

Post-conviction Sex Offender Polygraph Examination: Client-Reported Perceptions of Utility and Accuracy

Ron Kokish,^{1,4} Jill S. Levenson,² and Gerry D. Blasingame³

Post-conviction polygraph testing of adult sex offenders in treatment has been a somewhat controversial subject. This study (n = 95 participants who took 333 polygraph tests) explored how sexual offenders enrolled in outpatient treatment programs perceived their polygraph experience. Participants reported a relatively low incidence of false indications of both deception (22 of 333 tests) and truthfulness (11 of 333) tests, suggesting that clients agreed with examiners' opinions 90% of the time. The majority of clients reported that polygraph testing was a helpful part of treatment. Finally, about 5% of participants reported that they responded to allegedly inaccurate accusations of deception by admitting to things they had not done. The data offer encouragement for continued but cautious use of polygraphs by sex offender treatment programs. Implications for practice and research are identified.

KEY WORDS: sexual offenders; sex offender self-report; sex offender treatment program; polygraph testing; containment model.

Polygraph examinations have been used to monitor probationers since the mid-1960's, and sex offender treatment programs began using polygraph examinations to obtain sexual histories and monitor compliance in the early 1970's (Abrams & Abrams, 1993). Over the years, post-conviction sex offender polygraph examination has become an increasingly important tool used by many sexual offender treatment programs, particularly those operating as part of a *containment triangle* (English, Pullen, & Jones, 1996, 1998). The containment approach emphasizes

¹Delson Kokish Associates, Trinidad, California.

²Lynn University, Boca Raton, Florida.

³New Directions to Hope, Redding, California.

⁴To whom correspondence should be addressed at Delson Kokish Associates, Trinidad, California; e-mail: ron@delko.net.

collaboration between treatment providers, supervising officers, and polygraph examiners in an effort to increase offender accountability and compliance (English et al., 1996, 1998).

Post-conviction sex offender polygraph examination's utility is derived from its ability to elicit information from offenders who might be less forthcoming with traditional interviewing techniques (ATSA, 2001). *Sexual history* exams seek to uncover previously undetected victims and offense patterns, and *monitoring* exams seek to clarify the offender's compliance with probation and treatment requirements while living in the community. Because a history of sexually deviant behavior and continued deviant sexual interest has been linked to risk and recidivism (Hanson & Bussiere, 1998; Hanson & Harris, 2001; Hanson & Morton-Bourgon, 2004; Quinsey, Lalumiere, Rice, & Harris, 1995), interventions that promote honest disclosure have clinical value. It is well established that polygraphy elicits increased numbers of disclosures from offenders (Ahlmeyer, Heil, McKee, & English, 2000a; Emerick & Dutton, 1993; English, Jones, Pasini-Hill, Patrick, & Cooley-Towell, 2000; Heil, Ahlmeyer, & Simons, 2003; Hindman, 1988; Hindman & Peters, 2001; Humbert, 1990; O'Connell, 1998). In this way, static and dynamic risk factors that are otherwise unknown can be identified. Post-conviction sex offender polygraph examination has also proven useful for monitoring sex offenders' behavior in the community (Ahlmeyer, Heil, McKee, & English, 2000b) and appears to aid clients in successfully completing their probationary supervision (Abrams, 1989; Abrams & Ogard, 1986).

Critics acknowledge that post-conviction sex offender polygraph examination produces increased disclosures, but caution that polygraphy lacks scientific validity and that the information it generates may be inaccurate (Cross & Saxe, 1992, 2001). Although many studies have investigated the accuracy of polygraph examinations, wide disagreement about its validity has not been satisfactorily resolved (Ekman, 1985, 1992; Faller, 1997; Iacono, 2001; Matte, 1996; Raskin, Barland, & Podlesny, 1976; Saxe, Dougherty, & Cross, 1983; Williams, 1995). A recent report (National Academy of Sciences, 2003) concluded that "specific incident polygraph tests likely can discriminate lying from truth telling at rates well above chance, but well below perfection" (p. 4). Further complicating the issue for sex offender treatment providers is that polygraph research is based on single-issue investigative examinations from the criminal justice and intelligence communities as well as from controlled laboratory experiments. It is unclear to what degree results from these studies can be applied to the sexual history and periodic monitoring examinations used in treatment programs. Post-conviction sex offender polygraph examination context and procedures are somewhat different from investigative polygraph examinations, and because they are less specific, they may be less accurate.

Validity and reliability notwithstanding, one study asked sex offenders themselves whether they thought post-conviction sex offender polygraph examination

helped them achieve treatment goals (Harrison & Kirkpatrick, 2000). The 28 participants credited post-conviction sex offender polygraph examination with helping them achieve significant reductions in a variety of behaviors that included grooming, frequenting adult bookstores, extramarital affairs, sexual touching of children, and masturbation. They also reported increased honesty with their therapists and group members, and reported that polygraphy helped them comply with supervision and treatment requirements (Harrison & Kirkpatrick, 2000).

Despite lack of research about post-conviction sex offender polygraph examination's accuracy and its ultimate effects on recidivism, a recent national survey reported that over 70% of community based sex offender treatment programs for adults, and over 45% of those treating juveniles, use polygraph examinations to varying degrees (McGrath, Cumming, & Burchard, 2003). Furthermore, several states now mandate post-conviction sex offender polygraph examinations. That being the case, there is an obvious and urgent need to learn more about polygraph examinations as they are being used in the post-conviction management and treatment of sex offenders. This study represents a preliminary exploration of the perceived utility of polygraphy in containment model sex offender treatment programs.

PURPOSE OF THE STUDY

This descriptive study explored client-reported incidence of correct and incorrect examiner opinions regarding deception and truthfulness in post-conviction sex offender polygraph examination. The study also asked examinees about the extent to which they had provided fictitious admissions as a response to inaccurate accusations of attempted deception on polygraph examinations. Finally, the study solicited offender perceptions about the potential treatment benefits and detriments of taking mandatory polygraph examinations.

Four specific research questions were posed: (1) How often would clients report incorrect "deception indicated" (DI) and "no deception indicated" (NDI) opinions by examiners? (2) How would examiners' chart ratings obtained during the same time period compare to client self-report? (3) What do clients report about their perception of post-conviction sex offender polygraph examination as helpful or harmful in the completion of treatment goals? (4) How often would clients report having made fictitious admissions when faced with false-positive polygraph results?

These questions were considered to be important for several reasons. First, although determining the validity or accuracy of polygraphy is beyond the scope of this study, we were curious to see how examinees' anonymous reports of deception and truthfulness would compare to opinions rendered by the examiners. Second, no studies have addressed critics' concerns that polygraphy incites fictitious

admissions by examinees who are falsely labeled deceptive and who might desperately seek a way out of what they consider a hopeless trap. Finally, and perhaps most important, this study is only the second to elicit client perceptions of the effect polygraph examinations have on their treatment.

METHOD

Participants

This convenience sample consisted of 95 convicted sex offenders who admitted to their instant offenses and were participating in treatment as a condition of remaining in the community. One-hundred thirteen English-speaking, literate, adult males, and two English speaking literate adult females in three northern California outpatient sex offender treatment programs were invited to anonymously complete a questionnaire about their experience with polygraph examinations. Twelve potential participants declined participation and eight submitted incomplete or internally contradictory questionnaires that could not be adequately coded.

All participants had taken at least one polygraph examination and had been rated “no deception indicated” on their most recent examination. Although it is possible that some of these results represented false negatives, the requirement of a previous truthful exam helped maximize the probability that participants were capable of passing a polygraph test. Time in treatment ranged from 2 to 91 months (mean = 29.8; median = 27; $SD = 18$). These 95 participants had taken a total of 333 polygraph examinations (Mean = 3.5, Median = 3; $SD = 2.9$). The 333 examinations included sexual history tests, monitoring tests, and some specific issue tests. Demographic descriptors such as age, socioeconomic status, ethnicity, mental health diagnosis, legal history, type of sex crime leading to treatment, victim age, and gender were not collected to help protect anonymity and to foster clients’ willingness to respond to the survey.

Each program was directed by Clinical ATSA members and adhered to ATSA’s Ethical Standards and Principles (ATSA, 2001). The polygraph examinations were conducted by three experienced examiners who had completed specialized training in post-conviction sex offender testing and adhered to prevailing standards (American Polygraph Association, 1995).

Measures

Each participant anonymously completed a questionnaire specifically constructed for this survey. Participants were asked how long they had been in treatment, how many examinations they had taken, how many times they had successfully lied to examiners, and the number times they had been incorrectly been

labeled deceptive on those examinations (i.e. false positive results). Participants claiming false positives were asked whether they had ever reacted by admitting things they had not done. Those who reported using this strategy were asked how often they had used it, how often it resulted in a subsequent “NDI” rating, and how often they were again rated deceptive, even after making fabricated admissions. Participants were also asked whether mandatory polygraph examinations were helpful or/and harmful to their treatment. The questionnaire invited those who indicated that polygraph examinations were helpful, harmful or both to give unstructured, narrative written comments specifying how the procedure helped and/or harmed, other than financially.

Data Collection Procedure

Group therapists distributed the questionnaires to eligible participants at the beginning of a weekly group therapy meeting. To assure confidentiality and anonymity, clients were instructed not to put their names on questionnaires. The research was conducted in accordance with federal guidelines for the ethical treatment of human subjects, and all clients were provided with a written and verbal description of the study in order to make an informed decision about participation. Completion of the survey was considered to imply informed consent to participate in the project.

Therapists remained in the room to assure that participants did not collaborate. Potential participants were advised that those who did not wish to participate and did not wish to have this known could scribble on their questionnaires or use a blunted writing instrument, giving the appearance of writing without actually doing so. The fact that narrative comments, though invited, were not required for completion helped allay potential participant fears that responses could be identified by their handwriting. Therapists then occupied themselves by reading or doing paperwork. When all group members had stopped writing, therapists asked them to place their questionnaires (including blanks and scribbled forms from those who opted to not participate) into a large envelope that was passed around the room.

Data Analysis

Survey results were tabulated, and participant narrative comments were summarized (Table I). Program records were then reviewed to collect data from actual polygraph examination reports to establish DI, NDI, and inconclusive rates in the participating programs. Client survey results were then compared with file reviews of 403 polygraph examinations conducted during the sampling time frame. Because participants were anonymous, program records included examinations of

Table I. Survey Results

	Client self-report		
	Total number	Mean	Frequency
Length of time in treatment	<i>n</i> = 95	30 months	
Total number of polygraph exams	333	3.5	
False deceptive results	22		6%
False truthful results	11		3%
Number of clients reporting fictitious admissions	5		26% of those reporting false deceptive results
Number reporting they were found truthful on exam following fictitious admissions	4		80% of those reporting fictitious admissions
Number reporting they were found deceptive on exam following fictitious admissions	1		20% of those reporting fictitious admissions
Harmed by polygraph	10		11%
Helped by polygraph	68		72%

offenders in treatment during the study period but not included in the study. To protect anonymity, file reviews were not matched to subjects and therefore the number of exams reviewed in files differs from those reported by clients.

RESULTS

Eighteen participants (19% of participants) reported having been incorrectly labeled deceptive on 22 polygraph examinations (6% of total examinations taken). Six examinees (6% of participants) claimed they were incorrectly rated truthful after lying on 11 examinations (3% of total examinations taken), with four of them claiming this happened once, one client claiming he succeeded in deceiving the examiner twice, and one client claiming he was erroneously found truthful on no less than five occasions.

Examiners rated 337 of the 403 charts (84%) as truthful and 61 charts (15%) as showing indications of deception. Examiners rated six (1.5%) of the 403 charts inconclusive.

Sixty-eight participants (72% of participants) reported that taking polygraph examinations was a helpful aspect of their treatment. Descriptions of "helpfulness" generally indicated that polygraph testing was forcing them to be more truthful with themselves, their therapists, and with group members. They considered this a new and positive experience. Many said that, because of being socialized into honesty in treatment, they were becoming more truthful with loved ones as well and this was having a positive effect on their personal relationships. Some said they believed that if we stopped testing they would soon return to their dishonest

Table II. Polygraph Exam Results From Program Records

	Program A	Program B	Program C	All programs
Number of tests	150	100	153	403
No deception indicated	129 (86%)	75 (75%)	133 (87%)	337 (84%)
Deception indicated	18 (12%)	23 (23%)	19 (12%)	60 (15%)
Inconclusive	3 (2%)	2 (2%)	1 (.67%)	6 (1%)

Note. Percentages do not equal 100 because of rounding.

ways but they were hopeful that being required to practice honesty for so long (the duration of their legal commitment) would make it easier and eventually, perhaps even habitual.

Ten respondents (11%) reported that taking mandatory polygraph examinations was harming them. Examples of harm included negative moods associated with facing unpleasant realities, resenting the invasion of their privacy, and stress associated with being wrongfully accused of deception. Twenty-one participants (22%) did not comment on the helpfulness or harmfulness of polygraph testing. Totals exceed 100% because four participants (4%) reported experiencing both helpful and harmful effects (Table II).

Five participants (5% of all participants, 23% of participants claiming false positives) reported responding to false positives with fictitious admissions. Four of those who reported using a fictitious admission strategy said it resulted in an NDI rating on their next examination, and one person said that he was again rated deceptive after making fictitious admissions (Table III).

Of the five respondents who reported resorting to fictitious admissions, two nonetheless reported that post-conviction sex offender polygraph examination was a helpful aspect of their treatment. One of them commented that although the incorrect accusation of deception was stressful, he thought in general it was good to have to face things he did not want to face. The second did not specify in what way he found it helpful. One examinee reporting fictitious admissions said that taking polygraph examinations was harmful because the false positive result frightened him, made him less sure of himself and hurt his trust level with his

Table III. Reports of False Negatives, Fictitious Admissions, and False Positives by Program

	Program A	Program B	Program C	All programs
<i>N</i>	33	31	31	95
Number of tests taken	162	60	111	333
Reported # of false negatives	7	2	2	11
Reported # of false positives	9	7	6	22
Reported # of fictitious admissions	4	1	0	5
Reported NDI following fictitious admissions	3	1	0	4

therapist. Two examinees reporting fictitious admissions did not respond to the helpfulness/harmfulness question.

DISCUSSION

This study explored offenders' self-reports about the validity and utility of polygraph examination. Self-report information about polygraph examinations might be expected to generate skewed data because closely supervised offenders, anxious to please authority figures, might be motivated to underreport problems. On the other hand, offenders might want to undermine professional confidence in a procedure they dislike by under-reporting accuracy and utility. However, examinees reported they were truthful on 90% of the examinations they took while examiners rated 84% of all charts produced during the same time period as non-deceptive. The degree of similarity between participants' reports and examiners' opinions suggests that our subjects responded with relative candor. Participants reported a relatively low incidence of incorrect conclusions regarding both deception (22 of 333 tests) and truthfulness (11 of 333 tests), suggesting that clients agreed with examiners' opinions 90% of the time. Consistent with findings from a previous study (Harrison & Kirkpatrick, 2000), most reported that polygraph testing is a helpful part of their treatment.

Participants' subjective reports about the value of post-conviction sex offender polygraph examination as a treatment tool provide preliminary but promising support for its continued use. Interestingly, a large majority of our respondents who reported experiencing incorrect accusations of deception opined that taking polygraph examinations was helpful to their treatment nonetheless, as did almost one half of respondents who claimed they had resorted to fictitious admissions. Apparently, these participants felt that the shortcomings of polygraph examinations were offset by benefits they received from the procedure.

Post-conviction sex offender polygraph examination critics have expressed concern that examinees may fabricate and admit things they never did in response to examiners' false-positive chart interpretations (Cross & Saxe, 2001). Five of 22 participants who reported experiencing false-positive results reported making fictitious admissions. Somewhat surprisingly, four of these five examinees reported passing their next examination based on their fictitious admissions. Of course, it is possible that the "fictitious" admission was actually true, which would explain the subsequent truthful polygraph result. It may be that frequent testing and coercion for added disclosures when examinees are incorrectly rated deceptive encourages them to make false admissions in a desperate attempt to correct a wrongful polygraph outcome. Alternatively, it is possible that some or all participants who reported fictitious admissions in this study were dissimulating in order to influence the researchers' perception of polygraph accuracy, and perhaps fictitious admissions are less common than these results seem to indicate. The small number of fictitious admissions reported by these participants makes it

impossible to offer even tentative conclusions. However, the possibility of fictitious admission continues to raise ethical and practical concerns and warrants further investigation.

This study is the first of its kind and therefore had some important limitations. Generalization of the findings is constrained by the small sample size. As well, the sample was drawn from outpatient participants in California, and is not necessarily representative of outpatient programs in states with different laws, or other settings such as prisons. Selection bias was inherent in the design and may have influenced the results. For instance, individuals who were rated deceptive on their most recent examination were excluded from the study; it is entirely possible that such clients might have different opinions and attitudes from those who were invited to participate. Likewise, those who declined to participate may have offered different perceptions from those who volunteered. Our method for collecting data did not distinguish between sexual history, monitoring, and specific issue examinations, which, according to the literature, may produce diverse degrees of validity. As one reviewer pointed out, it would have been advantageous to have someone other than the participant's own therapists administer the surveys, because participant concerns about anonymity can lead to desirable responding. Unfortunately, because of lack of resources, alternative methodologies were not feasible. In general, this study represents an initial effort to better understand the use of polygraphy with sex offenders, and also offers lessons learned for future research endeavors. Continued investigation of both the validity and utility of polygraphy is needed in order to clarify its role in sex offender treatment and management.

Treatment providers who use polygraphy in their programs generally assert that disclosure of sexually deviant behaviors and attractions helps identify relevant treatment targets, leading to more effective treatment planning which can reduce post-treatment recidivism. Results of this study suggest that polygraphy helps clients become more engaged in treatment by promoting honest relationships within and outside the therapy setting. Because engagement in treatment seems to be associated with improved treatment progress (Levenson & Macgowan, 2004), and sex offender treatment appears to reduce recidivism (Hanson et al., 2002), it seems reasonable to hypothesize that post-conviction sex offender polygraph examination could potentially help to improve treatment outcomes. This is, however, an empirical question that must ultimately be addressed by future research. With the exception of Abrams' early work indicating that post-conviction sex offender polygraph examination leads to higher rates of successful completion of probation (Abrams, 1989, 1991; Abrams & Ogard, 1986), research in this area is sorely lacking. Future research should explore post-conviction sex offender polygraph examination's role in facilitating sex offender treatment progress and its impact on post-treatment recidivism.

Although data were collected from both clients and polygraph examinations, and results were compared, truly assessing the validity of polygraph results was beyond the scope of this study. Determining "ground truth" remains a methodological

challenge for polygraph validity research. Empirical data are needed to assess the validity of polygraph examinations as they are used in sex offender treatment programs. However, this study appears to lend preliminary but encouraging support for the accuracy and utility of sex offender polygraph testing, as evidenced by the congruence between offender report and official examination results.

REFERENCES

- Abrams, S. (1989). Probation polygraph surveillance of child abusers. *The Prosecutor*, 22(3), 29–36.
- Abrams, S. (1991). The use of polygraphy with sex offenders. *Annals of Sex Research*, 4(3/4), 239–263.
- Abrams, S., & Abrams, J. B. (1993). *Polygraph testing of the pedophile* (1st ed.). Portland OR: Ryan Gwynner.
- Abrams, S., & Ogard, E. (1986). Polygraph surveillance of probationers. *Polygraph*, 13(3), 174–182.
- Ahlmeyer, S., Heil, P., McKee, B., & English, K. (2000a). The impact of polygraphy on admissions of victims and offenses in adult sexual offenders. *Sexual Abuse: Journal of Research and Treatment*, 12(2), 123–138.
- Ahlmeyer, S., Heil, P., McKee, B., & English, K. (2000b). The impact of polygraphy on admissions of victims and offenses in adult sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 12(2), 123–138.
- American Polygraph Association. (1995). *Standards for postconviction sex offender testing* (practice guidelines): American Polygraph Association.
- ATSA. (2001). *Practice standards and guidelines for members of the association for the treatment of sexual abusers*. Beaverton, OR.
- Cross, T. P., & Saxe, L. (1992). A critique of the validity of polygraph testing in child sexual abuse cases. *Journal of Child Sexual Abuse*, 1(4), 19–33.
- Cross, T. P., & Saxe, L. (2001). Polygraph testing and sexual abuse: The lure of the Magic Lasso. *Child Maltreatment*, 6(3), 195–206.
- Ekman, P. (1985/1992). The polygraph as lie catcher. In P. Ekman (Ed.), *Telling lies: Clues to deceit in the marketplace, politics and marriage* (pp. 190–239). New York: W. W. Norton.
- Emerick, R., & Dutton, W. (1993). The effect of polygraphy on the self report of adolescent sex offenders: Implications for risk assessment. *Annals of Sex Research*, 6(2), 83–103.
- English, K., Jones, L., Pasini-Hill, D., Patrick, D., & Cooley-Towell, S. (2000). *The value of polygraph testing in sex offender management*. Denver, CO: Research Report Submitted to the National Institute of Justice No. D97LBVX0034.
- English, K., Pullen, S., & Jones, L. (1996). *Managing adult sex offenders: A containment approach*. Lexington, KY: American Probation and Parole Association.
- English, K., Pullen, S., & Jones, L. (1998). The containment approach: An aggressive strategy for community management of adult sex offenders. *Psychology, Public Policy, and Law*, 4(1/2).
- Faller, K. C. (1997). The polygraph and its use in cases of alleged sexual abuse: An exploratory study. *Child Abuse and Neglect*, 21(10), 993–1008.
- Hanson, R. K., & Bussiere, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348–362.
- Hanson, R. K., Gordon, A., Harris, A. J. R., Marques, J. K., Murphy, W., Quinsey, V. L., et al. (2002). First report of the collaborative outcome data project on the effectiveness of treatment for sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 14(2), 169–194.
- Hanson, R. K., & Harris, A. J. R. (2001). A structured approach to evaluating change among sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 13(2), 105–122.
- Hanson, R. K., & Morton-Bourgon, K. (2004). *Predictors of sexual recidivism: An updated meta-analysis*. Ottawa, CA: Public Works and Government Services.
- Harrison, J. S., & Kirkpatrick, B. (2000). Polygraph testing and behavioral change with sex offenders in an outpatient setting: An exploratory study. *Polygraph*, 29(1), 20–25.
- Heil, P., Ahlmeyer, S., & Simons, D. (2003). Crossover sexual offenses. *Sexual Abuse: A Journal of Research and Treatment*, 15(4), 221–236.

- Hindman, J. (1988). Research disputes assumptions about child molesters. *National District Attorney's Association Bulletin*, 7(4).
- Hindman, J., & Peters, J. M. (2001). Polygraph testing leads to better understanding adult and juvenile sex offenders. *Federal Probation*, 65(3), 8–15.
- Humbert, P. (1990, Fall 1990). The impact of polygraph use on offense history reporting. *ATSA Professional Forum*, 4, 20–21.
- Iacono, W. G. (2001). Forensic “lie detection”: Procedures without scientific basis. *Journal of Forensic Psychology Practice*, 1(1), 75–86.
- Levenson, J. S., & Macgowan, M. J. (2004). Engagement, denial, and treatment progress among sex offenders in group therapy. *Sexual Abuse: A Journal of Research and Treatment*, 16(1), 49–63.
- Matte, J. A. (1996). *Forensic psychophysiology using the polygraph: Scientific truth verification—Lie detection* (1st ed.). Williamsville: J. A. M. Publications.
- McGrath, R. J., Cumming, G., & Burchard, B. L. (2003). *Current practices and trends in sexual abuser management: The safer society 2002 nationwide survey*. Brandon, VT: Safer Society Press.
- National Academy of Sciences. (2003). *The polygraph and lie detection*. Washington, DC: National Academies Press.
- O'Connell, M. A. (1998). Using polygraph testing to assess deviant sexual history of sex offenders. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 58(8-A), 3023.
- Quinsey, V. L., Lalumière, M. L., Rice, M. E., & Harris, G. T. (1995). Predicting sexual offenses. In J. C. Campbell (Ed.), *Assessing dangerousness: Violence by sexual offenders, batterers, and child abusers* (pp. 114–137). Thousand Oaks, CA: Sage.
- Raskin, D., Barland, G. H., & Podlesny, J. A. (1976). *Validity and reliability of detection of deception: Final report* (Government Study No. Contract # 75-NI-00-0001). Salt Lake City, Utah: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Department of Justice.
- Saxe, L., Dougherty, D., & Cross, T. (1983). *Scientific validity of polygraph testing: A research review and evaluation—A technical memorandum* (No. OTA-TM-H-15.). Washington, DC: U.S. Congress Office of Technology Assessment.
- Williams, V. L. (1995). Response to Cross and Saxe's “A critique of the validity of polygraph testing in child sexual abuse cases.” *Journal of Child Sexual Abuse*, 4(3), 55–71.