

Use of the Polygraph in Sex Offender Treatment

Isabella R. Tambone

Creighton University

### Abstract

This study addresses whether post-conviction polygraph assessments are useful in the treatment of sex offenders and the reduction of sexual violence. The proposed sample includes polygraph reports from approximately 460 sex offenders across several state and federal law enforcement and treatment agencies. All records were digitized and provided in individual electronic files to the researchers. Most of the participants (75%) not only received an initial post-conviction polygraph but also received follow-up polygraphs. This archival data includes the polygraph test results as well as their responses on an extensive sexual history questionnaire along with medical, legal, employment, substance use, and residential information. This study hopes to address questions surrounding the utility of polygraph assessments through analysis of new admissions and ultimate performance on the polygraph assessments as well as characteristics of offenders who admit to new information such as new victims and new sexual offenses. This research will hopefully lead to the advancement of treatment for sexual offenders, a group of people with a historically low treatment success rate.

### Use of the Polygraph in Sex Offender Treatment

The public generally views polygraphs as a way to assess the truthfulness of suspects in criminal cases. However, polygraph exams on post-conviction sexual offenders are increasingly being used to improve treatment and increase admissions regarding sexual behaviors. Post-conviction polygraphs are used to assess treatment progress and make sure offenders are complying with supervision (US Department of Justice, 2003). Questions remain about the utility of such practices though. The US National Academy of Science determined, after consulting a board of experts, that the accuracy of polygraphs is generally between 81% and 91% under ideal conditions (National Research Council, 2002). An early study of the use of polygraph exams on sex offenders by Emerick and Dutton (1993) reported an increase in information post-polygraph both in terms of the number of victims and number of offenses reported by offenders. McGrath, Cumming, Hoke, & Bonn-Miller (2007) further found that recidivism rates decreased when the offenders underwent polygraph testing. Furthermore, Anderson, Barkley, & Cook (2014) also found a difference between recidivism for a group of sex offenders undergoing polygraphs compared to a non-polygraph in terms of violent recidivism.

However, Anderson et al. (2014) identified several shortcomings in their research. They expressed concern with the presence of large variability in the examination methods that may have thereby altered the results of the study itself. In addition, they were concerned that offenders who were willing to engage in polygraph tests would differ from those who were not compliant with polygraph administration. Specifically, they

were concerned that those offenders not willing to engage may have been inherently more likely to offend (Anderson et al., 2014). Another shortcoming of polygraph research may be that, because of the context of the evaluation, offenders are likely to make false admissions. Grubin and Madsen (2006) addressed the issue of possible false admissions during polygraph and found that 10% had reported false admissions. Gannon, Wood, Pina, Tyler, Barnoux, & Vasquez (2014) further suggested that future research should review the type of sexual offense committed for any link to different disclosures patterns. Another limitation in the past research is that polygraphs were administered only to volunteers (Grubin, 2010; Kokish, Levenson & Blasingame, 2005).

Given the previous exclusions of offense type and range of paraphilias in literature, it is especially important to note that the current study intends to focus on this very factor. Paraphilia is defined as sexual desire that is abnormal or dangerous to others, and psychologists have traditionally believed that sex offenders do not suffer from multiple paraphilias (e.g., Cann, Friendship, & Gonza 2007). However, more recent research has increasingly suggested that many sexual offenders are *crossover* offenders and victimize across ages, genders, and relationship types (Kleban, Chesin, Jeglic, & Mercado, 2012). The previously mentioned finding that polygraphs may be linked to greater disclosure of sexual history may be especially useful for identifying crossover offenders. A resulting reclassification of offenders may have a significant impact on the literature as well as individual interventions for the offenders themselves. If a significant number of offenders are reclassified as crossover offenders, it is likely that treatment will be tailored to the specific needs of crossover offenders in order to further reduce the risk of recidivism. Implementing post-conviction polygraphs to identify crossover offenders is

important because more effective treatment could lead to lower rates of recidivism, ultimately meaning less victims sexual crime (Cann et al., 2007). It may also be that offenders convicted of more serious sexual crimes tend to show higher rates of crossover paraphilia and therefore present further treatment challenges (Sim & Proeve, 2010). Some of the preliminary findings regarding crossover sex offenders may also be flawed if we have simply been looking at a subsample of crossover offenders in previous research. It may be that offenders have been admitting to their least stigmatizing sexual behaviors.

The current study seeks to identify the presence of crossover sexual offenders in a sample of sex offenders who have undergone post-conviction polygraph examinations. The current study also seeks to discern differences in polygraph outcomes between crossover and specialist sex offenders. Available data includes residential history, employment information, history of drug abuse, history of domestic relationships, and history of all lifetime sexual contacts. Past polygraph studies have not provided a thorough sexual contact history while the current study's polygraph questionnaires include lifetime sexual contact history for each offender. This information can be used to note specific behavior patterns present in sex offenders, such as sexual contact with family members or animals as well as early abuse. The available data also includes sexual contact sheets that identify a description of all lifetime sexual experiences, consensual or illegal. These data sources will allow for the identification of new admission pre- and post-conviction.

New admissions on the polygraph tests will be examined in relation to different types of offender. New admissions are defined as newly disclosed information during a polygraph to the examiner. New admissions include new victims or new offenses against

victims as well as paraphilias that are newly disclosed during the polygraph examination. Along with new admissions, polygraph results will also be examined, whether the examiner noted significant reactions, no significant reactions, no opinion, or deemed the offenders' answers inconclusive during examinations. This information can be used to examine which offenders are most likely to provide untruthful answers during a polygraph test as well as help provide information about new admissions, such as whether new admissions were provided before or after producing a significant reaction or an untruthful response. In the future, we hope to code for more types of new admissions, some we have come across include admission to violation of parole in regards to possession of child pornography as well as admission of new victims and more severe crimes against past victims. We are especially interested in the relationship between new admissions on polygraph reports and type of offender as well as number of victims and sexual history information. Denial of past sexual offenses has long been considered a risk factor for recidivism and likely to nullify any treatment effect (Anderson et al., 2014), which is why new admissions in polygraphs are likely to improve treatment of offenders. Past research has classified new admissions as one category, while we will separate new admissions and correlate specific admissions, such as new victims and new offenses with demographic information and offender type.

To examine these hypotheses, research assistants will code polygraph reports provided by a polygraph examiner that has tested approximately 460 sex offenders across several state and federal law enforcement and treatment agencies. All records were digitized and provided in individual participant files to the researchers. Researchers have currently coded 30 participants to provide some pilot data. Preliminary data show the

sample is 95% Caucasian and 90% male, with an average age of 36. We expect the sample to become more racially diverse but expect other demographics to remain consistent otherwise. Excluding child pornography offenders, each offender has an average of 3.35 victims. Preliminary analysis revealed a significant pattern between rapists and admission of new victims,  $X^2(1) = 7.389, p = .007$ . Analysis also showed a significant pattern between mixed offenders, offenders who had perpetrated sexual crimes on adult and children, and admission of new victims,  $X^2(1) = 4.804, p = .028$ . With the continued coding of offenders, we hope to correlate different types of admissions, not just admission of new victims, with type of offender. Further analysis suggests those who perpetrate crimes against adults are more likely to originally withhold information from examiners, but found to have significant reactions during polygraph examinations and consequently make new admissions. Researchers hope to find similar trends in new admissions and to find significant patterns of relationship between type of offense and responses to polygraph examination to support our hypotheses.

The current sample of sex offenders has distinct advantages over previous samples. The issue of variability among multiple examiners identified in previous studies will be eliminated as one examiner performed all the polygraph tests used in the current study. The offenders in this study also did not participate on a volunteer basis; rather treatment facilities or probation officers mandated polygraphs for all offenders. In addition, these offenders are drawn over multiple agencies so the sample will be much more diverse than any of the previous efforts in the literature that have been confined to a single agency or correctional facility.

### Budget

The five-hundred-dollars supply stipend will be used to pay two research assistants ten dollars an hour for twenty-five hours to code offender's files and enter them into SPSS.



## References

- Abrams, S. (1989). *The complete polygraph handbook*. Lexington, MA: Lexington Books
- Cook, R., Barkley, W., & Anderson, P. B. (2013). The sexual history polygraph examination and its influences on recidivism. *Journal of Social Change*, 5(1).
- Cann, J., Friendship, C., & Gozna, L. (2007). Assessing crossover in a sample of sexual offenders with multiple victims. *Legal and Criminological Psychology*, 12, 149-163. doi: 10.1348/135532506X112439
- Cook, R., Barkley, W., & Anderson, P. B. (2014). The sexual history polygraph examination and its influences on recidivism. *Journal of Social Change*, 5(1).
- 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(2), 83-103.
- Gannon, T. A., Wood, J. L., Pina, A., Tyler, N., Barnoux, M. F., & Vasquez, E. A. (2014). An evaluation of mandatory polygraph testing for sexual offenders in the United Kingdom. *Sexual Abuse*, 26(2), 178-203.
- Grubin, D. (2010). A trial of voluntary polygraphy testing in 10 English probation areas. *Sexual Abuse*, 22(3), 266-278.
- Grubin, D., & Madsen, L. (2006). Accuracy and utility of post-conviction polygraph testing of sex offenders. *The British Journal of Psychiatry*, 188(5), 479-483
- 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).

- Kleban, H., Chesin, M. S., Jeglic, E. L., & Calkins Mercado, C. (2012). An Exploration of crossover sexual offending. *Sexual Abuse: A Journal of Research and Treatment*, 25, 427-443. doi: 10.1177/1079063212464397
- Kokish, R., Levenson, J. S., & Blasingame, G. D. (2005). Post-conviction sex offender polygraph examination: Client-reported perceptions of utility and accuracy. *Sexual Abuse: A Journal of Research and Treatment*, 17(2), 211-221.
- McGrath, R. J., Cumming, G. F., Hoke, S. E., & Bonn-Miller, M. O. (2007). Outcomes in a community sex offender treatment program: A comparison between polygraphed and matched non-polygraphed offenders. *Sexual Abuse: A Journal of Research and Treatment*, 19(4), 381-393.
- Nelson, H. E. & Willison, J. (1991) *National Adult Reading Test (NART): Test Manual* (2nd ed.). Windsor: NFER–Nelson.
- Sim, D. J., & Proeve, M. (2010). Crossover and stability of victim type in child molesters. *Legal and criminological psychology*, 15(2), 401-413.
- Wilcox, D. T. (2009). *The use of the polygraph in assessing, treating and supervising sex offenders: a practitioner's guide* (Vol. 40). Malden, MA: Wiley.