Sexual History Disclosure and Sex Offender Recidivism

James Edward Konopasek, Ph.D.

Colorado State University – Global Campus

Raymond Nelson, MA, NCC

Private Practice

Abstract

This research examines the extent to which non-deceptive sexual history polygraph test results are associated with treatment outcomes and sexual recidivism. Specifically, the project examined correlations among several independent variables (i.e., sexual history polygraph results, risk level/score, age at which a non-deceptive sexual history polygraph was achieved, achievement of a non-deceptive sexual history polygraph result within six months of treatment onset, sexual deviance, psychopathy, and denial) and the dependent variables of treatment completion status and sexual recidivism. A cohort of 170 convicted sexual offenders was evaluated for a period of five years following completion of treatment or discharge from supervision. Analysis revealed that the achievement of a non-deceptive sexual history polygraph result was moderately associated with completion of treatment ($r\phi = .328$, $p < .001$). Two variables, achievement of a non-deceptive sexual history polygraph result within six months of treatment onset ($r\phi = -.152$, $p = .047$), and age under 35 at the time of a non-deceptive sexual history polygraph ($r\phi = .167$, $p = .029$) were shown to be correlated with sexual recidivism. This research provides preliminary evidence that non-deceptive sexual history polygraph results are associated with favorable treatment and recidivism outcomes.

Keywords*: sex offender, rehabilitation, recidivism, Static-99R, polygraph, disclosure*

Sexual History Disclosure and Sex Offender Recidivism

Sexual history polygraph testing, is an adjunct component of approximately two thirds (67%) of the adult outpatient sex offender treatment programs in the U.S. (McGrath, Cumming, Burchard, Zeoli & Ellerby, 2010). Sexual history polygraph examinations are conducted in an effort to motivate full, accurate, and timely disclosure of sexually deviant behavior (Ahlmeyer, Heil, McKee & English, 2000; Association for the Treatment of Sexual Abusers, 2004; Emerick & Dutton, 1993; O'Connell, 1998). Polygraph testing is intended to encourage offenders to fully disclose their history of sexual offending behaviors. Treatment providers who make use of sexual history polygraph testing do so with the goal of the identification of paraphilic and crossover offense behaviors so they can formulate accurate and effective treatment planning to facilitate the cessation of continued offenses (Ahlmeyer, Heil, McKee & English, 2000; Bourke & Hernandez, 2009; O'Connell, 1998; Wilcox & Sosnowski, 2005). For more information on the use of polygraph testing in sex offender management see (English, 1998; English, Jones, Pasini-Hill, Patrick & Cooley-Towell, 2000; Grubin, 2008; Hindman & Peters, 2001; Levenson, 2009). Skeptics of polygraph testing have pointed to unanswered questions regarding the contribution of polygraph testing to observable and measurable outcomes (Ben-Shakhar, 2008; National Research Council, 2003; Rosky, 2013). Despite the existence of controversy, polygraph testing has become a recognizable component of sex offender supervision and treatment programs.

Autor Note
Correspondence Address: PO Box 178, Felton, PA 17322
Email: james.konopasek@csuglobal.edu

The Importance of Timely, Honest, Disclosure

Farber (2003) and Farber and Hall (2003) discussed the importance of disclosure in psychotherapy and how this process includes inherent challenges. Obstacles to timely, honest, disclosure of sexual problems include feelings of shame, guilt and fear among clients--which may contribute to deliberate secret-keeping, things left unsaid in therapy sessions, and what is termed *the untold story* relating to clinically relevant history. With general psychotherapy patients, the following have been described as the most prevalent items not disclosed: sexual and body-oriented experiences, sexual feelings and fantasies toward the therapist, interest in pornography, bathroom habits, experiences and feelings toward masturbation, loss of virginity and fidelity (Farber & Hall, 2002). Nearly all of these topics will also apply to the treatment of sex offenders.

Recent research in sex offender treatment has shown that measurement of the quantity and seriousness of clinically relevant disclosures (CRDs), obtained through polygraph testing, may be useful to identify and adjust treatment targets (Gannon, Wood, Pina, Tyler, Baroux & Vasquez, 2014). Gannon, et al., quantified CRDs in four categories: thoughts, feelings and attitudes (e.g., abusive fantasies and desires); sexual behavior (e.g., use of pornography); historical information (e.g., admitting unknown offense behavior); and changes in circumstance/risk-behaviors (e.g., increased access to children). They reported that sex offenders who were subject to polygraph testing made CRDs in 572 sessions versus 320 CRDs for controls not subject to polygraph testing, but also found that the seriousness ratings of disclosures did not differ across the two groups. Gannon et al. cautiously described the evidence showing that user satisfaction benefits were expressed by treatment and supervision professionals who made use of maintenance/compliance testing with sex offenders in the United Kingdom.

Although less is known, at the present time, about the benefits of the sexual history polygraph, there is general and emerging evidence that timely self-disclosure of problem behaviors is viewed by professionals as a favorable indicator that may be a factor in effective risk assessment, treatment planning and supervision in the community. How disclosure is measured varies, and the relevance of disclosure to treatment and recidivism outcomes remains elusive. This research aims to fill some of this gap in knowledge.

Accuracy and Validity of Sexual History Polygraph Testing

Polygraph examinations have been used to measure the veracity of sex offender disclosure for over 30 years (Abrams, 1991), beginning in the early 1980s. The accuracy of such testing has been questioned. Despite continued controversy, there is a substantial and growing literature supporting the polygraph as capable of discriminating deception and truth-telling at rates significantly greater than chance; and publishing the validity and reliability of various polygraph testing techniques, with both favorable and unfavorable findings (Furedy, 1996; Honts, 1996; Honts & Alloway, 2007; Iacano, 2008; Iacano & Lykken, 1997; Krapohl, 2006; National Research Council, 2003; Offe & Offe, 2007; Nelson, Handler, Krapohl, Gougler, Shaw & Bierman, 2011). Research and publication has also addressed threats to polygraph accuracy (Honts, Hodes & Raskin, 1985; Honts, Raskin & Kircher, 1994; National Research Council, 2003; Patrick & Iacano, 1989).

Most relevant to this study is research on the accuracy of two types of Comparison Question Technique (CQT) exams (i.e., the Air Force Modified General Question Technique – AFMGQT, and the Directed Lie Screening Test - DLST). The AFMGQT and DLST are considered by polygraph examiners to be equally well suited for multiple issue screening polygraphs in the post-conviction and other settings. Both techniques involve the same instrumentation and sensors. Differences between the two formats primarily involve the procedural rules for recording of several presentations of the test stimulus questions.

The scientific basis of the CQT is that difference in the pattern of response to relevant and comparison test stimuli can be observed as a function of deception or truth-telling in response to the relevant stimuli. Used in the context of a sexual history polygraph, the premise of the CQT is that an examinee who withholds information about his or her sexual history will produce physiological reactions that are loaded onto sexual history questions, whereas an examinee who is truthful will produce responses that are loaded on comparison stimuli. Senter, Weatherman, Krapohl, and Horvath (2010) referred to this phenomenon as *differential salience*. Polygraph results can be analyzed for

their statistical significance, and can also be described categorically. Polygraph examiners have adopted the categorical terms *Significant Reaction* and *No Significant Reaction*, though some results are described using the more traditional categorical terms *Deception Indicated*, or *No Deception Indicated* that remain in more common use in diagnostic polygraph contexts. These categorical labels are the contextual analog for the more abstracted terms Positive and Negative as used in other scientific testing context.

During recent years, there has been an increase in published polygraph research on the validity of the wide variety of polygraph testing techniques (Handler, Nelson & Blalock, 2008; Krapohl, 2006; Nelson, et al., 2011). Nelson, et al., (2011) summarized the results of 14 studies involving 1,008 cases and 31 different scores, and described the accuracy of polygraph techniques scored with an assumption of independent criterion variance, such as those used in post-conviction sex offender testing, as proving a mean unweighted accuracy rate of .850, with a 95% confidence range from .773 to .926.

Polygraph testing, applied to the sexual history disclosure polygraph, will address whether an offender has truthfully disclosed the details of his or her history of sexual offense behaviors. Because there is no known allegation or incident that is the target of the exam or investigation, that exams are *screening tests,* also referred to as exploratory exams, and investigative techniques (Handler, Nelson & Blalock, 2008), and are not intended to become the sole or central basis for decision and action in the same way manner as a diagnostic testing context.

Relevant questions for sexual history screening polygraphs can address several types of sex offending behavior, including: sexual offenses against underage children since becoming an adult, sexual contact with relatives and family members, forced sexual contact/violent sexual offenses, and sexual contact with persons who were asleep or unconscious. Relevant questions can also address sexual behaviors that can signal problems involving sexual compulsivity or sexual preoccupation, such as voyeurism, exhibitionism, public masturbation, stalking behaviors, theft or use of underwear/ undergarments or personal property for masturbation or sexual arousal, child pornography, and other sexual behaviors that may indicate problems with sexual deviancy.

Sexual History Polygraph Testing in the Sex Offender Management Context

Several studies describe the increase in disclosure of information (Abrams, 1991; Ahlmeyer, et al., 2000; English et al., 2000; Grubin, Madsen, Parsons, Sosnowski & Warberg, 2004; Gannon, et al., 2014; Heil et al., 2003; Kokish, Levenson & Blasingame, 2005; O'Connell, 1998; Wilcox, Sosnowski & Middleton, 1999) that results from polygraph testing, and that may contribute to improved risk assessment, treatment planning, and case management. Fewer studies have addressed the relationship between polygraph testing and *recidivism.* McGrath, Cumming, Hoke and Bonn-Miller (2007) and Cook (2011) are the only studies we located that address this relationship.

McGrath, et al. (2007), using a comparative matched-pairs design, studied recidivism incidence among treated offenders who were subject to maintenance polygraph testing regarding compliance with the supervision and treatment program. One hundred four (104) polygraph cases were matched (relative to completion status, risk level and offense severity) with 104 treated sex offenders who did not undergo polygraph testing. Although no relationship to sexual recidivism was found, the polygraph group showed lower *violent recidivism* rates than the non-polygraph group, 2.9% versus 11.5%. Cook (2011) reported results using logistic regression and a modified version of the Static-99 risk assessment instrument that included additional variables gleaned from sexual history polygraph examination (SHPE) reports. Those results showed that data extracted from SHPE reports on 93 convicted sex offenders, including early onset of sex offending prior to age 13, more than 2 admitted paraphilias, and passing/failing the SHPE did not account for any statistically significant change in the odds of violent, including sexual, recidivism. The present study is similar to McGrath, et al. (2007) and Cook (2011) in that it is aimed at increasing the body of knowledge on polygraph-assisted interventions related to treatment outcome and sex offense recidivism.

Purpose and Method

The purpose of this study is to explore correlations among variables related to test results from sexual history polygraph testing, treatment outcome, and sexual recidivism among convicted sex offenders. This study also examines relationships between study

variables and several other literature-derived variables that have been shown to be correlated with sexual recidivism. Those variables include: age, sex offender type, Static-99R risk score/level, denial, sexual deviance, and psychopathy. Relationships among the study variables were analyzed using bivariate analyses utilizing the Phi Coefficient for dichotomous variables and Point Biserial Correlation.

Assumptions

A key assumption in this project is that the CQT polygraph screening examinations conducted on individuals in this sample are similar enough in design and administration, and criterion accuracy rates are similar to those described by Nelson et al. (2011), specifically the AFMGQT. Polygraph examination reports utilized in this study indicated that CQTs were administered in all cases and that relevant sexual history questions were constructed around the target issues described previously in this report. However, the exact nature of comparison questions, scoring rules, and decision cut-off scores are unknown.

Procedures

Data were extracted from hard-copy files stored in program archives and from the computerized database (Microsoft Access) of an outpatient treatment program. Consultation during the design phase of this project (O'Connell, 2011) resulted in the use of independent third-party research assistants to ensure that the principal author remained blind as to the identity of recidivist identity in order to alleviate the potential for bias or conflict of interest. A research assistant constructed three research data sets: 1) a small 8-item identified data set for the purposes of requesting and capturing criminal history recidivism data from criminal history gatekeeper agencies, 2) a 64-item *identified* data set containing all variable data, and 3) a 52-item *unidentified* data set. Only the *un*identified data set was shared with this researcher. The unidentified data set was exported to a SPSS database file for analysis.

Data was captured for the dependent variable, recidivism, by a research assistant who conducted public record criminal history searches in accordance with the gatekeeper agency's confidentiality, terms of use, storage, retention and destruction guidelines (LexisNexis Accurint, 2011; Oregon Judicial Department--Justice Information Network--OJIN, 2009; Washington State Patrol--WATCH, 2011; Washington State Institute for Public Policy, 2009).

Test results were extracted from archived polygraph examination reports and pretest questionnaires, along with information on whether a non-deceptive SHPE result was achieved within six months of treatment onset. These data were entered into the larger, 64-item, database. Criminal history recidivism data was then matched for each case by the research assistant. Archived paper records included psychosexual evaluations, presentence reports, polygraph examination reports and treatment progress reports. Static-99R risk computation forms were completed by the principal author, who received training from the Justice Institute of British Columbia (JIBC, 2011) on the scoring of the Static-99R in accordance with published coding rules (Harris, Phenix, Hanson & Thornton, 2003; Helmus, Babchishin, Hanson, & Thornton, 2009) during 2011. These data were entered into the identified database, after which the research assistant entered matching recidivism data into the dataset. Due to time, personnel and training budget constraints of this self-funded project, third party Static-99R scorers were not used, and inter-rater reliability statistics were not obtained.

Sample

The study involved a convenience sample of adult male sex offenders (N = 170) mandated by the courts and parole/probation agencies to be evaluated and treated at four outpatient sex offender treatment programs between 1994 and year-end 2004. The sample is a small fraction of sex offenders supervised, treated and polygraph tested in the Oregon and Washington correctional treatment systems over the same time period, and so these results may not be generalizable. The sample cases were delimited by the availability of data for every adult male that was evaluated, treated, and polygraph tested at program offices during those years, as a result of the principal author´s role as the former outpatient program director.

Descriptive Statistics

The sample cases consisted of 170 men, the majority of whom were Caucasian (97.6%). The mean age of offenders, at the time

of polygraph testing was 36.6 years, the median age is 34.5 years, standard deviation of 14.56 years and range of 18 to 80 years. Table 1 shows the types of sexual offenses.

Table 1 Frequency of types of sexual offenses

Sex Offender Type				
Child Molester	Rapist	Non-contact	Other	Total
n = 110	*n* = 33	*n* = 20	*n* = 7	*N* = 170

The sample cases consisted of low risk offenders (*n* = 51, 30.0%); moderate-low risk offenders (*n* = 72, 42.4%); moderate-high risk offenders (*n* = 37, 21.8%) and high risk offenders (*n* = 10, 5.9%) as classified by the Static-99R (Hanson and Thornton, 2000; Hanson, 2005). Table 2 shows the frequencies, percentages and Static-99R risk levels.

Table 2 Frequency distribution of Static-99R risk scores and risk levels

Static-99R Score		Frequency	Percent	Risk Level
-3		*n* = 3	1.8	Low
-2		*n* = 3	1.8	Low
-1		*n* = 7	4.1	Low
0		*n* = 14	8.2	Low
1		*n* = 24	14.1	Low
2		*n* = 36	21.2	Moderate-Low
3		*n* = 35	20.6	Moderate-Low
4		*n* = 26	15.3	Moderate-High
5		*n* = 12	7.1	Moderate-High
6		*n* = 6	3.5	High
7		*n* = 2	1.2	High
8		*n* = 1	0.6	High
9		*n* = 1	0.6	High
Total	100.0%			

The mean Static-99R score was 2.41, the median 2.0, standard deviation 2.057, with a range of -3 to +9. Not surprisingly, the majority of offenders were classified in the moderate risk categories. Relatively few of the sample cases were in the low and high risk categories.

Other independent control variables were also analyzed, including the presence of substantial denial, sexual deviance and psychopathy. Denial of the instant offense details and/or problematic sexual behavior at intake was observed and documented by the evaluator or therapist in 57.1% (*n* = 97)

of the cases. Sexual deviancy, as indicated by self-reported paraphilias during presentence investigation or psycho-sexual evaluation reports, or through penile plethysmograph testing, was a factor for 48.8% (n = 83) of the individual offenders. Antisocial personality disorder or psychopathy was diagnosed by a psychologist or other licensed mental health professional and described in the presentence or psycho-sexual evaluation reports for 12.9% (n = 22) of the offenders.

Sample variables related to the this study were also analyzed, including treatment outcome, disclosure of sexual offense history, and whether a non-deceptive sexual history polygraph was completed within six months of treatment onset. Non-deceptive sexual history polygraph results were achieved by 67.1%, (*n* = 114) of the 170 sample cases. For 47.1% (*n* = 80) cases the non-deceptive sexual history polygraph was completed within six months of treatment onset. Case records indicated that 32.9% (*n* = 56) did not achieve a non-deceptive sexual history polygraph examination result. Offenders who completed treatment comprised 41.8% (*n* = 71) of the sample. A small portion of the sample 2.9% (*n* = 5) received no treatment due to the recommendations contained in the presentence and psychosexual evaluation reports. Some of the offenders did not complete treatment, including those who were terminated for non-compliance 17.1% (*n* = 29), dropouts 5.3% (*n* = 9) and discharges due to jurisdiction or funding changes 26.5% (*n* = 45). Some cases 5.3% (*n* = 9) were transferred to other treatment programs, and 1.2% (*n* = 2) deceased. Some cases were counted in multiple categories.

Findings

Table 3 shows the recidivism offenses committed by 39 recidivists, including failure to register/report, sexual abuse, child molestation, and forcible rape. Eleven (6.5% of the total sample) recidivists perpetrated new sex crimes within 5 years of discharge from treatment program discharge. Twenty eight (22.9% of the total sample) recidivists failed to register or report, a status sexual offenses. Within the group of status reoffenders, 50% (n = 14) also committed new non-sexual crimes, including non-sexual assault (n = 6), felony possession of controlled substance (n = 3), and theft of varying degrees (n = 5).

Table 3 Frequency of recidivism during a 5-year follow-up period

Sexual Recidivism Offense	Frequency
Child Molestation offense	*n* = 1
Dealing Child Pornography	*n* = 1
Encouraging Child Sexual Abuse	*n* = 1
Failure to Register/Report (FTR)	*n* = 28
Incest offense - Sexual Exploitation of Minor	*n* = 1
Rape	*n* = 2
Child Sexual Abuse/Assault	*n* = 5

Total 5-Year Recidivists (including FTR)	*n* = 39 (22.9% of *N* = 170)
5-Year Sexual Recidivists (excluding FTR)	*n* = 11 (6.5% of *N* = 170)

Results of bivariate analyses are shown in Table 5. That analysis showed statistically significant relationships between sexual recidivism and the variables of non-deceptive sexual history polygraph result (r_ϕ = .167, *p* = .029) and age under 35 at time of non-deceptive sexual history polygraph result (r_ϕ = -.152, *p* = .047). That analysis also showed a statistically significant relationship between successful completion of sex offense specific treatment and a non-deceptive sexual history polygraph result at any time during treatment (r_ϕ = .328, *p* < .001). There was also a statistically significant negative correlation between sexual deviancy

and treatment completion (r_{ϕ} = -.168, p = .028). Other study variables, including denial, were not statistically significantly correlated with treatment completion or recidivism, as indicated in Table 4. Only the Static-99R variable was approaching a significant level (r_{ϕ} = .134, p = .082) relative to sexual recidivism.

Table 4 Correlation of study variables to treatment completion and sexual recidivism

Variable	Treatment Completion Value / Sig. Level	Sexual Recidivism Value / Sig level
Age under 35 at non-deceptive SHPE	-.095 / .217	.167* / .029
Denial	-.057 / .461	.035 / .649
Non-deceptive SHPE within 6 months	.077 / .317	-.152* / .047
Non-deceptive SHPE	.328* / .000	-.070 / .361
Psychopathy	.041 / .592	-.101 / .186
Sexual Recidivism	.004 / .959	----------
Sexual Deviance	-.168* / .028	.126 / .101
Static 99R Risk Score	-.129 / .095	.134 / .082
Treatment Completion	----------	.004 / .959
Total Cases N = 170		

*Significant at $p < .05$

Non-deceptive SHPE results were correlated with successful completion of treatment (r_{ϕ} = .382, p < .001), but the correlation with sexual recidivism was not statistically significant. There was a statistically significant negative relationship between a non-deceptive SHPE within six months of treatment onset and sexual recidivism (r_{ϕ} = -.152, p = .047) at the .05 level. Interestingly, age under 35 at time of non-deceptive SHPE was also significant for sexual recidivism at the .05 level (r_{ϕ} = .167, p = .029). Sexual deviancy was negatively correlated with completion of treatment (r_{ϕ} = -.168, p = .028). No adjustment or correction was made to theses reported p-values.

Table 5 shows the case frequencies for the study variables, and indicates that nine of 11 sexual recidivist cases (81.8%) did not complete a non-deceptive sexual history polygraph within six months of treatment onset, and this relationship was statistically significant (r_{ϕ} = -.152, p = .047). Results also show that 81% of sexual recidivists were under age 35 at the of the SHPE, and that the relationship between age under 35 at the time of a non-deceptive sexual history polygraph examination and sexual recidivism was statistically significant (r_{ϕ} = .167, p = .029). Cases from the two moderate risk groups, as determined by Static-99R risk scores, were most represented in the recidivist category (63.6%), though the relationship risk and recidivism was not statistically significant (r_{pb} = .134, p = .082) for this sample.

Table 5 Frequency of sexual recidivism by study variables

		Non-deceptive SHPE within 6 months of treatment onset		
		No	Yes	Total
Sexual Recidivism	No	81	78	159
	Yes	**9**	**2**	**11**
		Age at time of non-deceptive SHPE		
		<35	>35	
Sexual Recidivism	No	83	76	159
	Yes	**9**	**2**	**11**

		Static 99-R Risk Level				
		Low	Med Low	Med High	High	Total
Sexual Recidivism	No	49	68	34	8	159
	Yes	**2**	**4**	**3**	**2**	**11**

Table 6 shows the crosstab frequencies for each independent variable and whether a non-deceptive SHPE was completed within six months of treatment onset. Forty-eight (60%) of the 80 offenders who completed a non-deceptive SHPE within six months of treatment onset were under age 35, which is statistically significant (r_{ϕ} = 0.189, p = .014). Denial was a factor for 69 of 90 cases for which a non-deceptive SHPE was not completed within six months of treatment onset, while denial was a factor for only 35 of 80 (35%) of the offenders who completed a non-deceptive SHPE within six months of treatment onset (r_{ϕ} = - .420, p = .000). No statistical correction was used for these reported p-values. Correlations were not statistically significant for the relationship between non-deceptive SHPE results and five other study variables, including recommendations for continued treatment at the time of discharge, sexual deviancy, anti-social personality or psychopathy, and Static-99R risk level.

Table 6 Distribution for non-deceptive sexual history polygraph within six months of treatment onset

	Age at time of non-deceptive SHPE				
			<35	>35	Total
Non-deceptive SHPE within 6 months of treatment onset					
	No		37	53	90
	Yes		**48***	32	80
	Treatment Status at Discharge – More Tx Needed				
			Yes	No	Total
Non-deceptive SHPE within 6 months of treatment onset					
	No		50	40	90
	Yes		41	39	80
	Presence of Sexual Deviance				
			Yes	No	Total
Non-deceptive SHPE within 6 months of treatment onset					
	No		42	48	90
	Yes		41	39	80
	Presence of Psychopathy – APD				
			Yes	No	Total
Non-deceptive SHPE within 6 months of treatment onset					
	No		14	76	90
	Yes		8	72	80
	Presence of Denial at Intake				
			Yes	No	Total
Non-deceptive SHPE within 6 months of treatment onset					
	No		69	21	90
	Yes		**28***	52	80
	Static 99-R Risk Level				
		Low	M-Low	M-High	High	Total
Non-deceptive SHPE within 6 months of treatment onset						
	No	31	32	22	5	90
	Yes	20	40	15	5	80

*Significant at $p < .05$

Discussion

This project was a correlation study, involving N = 170 adult males who were convicted of sexual offenses, designed to investigate the relationships between treatment and recidivism outcomes and other variables, including the completion of a non-deceptive sexual history polygraph examination, under age 35 at time of non-deceptive sexual history polygraph examination, anti-social personality disorder or psychopathy, sexual deviancy, and denial of offense details at the time of treatment intake. Bivariate analysis suggests that some study variables are worthy of further interest and continued investigation of their value towards the prediction of sexual recidivism and treatment completion. Two variables were significantly correlated with treatment completion, non-deceptive sexual history polygraph examination results (r_{ϕ} = .328, p < .001) and sexual deviancy (r_{ϕ} = -.168, p = .028), though the relationships of these and the sexual recidivism outcome were not statistically significant. Other sexual history polygraph variables were significantly correlated with sexual recidivism: completion of non-deceptive polygraph examination results within six months of treatment onset (r_{ϕ} = -.152, p = .049) and age under 35 at the time of a non-deceptive sexual history polygraph exam (r_{ϕ} = .167, p = .029). Although non-deceptive sexual history polygraph result was associated with lower sexual recidivism, non-deceptive sexual history polygraph results by offenders under age 35 were associated with higher sexual recidivism.

In a very preliminary way, these results indicate a statistical relationship between sexual history polygraph examination results and sexual recidivism outcomes. These results suggest the possibility of an interaction between age and motivation for disclosure and the outcome of sexual recidivism might be an interesting area for further study. However, data were not analyzed for younger age adults who completed a non-deceptive sexual history polygraph within six months of treatment onset. Although the non-random sample is somewhat small and the stability or generalizability of these results is presently unknown, this bivariate analysis suggests the possibility that treatment outcomes and 5-year sexual recidivism rates may be partially informed by timeliness of non-deceptive sexual history polygraph test results. Further study is needed to better understand the value or meaning of non-deceptive sexual history polygraph results when evaluating motivation and treatment progress.

These results must be interpreted cautiously because sexual history polygraph is a complex process with a number of dimensions. Non-deceptive sexual history polygraph results indicate that all an offender produced statistically significant truthful numerical scores for all investigation target questions. Test results are neither deterministic nor a direct physical measurement of the amorphous social construct of deception. Instead, test results are a probabilistic computation of the margin of error or level of confidence that can reasonably assigned to a categorical conclusion of deception or truth-telling when comparing the numerical scores of validated physiological discriminators with statistical reference distributions for deceptive and truthful persons.

Target questions for sexual history polygraph exams are selected for their actuarial, operational, or clinical relevance to risk assessment, risk management and treatment goals. Target issues for sexual history polygraph testing are presently unstandardized, though the basic requirements for polygraph questions are that relevant target questions describe a behavioral issue that can be answered either *yes* or *no,* and for which the examinee will know whether the answer is truthful or deceptive. Relevant questions will often include this following: sexual offenses against underage children since becoming an adult, sexual contact with relatives and family members, forced sexual contact/violent sexual offenses, and sexual contact with persons who were asleep or unconscious. Other target questions can be used to investigate sexual behaviors that can signal problems involving sexual compulsivity or sexual preoccupation, including: voyeurism, exhibitionism, public masturbation, stalking behaviors, theft or use of underwear/undergarments or personal property for masturbation or sexual arousal, child pornography, and any other sexual behaviors that may indicate problems with sexual deviancy.

Achievement of a non-deceptive sexual history polygraph result necessitates that the offender first admit the allegation of the instant offense, as there are potential error hazards associated with attempting to screen for unknown sexual assault behaviors while denying a alleged sexual offense. Without strong evidence that denial of the instant offense is factually truthful, any attempt to

screen for unreported sexual offenses might amount to a form of collusion with the offender. Preparation for sexual history polygraph testing will involve reviewing conceptual vocabulary terms that describe sexual abuse behaviors, along with operational definitions that define and describe and those behaviors. Preparation will also involve a personal review of one's history of sexual behavior with the goal of identifying behaviors that were abusive or unlawful and those that were within normal limits. Preparation of and review for sexual history testing is a clinical process for which the details will be inform and be informed by the larger clinical treatment picture, including corresponding mental health and personal trauma issues, in addition to the nature and extent of the individual's history of sexual behaviors.

Effective preparation for sexual history polygraph testing may be partially a function of the quality of professional and therapeutic rapport between the offender and the treatment and supervision professionals. This preparation may also be a function of the treatment cohort group, family system, and social support network. Ultimately, effective preparation will contribute to structured and organized review of the sexual history during the sexual history polygraph pretest interview.

An important aspect of the sexual history polygraph is that offenders are not compelled to disclose identifying information regarding their sexual assaults. Instead they are permitted to withhold information about jurisdiction, exact name or the exact nature of the relationship. This is viewed as unfortunate by some, but is neither intended to devalue the impact of sexual on the personhood of sexual abuse victims, nor to endorse the rights of the offender as more important, but is necessary to facilitate the disclosure of more complete information without compelling such disclosure that it results in legal vulnerability related individual rights.

Sexual history polygraph testing is a multidimensional process that may be affected by a number of factors. Sexual history polygraph testing, as a component of sex offender treatment and management, especially in cognitive behavioral programs that encourage the reduction of cognitive distortions and the increase of personal responsibility, may be an indicator of motivation for learning and change. Polygraph testing may be used by some programs as tool for assessing readiness for activities and privileges such as social/ public events, safety and activity plans, and family reunification. Finally, the achievement of non-deceptive sexual history polygraph results may also be a function of program expectations, for which both overt and subtle message can either reinforce or undermine attitudes and perceptions about the meaning and value of the disclosure process.

In this small study, age under 35 at the time of a non-deceptive sexual history polygraph was found to be correlated with the outcome of sexual recidivism at a minimal statistically significant level. As indicated in Table 6, 60% of the offenders who completed a non-deceptive sexual history polygraph within six months of treatment onset were under age 35, 35% of those were in denial at intake, and 75% were in the two lowest Static-99R risk categories. These results suggest the potential that some difference may exist for the under age 35 group, which also appears to be over-represented in this sample. Unfortunately, for this study, we did not capture information about the details of the offenders' reported histories of sexual offenses.

Limitations

The most significant limitations to this study relate to the type of sample, sample size and project design. This study was conducted on a convenience sample of 170 adult male offenders referred to outpatient treatment programs in the Pacific Northwest region of the United States between 1994 and 2004--and who were administered at least one sexual history polygraph examination. This study was designed to be an investigatory, correlational survey aimed at evaluating whether the variable of non-deceptive sexual history polygraph results are associated with sexual recidivism. This research was not an experimental study and so it did not include a non-polygraphed control group. Causal inferences are not possible based on these results, and the generalizability of these findings is presently unknown.

Interaction effects were not evaluated in this correlation study, as might have been accomplished with data coded in a manner that would support a multivariate analysis. Multivariate analysis would have also relieved concerns about the effects of multiplicity in a survey study of significant relationships between numbers of variables. Another, previously mentioned, limitation to the design of this project has to do with the absence of

data on the nature and scope of the reported sexual offense behaviors, both prior to and during the polygraph testing process.

Recommendations

Future studies should include this type of data into the design and analysis, perhaps using level of detail similar to that outlined in Pratley and Goodman-Delahunty (2011), which includes incidents of abuse, duration of offending (in days), frequency of offending, number of locations, range of abusive acts committed, and intrusiveness of abuse. Caution should always be exercised in the area of professional expectations for disclosure of information, always recognizing the impossibility of the notion of *full disclosure* or the expectation that professionals can somehow know *everything* or *every detail* of an offender's history of sexually abusive behavior. Instead, it remains within the realm of realistic possibility that non-deceptive sexual history polygraph results signify only the probability that an offender has reported the major behavioral detail as described by the test stimuli, and that there may always remain additional under-reported detail regarding behavioral and interactional aspects of sexual abuse behaviors.

For future research, the evaluation of a larger and more randomly selected sample will be important. Comparison of recidivism outcomes for a polygraph cohort and non-polygraph cohort may also be informative of the value of polygraph testing. Future studies should attempt to capture more fine-grained data and information about the length of time necessary to achieve a non-deceptive sexual history polygraph test result, and the contribution of CRDs as a recidivism predication variable in regression or other form of prediction model. Other research questions might include qualitative aspects of how supervision and treatment professionals know, or measure, the extent to which their client is being honest in CRDs, and what additional information can be accessed by supervision and treatment professionals to more effectively predict treatment and sexual recidivism outcomes.

Replication of this study is recommended, including the comparison of these results with polygraph cohorts and non-polygraph cohorts for whom reported sexual history is verified in some other manner. Future studies should attempt to further investigate the possibility that causal relationships may exist between motivation for disclosure and outcomes for both treatment and sexual recidivism. It remains possible that the observed results are an anomaly resulting from programatic or sampling factors. At present, the potential value for sexual history polygraph testing appears worthy of a recommendation for continued interest and continued study.

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