suspect had given that particular answer. The results were unsurprising: the participants gave significantly higher ratings of guilt to Inbau et al.'s guilt indicators than to their innocence indicators. This study conclusively demonstrated that Inbau et al.'s recommendations reflect just common-sense beliefs about guilt/innocence indicators.

While Masip et al. (2011) tested college students, most John E. Reid and Associates' clients are law enforcement officers. To examine whether police officers share the same beliefs about the BAI guilt/innocence indicators as non-officers, Masip et al. (2012) conducted an additional study with both police recruits and veteran officers (the latter both with and

without interviewing experience). The findings mirrored those of Masip et al. (2011) with students. This points to the robustness of the findings, as the samples also differed in age and gender composition. Note that these outcomes question the need to train the police in the BAI guilt/innocence indicators.

The BAI indicators appear to be a version of global myths about deception cues. In a 2006 study, the Global Deception Research Team (GDRT) identified worldwide-held stereotypes of deceptive behavior. Psychology professor Charles Bond, who assembled and led the GDRT, speculated that these stereotypes are prescriptive rather than descriptive—people *should* be ashamed when lying, liars *should* feel bad and so their lies would be transparent. Children are expected to internalize these notions to become honest adults. "Because liars should feel ashamed, they should show signs of hiding, withdrawal and submission" (Global Deception Research Team, 2006, p. 70). Indeed, the BAI guilt indicators include many signs of shame, nervousness, hiding, withdrawal and submission, and its innocence indicators involve signs of the opposite.

These findings and considerations have several implications. First, as noted above, it makes no sense teaching people what they already "know" (or believe). The BAI training can only strengthen previous mistaken beliefs and increase confidence. Note that fallibility coupled with high confidence is a dangerous combination in law enforcement. Second, if the BAI guilt/innocence indicators are only common-sense beliefs, then suspects will also hold those beliefs and may try to avoid displaying the guilty reactions during the interview.

This latter issue was examined by Masip and Herrero (2013). The participants read a description of a serious crime and were asked to vividly imagine that they were guilty or innocent suspects to be interviewed by the police. The 15 BAI behavior-provoking questions were then presented, each followed by each possible response according to the BAI proponents. After reading each answer, the participants had to indicate on a scale the extent to which they would give that answer. According to the BAI proponents, innocent suspects would provide innocent rather than guilty responses, whereas guilty suspects would do the opposite. This prediction was supported for only one question out of 15. Overall, participants both in the guilty and innocent condition were significantly more willing to give innocent rather than guilty responses. This finding seriously questions usefulness of the BAI to separate guilty from innocent interviewees.

These findings have just been replicated by Bettens and Warren (2023), who used Masip and Herrero's (2013) paradigm with juveniles (10-to-16-year-olds), young adults (18-to-25-year-olds), and adults (34-to-49-year-olds). Across all age groups, both guilty and innocent participants tended to select innocent rather than guilty responses, and the BAI prediction that innocent participants would give higher scores to innocent responses while guilty participants would give higher scores to guilty responses was supported for only one of the 15 questions. This replication is important because Bettens and Warren's participants were from a different country (USA vs. Spain) and their age range was wider compared to Masip and Herrero's participants (18-to-49 vs. 18-to-32 years old, respectively).

Bettens and Warren (2023) also measured the participants' endorsement of widely-held stereotypes about deceptive behavior (Global Deception Research Team, 2006). Interestingly, this measure significantly correlated with the responses the participants indicated they would give to the BAI questions for which these stereotypical behaviors were considered to indicate guilt or innocence. This finding strengthens the view that the BAI guilt/innocence indicators reflect nothing but stereotypical beliefs.

The Perils of Using the BAI with Juveniles

An additional, crucial finding of Bettens and Warren's (2023) study is that, across the guilty and innocent conditions, juveniles indicated a significantly higher likelihood of providing guilty responses compared to the two adult samples. This is worrisome, as it shows that juveniles are at a higher risk than adults to be misclassified as guilty when interviewed with the BAI. Of note, John E. Reid and Associates is marketing the Reid technique, including the BAI, to school administrators who may question students (https://reid.com/the-reid-technique-for-interviewing-and-interrogation-for-school-administrators; see also Starr, 2016). Given that in school juveniles have fewer legal rights than in a police station, using the BAI (not to mention Reid's ominous nine-step interrogation approach) with juveniles is particularly dangerous.

In the USA, juveniles can also be questioned about criminal misconduct by school resource officers (SROs). In a recent USA-wide survey, 41.5% of SROs reported having been trained in the Reid technique (Snow et al., 2021). Other surveys show that 56% (Cleary and Warner, 2016) or 57% (detectives' sample in Koestelnik & Reppucci, 2009) of the USA criminal investigators who interview juveniles are trained in the Reid technique. However, relative to non-Reid-trained officers, Reid-trained officers are less sensitive to the developmental limitations of adolescents and "perceive adolescents to be as mature as adults and treat them as such during interrogation" (Kostelnik & Reppucci, 2009, p. 374). Research also shows that investigators employ the same tactics regardless of whether they are interviewing juveniles or adults (Meyer & Repucci, 2007; Cleary and Warner, 2016). Feld (2012) conducted an observational study of 285 police interrogations of 16-to-18-year-olds. BAI questions were used in 29% of these interrogations. Other Reid-based tactics were used as well (Feld, 2012). All these findings are a source of great concern in the context of the questioning of juveniles.

Conclusions: Why You Should Not Use the BAI, and What You Can Use Instead

The BAI does not allow investigators to separate guilty from innocent individuals (Vrij et al., 2006, 2007). Rather than being based on sound science, its guilt/innocent indicators merely reflect widely held stereotypes about deceptive behavior (Bettens and Warren, 2023; Masip et al., 2011, 2012), and both guilty and innocent individuals may try to manipulate their responses over a BAI in order to look innocent (Bettens and Warren, 2023; Masip & Herrero, 2013). Yet, juveniles are less able to do so, which places them at a greater risk of being misclassified as guilty when interviewed with the BAI (Bettens and Warren, 2023). Research shows that that many interrogators of adolescents are trained in the Reid technique, and there is evidence that BAI behavior-provoking questions are used by the police in questioning adolescents (Feld, 2012).

Law-enforcement and security professionals can benefit from interview protocols to separate guilty from innocent suspects. However, these protocols must be grounded on sound science instead of faulty common-sense beliefs. Several science-based approaches have been proposed recently, such as the strategic use of evidence technique (Granhag & Hartwig, 2015). These approaches can be integrated within information-gathering interview protocols (see Brandon & Wells, 2018; Bull, 2018). John E. Reid and Associates are in a good position to teach these science-based approaches to practitioners instead of the BAI. Other police interviewing training companies, such as Wicklander-Zulawski and Associates, decided to discontinue Reid-technique training (Hager, 2017). In replacing it with more reliable alternatives, a better service is made to justice and society.

References

Bettens, T., & Warren, A. R. (2023). Juveniles and adults differ in their beliefs about cues to deception and strategies during a hypothetical police interview. *Applied Cognitive Psychology, 37*, 96-110. https://doi.org/10.1002/acp.4030

Blair, J. P., & McCamey, W. P. (2002). Detection of deception: An analysis of the Behavioral Analysis Interview technique. *Illinois Law Enforcement Executive Forum, 2*, 165-169.

Brandon, S. E., & Wells, S. (2018). *Science-based interviewing*. Authors' self-published book.

Buckley, J. (2012). Commentary: Detection of deception researchers needs to collaborate with experienced practitioners. *Journal of Applied Research in Memory and Cognition, 1*, 126-127. https://doi.org/10.1016/j.jarmac.2012.04.002

Bull, R. (2018). PEACE-ful interviewing/interrogation. What research can tell us. In K. Shigemasu, S. Kuwano, T. Sato, and T. Matsuzawa (Eds.), *Diversity in harmony – Insights from psychology: Proceedings of the 31st International Congress of Psychology* (pp. 191-212). Wiley.

Cleary, H. M. D., & Warner, T. C. (2016). Police training in interviewing and interrogation methods: A comparison of techniques used with adult and juvenile suspects. *Law and Human Behavior, 40*, 270–284. https://doi.org/10.1037/lhb0000175

Feld, B. (2012). *Kids, cops, and confessions. Inside the interrogation room*. New York University Press

Global Deception Research Team. (2006). A world of lies. *Journal of Cross-Cultural Psychology, 37*, 60-74. https://doi.org/10.1177/0022022105282295

Granhag, P.-A., & Hartwig, M. (2015). The strategic use of evidence technique: A conceptual overview. In P.-A. Granhag, A. Vrij, and B. Verschuere (Eds.), *Detecting deception: Current challenges and cognitive approaches* (pp. 231-251). Wiley.

Hager, E. (2017). The seismic change in police interrogations. *The Marshall Project*. https://www.themarshallproject.org/2017/03/07/the-seismic-change-in-police-interrogations

Horvath, F., Blair, J. P., & Buckley, J. P. (2008). The behavioral analysis interview: Clarifying the practice, theory and understanding of its use and effectiveness. *International Journal of Police Science &Management, 10*, 101-118.

Horvath, F., Jayne, B., & Buckley, J. (1994). Differentiation of truthful and deceptive criminal suspects in Behavior Analysis Interviews. *Journal of Forensic Sciences, 39*, 793-807.

Inbau, F. E., Reid, J. E., Buckley, J. P., & Jayne, B. C. (2013). *Criminal interrogation and confessions* (5th ed.). Jones and Bartlett.

Kassin, S. M. (2022). *Duped. Why innocent people confess—and why we believe their confessions*. Prometheus Books.

Kostelnik, J. O., & Reppucci, N. D. (2009). Reid training and sensitivity to developmental maturity in interrogation: Results from a national survey of police. *Behavioral Sciences & The Law, 27*, 361-379. https://doi.org/10.1002/bsl.871

Leo, R. A. (2008). *Police interrogation and American justice*. Harvard University Press.

Leo, R. A., & Drizin, S. A. (2010). The three errors: Pathways to false confession and wrongful conviction. In G. D. Lassiter and C. A. Meissner (Eds.), *Police interrogations and false confessions. Current research, practice, and policy recommendations* (pp. 9-30). American Psychological Association.

Masip, J., & Herrero, C. (2013). "What would you say if you were guilty?" Suspects' strategies during a hypothetical Behavior Analysis Interview concerning a serious crime. *Applied Cognitive Psychology, 27*, 60-70. https://doi.org/10.1002/acp.2872

Masip, J., Barba, A., & Herrero, C. (2012). Behavior Analysis Interview and common sense. A study with novice and experienced officers. *Psychiatry, Psychology and Law, 19*, 21-34. https://doi.org/10.1080/13218719.2010.543402

Masip, J., Herrero, C., Garrido, E., & Barba, A. (2011). Is the Behavior Analysis Interview just common sense? *Applied Cognitive Psychology, 25*, 593-604. https://doi.org/10.1002/acp.1728

Meyer, J. R., & Reppucci, N. D. (2007). Police practices and perceptions regarding juvenile interrogation and interrogative suggestibility. *Behavioral Sciences & The Law*, *25*, 757-780. https://doi.org/10.1002/bsl.774

Snow, M. D., Malloy, L. C., & Goldstein, N. E. S. (2021). Information gathering in school contexts: A national survey of school resource officers. *Law and Human Behavior, 45*, 356–369. https://doi.org/10.1037/lhb0000451

Starr, D. (2013, December 2). The interview. Do police interrogation techniques produce false confessions? *The New Yorker*, pp. 42-49.

Starr, D. (2016, March 25). Why are educators learning how to interrogate their students? *The New Yorker*. https://www.newyorker.com/news/news-desk/why-are-educators-learning-how-to-interrogate-their-students

Vrij, A., Mann, S., & Fisher, R. P. (2006). An empirical test of the Behavior Analysis Interview. *Law and Human Behavior, 30*, 329-345. https://doi.org/10.1007/s10979-006-9014-3

Vrij, A., Mann, S., Kristen, S., & Fisher, R. P. (2007). Cues to deception and ability to detect lies as a function of police interview styles. *Law and Human Behavior, 31*, 499-518. https://doi.org/10.1007/s10979-006-9066-4