

Use of the Polygraph with Adolescents Who Have Engaged in Sexually Abusive Behavior: A  
Critical Review of the Empirical Bases and Ethical Issues

Tayla T.C. Lee and Nicole M. Lemaster

Ball State University

Hugh R. Hanlin

Private Practice; Indiana Association of Juvenile Sex Offender Practitioners

Michael A. Johnson

Broad Ripple Counseling Center; Indiana Association of Juvenile Sex Offender Practitioners

Author Note

Tayla T.C. Lee and Nicole M. Lemaster, Ball State Univeristy, Department of Psychological Science, Muncie, IN; Hugh R. Hanlin, Private Practice, Plainfield, IN and Indiana Association of Juvenile Sex Offender Practitioners, Indianapolis, IN; Michael A. Johnson, Broad Ripple Counseling Center, Broad Ripple, IN and Indiana Association of Juvenile Sex Offender Practitioners, Indianapolis, IN. Address correspondence to Tayla T.C. Lee, Department of Psychological Science, Ball State University, Muncie, IN 47306; phone: 765-285-1705; e-mail: [tlee@bsu.edu](mailto:tlee@bsu.edu).

### Abstract

The Association for the Treatment of Sexual Abusers (ATSA) published guidelines in 2017 that cautioned against the use of the polygraph with adolescents who have engaged in sexually abusive behaviors but did not delineate the types of empirical evidence or ethical concerns considered when developing this policy statement. The goal of the current review was to address these shortcomings by examining the empirical bases of polygraph use with adolescents who have engaged in sexually abusive behaviors, as well as the ethical implications associated with this practice. Toward that end, we conducted an extensive literature review and identified four empirical studies, as well as numerous commentaries, on the use of the polygraph with adolescents who have engaged in sexually abusive behaviors. Broadly, our review suggests there is minimal empirical evidence supporting the utility and no evidence supporting the validity of using polygraph examinations with adolescents who have engaged in sexually abusive behaviors. Our review also suggests there are numerous ethical concerns related to beneficence and potential malfeasance when using the polygraph with adolescents who have engaged in sexually abusive behaviors and that use of the polygraph with these youth is an ethically questionable practice.

**Keywords:** Adolescent Sexual Abusers, Assessment, Polygraph, Sex Offender Policy

## Use of the Polygraph with Adolescents Who Have Engaged in Sexually Abusive Behavior: A Critical Review of the Empirical Bases and Ethical Issues

The polygraph, a psychophysiological measurement technique, is frequently used in the process of assessing and treating adolescents who have engaged in sexually abusive behavior (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010). Despite being frequently used, employing the polygraph for these purposes remains quite controversial. Indeed, the Association for the Treatment of Sexual Abusers (ATSA) published guidelines in 2017 that cautioned against the use of the polygraph with adolescents who have engaged in sexually abusive behaviors, citing concerns about the empirical bases and ethical implications of this practice. Unfortunately, the ATSA guidelines did not provide explicit detail regarding the types of empirical evidence or ethical concerns that were considered when developing this policy statement. Thus, the goal of the current review was to address these shortcomings. First, we aimed to provide a comprehensive review of the empirical bases of polygraph use with adolescents who have engaged in sexually abusive behaviors. Second, we wanted to consider the ethical implications associated with this practice.

According to the American Polygraph Association (2015), the polygraph is a psychophysiological measure that assesses deception. The ideal process of administering a polygraph includes a pretest interview, measurement of physiological responses, and analysis of measure results. The evaluator then synthesizes this information into a report, which includes the evaluator's opinion as to whether there was any deception detected during the polygraph examination process. The use of the polygraph as a method of detecting deception is based on the "anxiety-approach theory," which hypothesizes that individuals who are acting in a deceptive manner will demonstrate more physiological reactivity (Vrij, 2015). Importantly, laboratory-based

studies examining whether the polygraph can be used as a measure of deception have raised questions regarding the theoretical bases of the instrument, as well as the extent to which this instrument accurately detects deception (Crosse & Saxe, 1992; Crosse & Saxe, 2001; Faigman, Fienberg, & Stern, 2003; Fienberg & Stern, 2005; Iacono, 2001; Lykken, 1998; Seto, 2004). Thus, in many contexts outside of the assessment and treatment of adolescents and adults who have engaged in sexually abusive behaviors, results of polygraph examinations are viewed skeptically. This is best exemplified by state and federal rulings indicating polygraph results are not admissible in Court because the measure does not have sufficient empirical evidence or acceptance in the scientific community to meet evidentiary rules (e.g., Frye or Daubert Standards) (Vrij, 2000).

Despite being met with skepticism in other contexts, the polygraph remains widely used with individuals who have engaged in sexually maladaptive, abusive, or offensive behaviors. One recent survey of providers in the United States and Canada suggested that approximately 45% of community-based programs and 34% of residential programs treating adolescents who have engaged in sexually abusive behaviors used polygraph examinations (McGrath et al., 2010). This practice appears to have been an adoption of practices used with adults who sexually offend (Zimring, 2004) and typically applies methods used in Post-Conviction Sex Offender Testing (PCSOT) (American Polygraph Association, 2015, 2016; Blackstone & Plaud, 2014). There are three subtypes of PCSOT, including 1) Sexual History Polygraph Examinations (SHPE), 2) Specific Issue Examinations, and 3) Maintenance/Monitoring Examinations (American Polygraph Association, 2015, 2016). In the SHPE, sometimes referred to as a “Disclosure Exam,” the evaluatee is questioned about their history of sexually maladaptive behaviors. The American Polygraph Association (2016) recommends a two-part process for the sexual history exam. In the first part, the assessment focuses on the index behavior that led to the evaluation, sexual history, and

unreported victims. The second part of the SHPE focuses on the assessment of sexual deviancy, compulsivity, and preoccupation. In a Specific Issue Exam, the assessment is intended to clarify a specific situation where there are discrepancies about the truth (e.g., the youth denies committing the offense for which they have been charged). In a Maintenance/Monitoring Exam, polygraph testing is intended to determine whether the evaluatee has engaged in additional sexually maladaptive behaviors or violated supervision or treatment rules (e.g., violation of a safety plan while on probation).

The use of PCSOT methods with adolescents who have engaged in sexually abusive behaviors is intended to reduce non-disclosure or denial of sexually maladaptive or offensive behaviors (Elliot & Vollm, 2018). Examination results suggesting deception is detected are believed to reflect that the evaluatee has not fully disclosed their sexual history. The application of this technique assumes that full disclosure is needed for efficacious treatment. In other words, the goal of obtaining additional information via a polygraph examination is to improve treatment efforts and, ultimately, reduce recidivism. Given that the goals of the polygraph examination are to increase disclosure, improve treatment, and decrease recidivism, results from these exams have been used in both forensic and clinical contexts. In forensic contexts, polygraph results are sometimes incorporated into pre-adjudication and disposition evaluations, as well as sexual behavior risk evaluations. In clinical contexts, some providers use polygraphs as a source of information to inform treatment, while others require adolescents who have engaged in sexually abusive behaviors to produce a non-deceptive polygraph to advance or complete treatment. In each of these applications, results indicating deception was detected can have serious consequences for the individual being evaluated, their families, and communities. Thus, it is important to determine

whether there is any evidence supporting the use of these methods with adolescents who have engaged in sexually abusive behaviors.

To examine the question of whether there is any evidence supporting the use of PCSOT methods with adolescents who have engaged in sexually abusive behaviors, we conducted an extensive literature review. Using Google Scholar, Web of Science, Academic Search Premier, and JSTOR, we searched for studies on the use of the polygraph with adolescents who have engaged in sexually abusive behaviors. Keywords included in this search included: “adolescent\*”, “child\*”, “youth” “teen\*”, “abus\*”, “offender\*”, “perpetrator\*”, and “polygraph\*”. The search was narrowed through the use of Boolean, truncated, and proximity search methods. Articles located through this method were screened based on title and abstract to ensure that they were relevant to the topic. Once articles passed the initial screening, the full text was obtained and reviewed for relevance to this review. Additional potential articles to include in the review were then identified using the references sections of full text articles from the electronic search. Relevance in both screening and full text reviews were conducted by both the first and second author. After full-text screening, only 28 articles were deemed relevant for the purposes of this review. Of the 28, six were peer-reviewed, empirical studies examining the use of polygraph examinations with adolescents who have engaged in sexually abusive behaviors. Four of these studies are described below. The other two peer-reviewed studies were not included in this review, as they compared polygraph-related outcomes across juvenile and adult sex offenders (number of reported behaviors [Hindman & Peters, 2001] and rates of “passing” polygraph exams [Jensen, Shafer, Roby, & Roby, 2015]). The remaining articles were surveys on polygraph usage, commentaries on assessment and intervention with adolescents who have engaged in sexually abusive behaviors, or opinion pieces in favor or against the use of the polygraph with these youth.

One of the primary arguments in favor of using polygraph examinations with adolescents who have engaged in sexually abusive behaviors is that they are likely to be particularly useful in uncovering information most individuals would be motivated to conceal (Becker & Harris, 2004; Blackstone & Plaud, 2014). This argument was addressed by all four of the empirical studies on polygraph use with adolescents who have engaged in sexually abusive behaviors included in this review (Emerick & Dutton, 1993; Schenk, Cooper-Lehki, Keelan, & Fremouw, 2014; Stovering, Nelson, & Hart, 2013; Van Arsdale, Shaw, Miller, & Parent, 2012). Emerick and Dutton (1993) examined whether undergoing a “clinical polygraph” increased the number of sexual behaviors reported by a sample of 76 adolescent boys assessed in an inpatient setting when compared to information provided in reviewed official records or during an initial two-part interview. Results indicated a larger number of child victims were reported during the polygraph exam ( $M = 2.85$ ) when compared to reports of these types of behaviors identified during record reviews ( $M = 1.52$ ) or initial clinical interviews ( $M = 1.87$ ). Results also indicated a larger number of hands-on assaults were reported during the polygraph ( $M = 76.59$ ) than during the intake interview ( $M = 20.65$ ) or when records were reviewed ( $M = 27.18$ ). Finally, additional analyses indicated more cross-gender sexually inappropriate behaviors, greater levels of force or intrusion being used during the sexually maladaptive behavior, and higher levels of pornography use were also reported during the polygraph when compared to that recorded in records or initial interviews. Similarly, Schenk and colleagues (2014) investigated whether reports of bestiality were more likely during a polygraph exam than on a self-report measure assessing sexual history in a sample of 32 adolescent males residing in a secure treatment facility as a result of being adjudicated for “severe” contact offenses. Results suggested a statistically larger number of these youth reported bestiality during the polygraph (81.25%) when compared to answering the self-report item “I have sometimes had sex

with animals” (37.50%). Van Arsdale and colleagues (2012) examined whether there were differences in the number of victims reported before and during a polygraph exam administered as a part of an outpatient treatment program using archival data from 60 adolescent males receiving court-ordered outpatient treatment. Results indicated a statistically larger number of persons victimized were reported during polygraph exams when compared to information provided prior to the exams (Mean Increase = .73 victims; SD = 1.16). Additional analyses indicated a wider variety of types of offenses (i.e., use of force, contact offense, exposure) were reported during the polygraph when compared to before the exam. Results of these studies are consistent with findings from studies of adults who have sexually offended (Elliot & Vollm, 2018). They are also broadly consistent with the argument that using the polygraph results in adolescents who have engaged in sexually abusive behaviors reporting a larger number of sexual behaviors.

The fourth empirical study included in this review calls to question cause of the additional sexual behavior reports demonstrated in past studies. Stovering, Nelson, and Hart (2013) examined the number of victims reported at different points across the course of participation in a mandated treatment program in a sample of 74 adolescent males adjudicated for sexually abusive behaviors. Specifically, they contrasted the number of reported victims at four points in time including 1) at adjudication, 2) during the assessment/education phase (i.e., post-adjudication up until the polygraph exam), 3) during the polygraph exam, and 4) during treatment occurring after the polygraph exam. Results indicated the adolescents reported an average of 2.93 (SD = 3.50) additional victims across the course of treatment. Post-hoc analyses demonstrated the largest number of victims was reported during the assessment/education phase of treatment occurring before the polygraph exam. There was no statistically significant increase in the number of victims reported during the polygraph exam. Stovering and colleagues (2013) suggested this pattern of



results raised the possibility that reports of additional sexually maladaptive behaviors were not necessarily a result of the polygraph exam itself, rather could result from increased knowledge about sexually abusive behaviors, completing a detailed sexual history, or the threat of undergoing a polygraph. VanArsdale and colleagues (2012) raised a similar possibility in discussing the results of their study, as they had observed that many of the new behaviors reported in their sample occurred during the pre-polygraph interview. Thus, it is currently unclear whether additional sexual behavior reports in these youth result from participating in the polygraph exam itself or some other mechanism (e.g., education or threat of polygraph).

Notably, results of the abovementioned studies (Emerick & Dutton, 1993; Schenk et al., 2014; Stovering et al., 2013; Van Arsdale et al., 2012) reflect the question of utility (i.e., Does using the polygraph provide information?), not validity (i.e., Does the polygraph assess deception as it was intended to?). Research on polygraph methods in adults has suggested only the Specific Issue Exam detects deception at levels greater than chance (median accuracy in 52 controlled laboratory studies = .86) (National Research Council [NRC], 2003). The NRC's report suggests other polygraph methods used with adults have an unacceptable number of false positives (i.e., classifying results as deceptive when they were not). No previous studies have examined the issue of whether or not polygraph exam results can detect deception at levels greater than chance in adolescents or in adolescents who have engaged in sexually abusive behaviors, specifically. This means the accuracy of polygraph results in adolescents is unknown and whether the person being evaluated is truly being deceptive cannot be determined.<sup>1</sup>

---

<sup>1</sup> Ideally, studies examining accuracy of PCSOT in adolescents who have engaged in sexually abusive behaviors would investigate the full range of classification statistics (i.e., sensitivity, specificity, positive and negative predictive powers). This would allow test users to examine the costs and benefits of using the technique while also considering the base rate of deception in this population. Overall accuracy does not provide sufficient information regarding rates of false positive and negative results to conduct this cost/benefit analysis (see Rosky, 2012 or Kokish, 2003 for an in-depth discussion of this issue).

Determining how well the polygraph detects deception in adolescents may be complicated by demand characteristics of the exam that could make youth more susceptible to false confessions (Chaffin, 2011). Demand characteristics are implicit or explicit environmental cues that influence the way a person behaves and responds to a particular situation. In the context of a polygraph exam, this could include such things as policies requiring the youth “pass” the exam to complete treatment or insistence from authority figures that the youth needs to make full disclosure. It is possible that even well-intentioned discussions regarding potential benefits of polygraph-related disclosure, such as relief from psychological pain, building family trust, and opportunities to demonstrate treatment progress, may act as demand characteristics. In situations with these or other types of demand characteristics, false confessions could occur in at least two ways. First, adolescents who have engaged in sexually abusive behaviors could be motivated to exaggerate, match the account of the person(s) reportedly victimized, or fabricate their sexual history to avoid producing a deceptive polygraph result. Second, youth could be provided erroneous feedback regarding deception being indicated by polygraph results. In this case, the youth would be motivated to exaggerate or fabricate reports to remedy this outcome. To our knowledge, however, no previous studies have examined the likelihood of false disclosures by adolescents who have engaged in sexually abusive behaviors during polygraph examinations. Nonetheless, the larger literature on adolescents suggests they are vulnerable to demand characteristics and making false reports in psycho-legal evaluations (Salekin, Kubak, & Lee, 2008) and criminal interrogations (Owen-Kostelnik, Repuuci, & Meyer, 2006). This vulnerability appears to result from their stage of cognitive and psychosocial development, which contributes to suboptimal decision-making processes, suggestibility when being questioned by authority figures, and susceptibility to false

memory induction (Owen-Kostelnik et al., 2006; Reyna, Holliday, & March, 2002, Steinberg, 2009).

Further caution in interpreting the results of the previously reviewed studies (Emerick & Dutton, 1993; Schenk et al., 2014; Stovering et al., 2013; Van Arsdale et al., 2012) is needed because it cannot be concluded that reporting an increased number of sexual behaviors necessarily corresponds to increased accuracy in predicting important outcomes, such as recidivism. To demonstrate polygraph exams reduce recidivism, these exams must improve our abilities to assess and intervene with adolescents who have engaged in sexually abusive behaviors in a way that correctly identifies and reduces risk (Chaffin, 2011; Prescott, 2010; Rosky, 2012). This could include improving assessment methods intended to assess risk or needed level of care or supervision, as well as intervention tasks such as development of treatment plans, evaluation of treatment effectiveness, or examinations of an individual's compliance with treatment. Based on our review, there are no published studies that have examined whether considering data from a polygraph examination improves these processes or reduces recidivism. Furthermore, including data from polygraph exams in these processes may lead to increased, not decreased error. To our knowledge, empirically based assessment instruments and therapeutic techniques were not validated using polygraph data. As such, polygraph data could lead to misidentification of risk and treatment targets due to inappropriate comparisons with youth who did not undergo polygraphs. Due to unknown error rates and uncertainty regarding the ability of polygraph results to predict important outcomes, we opine additional research is needed before any conclusion is made regarding the validity of polygraph examinations with adolescents who have engaged in sexually abusive behaviors.

Evidence that a measure is valid consists not only of knowing it can be used for a particular purpose, but also with whom the measure can be used (AERA/APA/NCME, 2014, Cronbach & Meehl, 1955). Some have argued that polygraphs should be used with adolescents because they are similar physiologically to adults (Blackstone & Plaud, 2014). However, no empirical studies have examined whether adult studies supporting the use of the polygraph replicate in adolescents. Further, there are good reasons from the developmental literature to hypothesize these results may not replicate in adolescents. Adolescence is a developmental period characterized by flux in cognitive, emotional, and social abilities (Eccles, Wigfield, & Byrnes, 2003; Galambos & Costigan, 2003). Adolescents also tend to be more highly influenced by contextual factors (e.g., parents or peers) than adults (Kerr, Stattin, Biesecker, & Ferrer-Wreder, 2003; Perkins & Borden, 2003). Due to these developmental characteristics, one could also expect that interests and behaviors, such as those represented in dynamic risk factors, may be subject to more radical or rapid change in adolescence than in adulthood. Indeed, empirical studies have demonstrated wide variability in “normal” sexual development and that there are no clear boundaries between normative, unusual, and problematic sexual behaviors (Bancroft, 2006; Susman, Dorn, & Schiefelbein, 2003). Research also suggests that many sexually maladaptive behavior risk indicators for adolescents who have engaged in sexually abusive behaviors are different from those of adults (Caldwell, 2002; 2010; Eperson, Ralston, Fowers, DeWitt, & Gore, 2006; Worling & Langstrom, 2003, 2006). Thus, whether polygraph methods have evidence supporting their validity for use with adolescents who have engaged in sexually abusive behaviors cannot be determined via generalization of findings with adults who have sexually offended.

Which characteristics should preclude adolescents who have engaged in sexually abusive behaviors from being examined using polygraph methods has also not been empirically examined,

although there are subgroups of adolescents who may be particularly vulnerable to inaccurate results. The American Polygraph Association (2015, Section 1.2.4) dictates that polygraph examiners should “make reasonable efforts to determine that the examinee is a fit subject for testing,” including observable or reasonably known mental, physical, or medical conditions. Nevertheless, in a survey of polygraph examiners, Craig and Molder (2003) demonstrated only 26.7% reported prescreening juvenile examinees to ensure they were suitable candidates for completing the exam. This poor adherence to best practices may be particularly problematic given that some programs require all adolescents to undergo a polygraph exam as part of their treatment. There are numerous candidate characteristics that could preclude an individual from participating appropriately in a polygraph exam, however. For example, Waid and Orne (1982) reviewed laboratory-based studies examining the polygraph and noted poor socialization, impulsivity, depressed mood, and race of the examiner all influenced results. Based on a review of the literature, Prescott (2010) suggested characteristics influencing the polygraph likely include poor reality testing, cognitive or intellectual deficits, or physical conditions that prevent an accurate examination. It is possible that trauma, which causes lasting changes in the physiological systems that are the basis for polygraph measurement (see Sherin & Nemeroff, 2011 for a review), also impacts polygraph results. Thus, it seems significant research is needed to ensure the validity of polygraph procedures for adolescents who have engaged in sexually abusive behaviors with these (and likely other) characteristics.

In the absence of scientific evidence supporting its use, whether the polygraph should be used with adolescents who have engaged in sexually abusive behaviors becomes an ethical decision. Ethical debates regarding polygraph use with adolescents who have engaged in sexually abusive behaviors have largely revolved around the potential impact polygraph examinations can

have on effective supervision, assessment, and treatment efforts (Chaffin, 2011, Kokish, 2003, Prescott, 2010; Worling, 2013). Broadly, Chaffin (2011) suggested motivations for using the polygraph with adolescents who have engaged in sexually abusive behaviors are grounded in the ethical principle of beneficence, which can be broadly defined as actions that promote another individual's well-being. In other words, practitioners who use polygraph exams with adolescents who have engaged in sexually abusive behaviors have intentions to do good, likely because they believe polygraph results can produce comprehensive and accurate sexual histories that improve the quality of intervention efforts.

Nonetheless, many authors express concerns that polygraph methods circumvent personal agency and are inherently coercive and deceptive, counter to claims the polygraph is employed beneficently. Specifically, polygraph methods rely on a person's involuntary physiology (Vrij, 2000), which reduces the individual's personal agency to make decisions about disclosing information that is in their best interests (Chaffin, 2011). Due to this reason, some have suggested polygraph examinations may violate an individual's rights against self-incrimination and that this violation may be especially likely when polygraph results are used in pre-adjudication assessments or are a requirement of a treatment program (Fox, 2005; Hunter & Lexier, 1998; Kokish, 2003; Worling, 2013). Cross and Saxe (2001) argued polygraph examinations are coercive because they capitalize on an individual's fear and anxiety regarding their past behavior and current circumstances to compel people to tell the "truth." The client's self-reports of sexual behaviors have been observed (VanArsdale et al., 2012) or demonstrated (Stovering et al., 2013) to occur prior to, not during, a polygraph exam suggests that the anxiety over an impending polygraph and potential consequences of failing coerces the client to make reports. Thus, polygraphs' coercive nature may be a legitimate ethical concern. Finally, others have noted polygraphy is inherently

deceptive because those who are asked to undergo such exams believe it can detect deception, when its scientific acceptance as a method of detecting falsehoods is questionable (Vrij, 2000).<sup>2</sup> In sum, these arguments suggest when using polygraphs with adolescents who have engaged in sexually abusive behaviors that the intention may be to do good, but the actual action is ethically questionable.

Another ethical concern related to polygraph use with adolescents who have engaged in sexually abusive behavior is the potential violation of the principle of non-maleficence (i.e., active avoidance of any action that would cause harm) (Chaffin, 2011; Prescott, 2010; Rasmussen, 2013; Worling, 2013). A focus on disclosure, such as that represented in the use of the polygraph, is reflective of the Containment Model, a model of adult sex offender management adopted for use with adolescents who have engaged in sexually abusive behaviors (Rasmussen, 2013). However, empirical evidence has demonstrated that Containment Model based methods are ineffective for intervening with adolescents who have engaged in sexually abusive behaviors and can place these youth at risk for serious psychological, social, sexual, financial, and legal harms (Letourneau & Borduin, 2008; Rasmussen, 2013; Worling, 2013; Zimring, 2004). Thus, polygraph exams, especially when used in the context of other Containment Model practices, may pose an iatrogenic risk to these youth, which could potentially increase the youth's risk to recidivate, and violate the principle of non-maleficence.

It is possible that even including the polygraph in interventions based on "best practices" may do harm to adolescents who have engaged in sexually abusive behaviors. Our current understanding of "best practices" for intervention with adolescents who have engaged in sexually

---

<sup>2</sup> It is for this reason that some have argued the polygraph represents a variation of the "bogus pipeline" procedure, where an individual discloses more behaviors when deceived to believe a machine is recording the genuineness of their responses using their physiological responsivity when in actuality it is not (see Roese & Jamieson, 1993).

abusive behaviors includes developing a strong alliance with service providers, identification of risk, needs, and responsivity-related factors, and engagement in an empirically-supported, trauma-informed intervention program that is matched to the individual's level of risk (Dwyer & Letourneau, 2011; Letourneau & Borduin, 2008; Rasmussen, 2013; Worling, 2013; Worling & Langton, 2012). Thus, harm resulting from including the polygraph in intervention could arise from things like preventing youth from developing a strong, positive alliance with service providers, instead encouraging them to view providers as representatives of an adversarial system (Worling, 2013). This view of providers as adversaries may be especially likely to occur in situations where polygraph results could or do lead to additional legal charges against the youth. Eroding the therapeutic alliance could do harm because it is a key predictor of therapeutic outcomes with youth (Shirk & Karver, 2003). Use of the polygraph may also divert limited resources needed to develop a holistic understanding of an individuals' levels of risk, needs, and responsivity-related factors. Furthermore, polygraph use could decrease the likelihood that an adolescent who has engaged in sexually abusive behaviors will be motivated to participate in intervention efforts by increasing their experiences of shame and other self-conscious emotions. This is problematic because these emotional experiences are related to characteristics that impede effective treatment including higher levels of victim blaming, retaliatory anger, and social withdrawal, as well as lower levels of victim empathy and self-esteem (Worling, 2013; Worling & Langton, 2012). Alternatively, use of the polygraph may also inadvertently reinforce inappropriate behaviors through social modeling. Prescott (2010) expressed concerns that use of the polygraph with youth who used coercion in the commission of sexually maladaptive behaviors reinforces beliefs that using interpersonal coercion is acceptable. Finally, some authors have argued that the potentially coercive nature of polygraph exams could retraumatize adolescents who



have engaged in sexually abusive behaviors that were previously victimized themselves (Prescott, 2010). Given that traumatization rates for adolescents who have engaged in sexually abusive behaviors are high (Seto & Lalumiere, 2010), experience of retraumatization via polygraph examination is a significant risk and violates the best practice principal of trauma informed care. Thus, it seems use of the polygraph likely further violates the ethical principle of non-maleficence because it appears contraindicated for use in efficacious interventions with adolescents who have engaged in sexually abusive behaviors.

Professionals working with adolescents who have engaged in sexually abusive behaviors not only have ethical obligations to these youth, but also to act in a manner that protects communities. These obligations likely fall under the ethical principle of beneficence. In line with this aspiration, proponents of polygraph use with adolescents who have engaged in sexually abusive behaviors have noted including polygraph examinations in routine evaluations of these youth could be useful for identifying additional survivors in need of intervention (as cited in Prescott, 2010). To our knowledge, there is no research investigating the effects of compelled disclosure (i.e., disclosures resulting from being identified as a survivor due to mandatory reporting policies/laws) on survivors of sexually abusive behaviors perpetrated by adolescents. Nonetheless, previously published commentaries and research on other types of trauma survivors suggests there could be potential drawbacks of this practice. Of highest concern is that using polygraph results for this purpose will identify survivors who have not disclosed being victimized for legitimate reasons, such as potential consequences within their families or communities (Prescott, 2010). Additionally, not all individuals who experience trauma desire or require intervention. Research suggests trauma-related dysfunction requiring treatment is the exception, not the rule, after experience of a traumatizing event (Resick, Monson, & Rizvi, 2013). These

unintended effects could also extend to intervention with survivors. Research in adult survivors of sexual assault and interpersonal violence suggests survivors may be less likely to engage with legal, therapeutic, and social support processes when disclosures are compelled (see Holland, Cortina, and Freyd, 2018, for a review). Furthermore, previous research on involuntary trauma processing, such as that done in Critical Incident Stress Debriefing, has suggested this practice may increase the likelihood individuals will develop trauma-related mental disorders (see Devilly, Gist, & Cotton, 2006, for a review). Thus, while well-intentioned, the practice of using polygraph information to identify survivors could do more harm than good.

In summary, there is minimal empirical evidence supporting the utility and no evidence supporting the validity of using polygraph examinations with adolescents who have engaged in sexually abusive behaviors. In the absence of an empirical base on which to guide use of the polygraph with adolescents who have engaged in sexually abusive behaviors, the issue becomes one of ethics. Concerns related to beneficence and potential malfeasance when using the polygraph with adolescents who have engaged in sexually abusive behaviors suggest this practice is ethically questionable because it may contribute to iatrogenic effects for both the youth and survivors of their sexually abusive behaviors.

## References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. Washington DC: American Educational Research Association Publications.
- American Polygraph Association. (2015). *APA standards of practice*. Chattanooga, TN: Author.
- American Polygraph Association. (2016). PCSOT Committee operational policy. Chattanooga, TN: Author.
- Association for the Treatment of Sexual Abusers. (2017). *Practice guidelines for assessment, treatment, and intervention with adolescents who have engaged in sexually abusive behavior*. Beaverton, OR: Author.
- Bancroft, J. (2006). Normal sexual development. In H. E. Barbaree and W. L. Marshall (Eds.). *The Juvenile Sex Offender* (2<sup>nd</sup> ed., pp. 19–57). New York, NY: The Guilford Press.
- Becker, J. V. & Harris, C. (2004). The psychophysiological assessment of juvenile offenders. In G. O'Reilly, W. L. Marshall, A. Carr, and R. C. Beckett (Eds.), *The handbook of clinical intervention with young people who sexual abuse* (pp. 191–202). New York, NY: Brunner-Routledge.
- Blackstone, K. E. & Plaud, J. J. (2014). The polygraph. In D. Bromberg. & W. T. O'Donohue (Eds.), *Toolkit for working with juvenile sex offenders* (pp. 89-119). Cambridge, MA: Elsevier Inc. doi:10.1016/B978-0-12-405948-1.00004-9
- Caldwell, M. F. (2002). What we do not know about juvenile sexual reoffense risk. *Child Maltreatment*, 7, 291-302. doi:10.1177/107755902237260

- Caldwell, M. F. (2010). Study characteristics and recidivism base rates in juvenile sex offender recidivism. *International Journal of Offender Therapy and Comparative Criminology*, *54*, 197–2012. doi:10.1177/0306624X08330016
- Chaffin, M. (2011). The case of juvenile polygraph as a clinical ethics dilemma. *Sexual Abuse: A Journal of Research and Treatment*, *23*, 314-328. doi:10.1177/1079063210382946
- Craig, R. A. & Molder, C. (2003). The use of law enforcement polygraph tests with juveniles. *The Journal of Credibility Assessment and Witness Psychology*, *4*, 63–74.
- Cronbach, L. J. & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*, 281-303. doi:0.1037/0022-006X.71.3.452
- Cross, T. P., & Saxe, L. (1993). A critique of the validity of polygraph testing in child sexual abuse cases. *Journal of Child Sexual Abuse*, *1*, 19-33. doi:10.1300/J070v01n04\_02
- Cross, T. P., & Saxe, L. (2001). Polygraph testing and sexual abuse: The lure of the magic lasso. *Child Maltreatment*, *6*, 195-206. doi:10.1177/1077559501006003001
- Devilly, G. J., Gist, R., & Cotton, P. (2006). Ready! Fire! Aim! The status of psychological debriefing and therapeutic interventions: In the workplace and after disasters. *Review of General Psychology*, *10*, 318–345. doi:10.1037/1089-2680.10.4.318
- Dwyer, R. G. & Letourneau, E. J. (2011). Juveniles who sexually offend: Recommending a treatment program and level of care. *Child Adolescent Psychiatric Clinical*, *20*, 413-429. doi:10.1016/j.chc.2011.03.007
- Eccles, J. S., Wigfield, A., & Byrnes, J. (2003). Cognitive development in adolescence. In I. B. Weiner, R.M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology: Volume 6. Developmental psychology, 2<sup>nd</sup> Edition* (2<sup>nd</sup> ed., Vol. 6, pp. 325–349). Hoboken, NJ: John Wiley & Sons, Inc.

- Elliot, E. & Vollm, B. (2018). The utility of post-conviction polygraph testing among sexual offenders. *Sexual Abuse, 30*, 367–392. doi:10.1177/1079063216667922
- Emerick, R. L. & Dutton, W. A. (1993). The effect of polygraphy on the self-report of adolescent sex offenders: Implications for risk assessment. *Annals of Sex Research, 6*, 83-103. doi:10.1007/BF00849301
- Epperson, D.L., Ralston, C.A., Fowers, D., DeWitt, J., & Gore, K.S. (2006). Actuarial risk assessment with juveniles who offend sexually: Development of the Juvenile Sexual Offense Recidivism Risk Assessment Tool – II. In Prescott, D. S. (Ed.), *Risk assessment of youth who have sexually abused: Theory, controversy, and emerging strategies*. Oklahoma City, OK: Wood’N’Barnes.
- Faigman, D. L., Fienberg, S. E., & Stern, P. C. (2003). The limits of the polygraph. *Issues in Science and Technology, 20*, 40-48.
- Fienberg, S. E., & Stern, P. C. (2005). In search of the magic lasso: The truth about the polygraph. *Statistical Science, 20*, 249-260. doi:10.1214/08834230500000022
- Fox, E. L. (2005, Summer). Did Antelope kill the polygraph? *ATSA Forum*.
- Galambos, N. L. & Costigan, C. L. (2003). Emotional and personality development in adolescence. In I. B. Weiner, R.M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology: Volume 6. Developmental psychology, 2<sup>nd</sup> Edition* (2<sup>nd</sup> Ed., Vol. 6, pp. 325 – 349). Hoboken, NJ: John Wiley & Sons, Inc.
- Hindman, J. & Peters, J. M. (2001). Polygraph testing leads to better understanding of adult and juvenile sex offenders. *Federal Probation, 65*, 8 – 15.
- Holland, K. J., Cortina, L. M., & Freyd, J. J. (2018). Compelled disclosure of college sexual assault. *American Psychologist, 73*, 256–268. doi:10.1037/amp0000186

- Hunter, Jr., J. A. & Lexier, L. J. (1998). Ethical and legal issues in the assessment and treatment of juvenile sex offenders. *Child Maltreatment, 3*, 339-348.  
doi:10.1177/1077559598003004006
- Iacono, W. G. (2001). Forensic “lie detection”: Procedures without scientific basis. *Journal of Forensic Psychology Practice, 1*, 75-86. doi:10.1300/J158v01n01\_05
- Jensen, T. M., Shafer, K., Roby, C. Y., & Roby, J. L. (2015). Sexual history disclosure polygraph outcomes: Do juvenile and adult sex offenders differ? *Journal of Interpersonal Violence, 30*(6), 928-944. doi:10.1177/0886260514539766
- Letourneau, E. J., & Borduin, C. M. (2008). The effective treatment of juveniles who sexually offend: An ethical imperative. *Ethics & Behavior, 18*, 286-306.  
doi:10.1080/10508420802066940
- Lykken, D. T. (1998). *A tremor in the blood: Uses and abuses of the lie detector*. New York, NY: Plenum Press.
- Kerr, M., Stattin, H., Biesecker, G., & Ferrer-Wreder, L. (2003). Relationships with parents and peers in adolescence. In I. B. Weiner, R.M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology: Volume 6. Developmental psychology, 2<sup>nd</sup> Edition* (2<sup>nd</sup> ed., Vol. 6, pp. 325–349). Hoboken, NJ: John Wiley & Sons, Inc.
- Kokish, R. (2003). The current role of post-conviction sex offender polygraph testing. In Geffner, R., Franey, K.C., Arnold, T.G., & Falconer, R. (Eds.). *Identifying and treating sex offenders: Current approaches, research, and techniques* (175–194). Binghamton, NY: The Haworth Maltreatment and Trauma Press.

- McGrath, R. J., Cumming, G. F., Burchard, B. L., Zeoli, S., & Ellerby, L. (2010). *Current practices and emerging trends in sexual abuser management: The Safer Society 2009 North American Survey*. Brandon, VT: Safer Society Press.
- National Research Council (2003). *The polygraph and lie detection*. Washington, DC; National Academies Press.
- Owen-Kostelnik, J., Reppucci, D., & Meyer, J. R. (2006). Testimony and interrogation of minors: Assumptions about maturity and morality. *American Psychologist*, *61*, 286–304. doi:10.1037/0003-066X.61.4.286
- Perkins, D. F. & Borden, L. M. (2003). Positive behaviors, problem behaviors, and resiliency in adolescence. In I. B. Weiner, R.M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology: Volume 6. Developmental psychology, 2<sup>nd</sup> Edition* (2<sup>nd</sup> ed., Vol. 6, pp. 325 – 349). Hoboken, NJ: John Wiley & Sons, Inc.
- Prescott D. (2010). Polygraphy with youth who have sexually abused: Considerations and cautions. In D. S. Prescott & R.E. Longo and (Eds.), *Current Application: Strategies for working with Sexually Aggressive Youth and Youth with Sexual Behavior Problems* (Vol. 1, pp. 155 -165). Holyoke, MA: NEARI Press Publishers.
- Rasmussen, L. A. (2013). Young people who sexually abuse: A historical perspective and future directions. *Journal of Child Sexual Abuse*, *22*, 119-141. doi:10.1080/10538712.2013.744646
- Resick, P. A., Monson, C. M., & Rizvi, S. L. (2013). Posttraumatic stress disorder. In W. E. Craighead, D. J. Miklowitz, & L. W. Craighead (Eds.). *Psychopathology: History, diagnosis, and empirical foundations* (2<sup>nd</sup> ed., pp. 244 – 284). Hoboken, NJ: John Wiley & Sons, Inc.

- Reyna, V.F., Holliday, R., & March, T. (2002). Explaining the development of false memories. *Developmental Review, 22*, 436 – 489.
- Roese, N. J. & Jamieson, D. W. (1993). Twenty years of bogus pipeline research: A critical review and meta-analysis. *Psychological Bulletin, 114*, 363–375. doi:10.1037/0033-2909.114.2.363
- Rosky, J. W. (2012). The (f)utility of post-conviction polygraph testing. *Sexual Abuse: A Journal of Research and Treatment, 25*, 259–281. doi:10.1177/1079063212455668
- Salekin, R. T., Kubak, F. A., & Lee, Z. (2008). Deception in children and adolescents. In R. Rogers (Eds.), *Clinical assessment of malingering and deception* (3<sup>rd</sup> ed., pp. 343-364). New York: The Guilford Press.
- Schenk, A. M., Cooper-Lehki, C., Keelan, C. M., & Fremouw, W. J. (2014). Underreporting of bestiality among juvenile sex offenders: Polygraph versus self-report. *Journal of Forensic Science, 59*, 540-542. doi:10.1111/1556-4029.12333
- Seto, M. C. (2004). Pedophilia and sex offenses against children. *Annual Review of Sex Research, 14*, 321-361. doi:10.1080/10532528.2004.10559823
- Seto, M. C. & Lalumiere, M. L. (2010). What is so special about male adolescent sexual offending? A review and test of explanations through meta-analysis. *Psychological Bulletin, 136*, 526–575. doi:10.1037/a00197000
- Sherin, J. E. & Nemeroff, C. B. (2011). Post-traumatic stress disorder: The neurobiological impact of psychological trauma. *Dialogues in Clinical Neuroscience, 13*, 263-278.
- Shirk, S. R. & Karver, M. (2003). Prediction of treatment outcome from relationship variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 71*, 452–464. doi:10.1037/0022-006X.71.3.452



- Steinberg, L. (2009). Adolescent development and juvenile justice. *Annual Review of Clinical Psychology, 5*, 47–73. doi:10.1146/annurev.clinpsy.032408.153603
- Stovering, J., Nelson, W. M., & Hart, K. J. (2013). Timeline of victim disclosures by juvenile sex offenders. *The Journal of Forensic Psychiatry & Psychology, 24*(6), 728-739. doi:10.1080/14789949.2013.848461
- Susman, E. J., Dorn, L. D., & Schiefelbein, V. L. (2003). Puberty, sexuality, and health. In I. B. Weiner, R.M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology: Volume 6. Developmental psychology, 2<sup>nd</sup> Edition* (2<sup>nd</sup> ed., Vol. 6, pp. 325–349). Hoboken, NJ: John Wiley & Sons, Inc.
- Van Arsdale, A., Shaw, T., Miller, P., & Parent, M.C. (2012). Polygraph testing for juveniles in treatment for sexual behavior problems: An exploratory study. *Journal of Juvenile Justice, 1*, 68–79.
- Vrij, A. (2000). *Detecting lies and deceit: The psychology of lying and the implications for professional practice*. Chichester, UK: John Wiley & Sons.
- Vrij, A. (2015). Deception detection. In B.L. Cutler & P.A. Zapf (Eds.), *APA handbook of forensic psychology: Vol. 2. Criminal investigation, adjudication, and sentencing outcomes* (pp. 225 -244). Washington, DC: American Psychological Association. doi:10.1037/14462-008
- Waid, W. M. & Orne, M. T. (1982). The physiological detection of deception: The accuracy of polygraph testing can be affected by such variables as attentiveness, drugs, personality, and the interaction between examiner and subject. *American Scientist, 70*, 402-409. Retrieved from <http://www.jstor.org/stable/27851548>

- Worling, J. R. (2013). What were we thinking? Five erroneous assumptions that have fueled specialized interventions for adolescents who have sexually offended. *International Journal of Behavioral Consultation and Therapy*, 8, 80-88. doi:10.1037/h0100988
- Worling, J.R. & Langstrom, N. (2003). Assessment of criminal recidivism risk with youth who have offended sexually. A review. *Trauma, Violence, & Abuse*, 4, 341-362. doi:10.1177/1524838003256562
- Worling, J.R. & Langstrom, N. (2006). Risk of sexual recidivism. In H.E. Barbaree & W. L. Marshall (Eds.), *The juvenile sex offender* (2<sup>nd</sup> ed., 219-247). New York, NY: The Guilford Press.
- Worling, J. R. & Langton, C. M. (2012). Assessment and treatment of adolescents who sexually offend. Clinical issues and implications for secure settings. *Criminal Justice and Behavior*, 39, 814-841. doi:10.1177/0093854812439378
- Zimring, F. E. (2004). *An American travesty: Legal response to adolescent sexual offending*. Chicago, IL: University of Chicago Press.