



Treatment Effectiveness of the Louisiana Sexual Behavior Problem Treatment Program

Frances LL Dailey¹, Lee A Underwood^{1*}, Yolanda Crump², Cyrus Williams¹, Mark Newmeyer¹, Donna M Washburn³, Aryssa Washington¹ and LaKeitha Poole⁴

¹Regent University School of Psychology & Counseling, Virginia, USA

²Louisiana Office of Juvenile Justice, Baton Rouge, USA

³Evangel University, Springfield MO, USA

⁴Louisiana State University, Baton Rouge, Louisiana, USA

*Corresponding author: Lee A Underwood, Regent University School of Psychology & Counseling, 1000 University Drive, CRB 215, Virginia Beach, Virginia 23464, USA, Tel: 757-630-4442, E-mail: leeunde@regent.edu

Abstract

The purpose of this study is to assess the treatment effectiveness of the Louisiana Sexual Behavior Problem Treatment Program (SBPTP) on reducing risk for recidivism in juveniles with sexual behavior problems. Using the JSOAP-II, pre and post test scores for juveniles with sexual behavior problems in secure and non-secure care settings, secondary analyses on archival data was collected from participants who completed the SBPTP between 2008 and 2014. SBPTP subjects were 100 adjudicated male juveniles with sexual behavior problems (ages 12-20) and enrolled in the treatment program. Overall, 73% of subjects in both secure and non-secure settings significantly decreased their overall sexual recidivism risk scores and 83% significantly decreased scale 3 (Intervention) scores showing significant improvement. The analyses reveal decreases in sexual risk recidivism in secure settings in JSOAP-II total scores. Furthermore, the analyses showed decreases in the scale 3 (Intervention Scale) showing treatment benefits of the SBPTP across time. The implication for this research is that the SBPTP shows promise related to lowering JSOAP-II scores over time, which may lead to sexual recidivism risks across settings.

Keywords

Juveniles with sexual behavior problems, Juvenile Sex Offender Assessment Protocol Two (JSOAP-II), Risk recidivism, Treatment, Secure care

Treatment Effectiveness of the Louisiana Sexual Behavior Problem Treatment Program

Sexual assaults are often one of the most traumatic experiences endured by those victimized, and the impact can be life-long for victims, their loved ones, and the community [1]. Research on sexual perpetrators is often segregated between adult assailants and juvenile offenders. The Department of Justice finds that juvenile offenders account for "25.8 % of all sexual offenders and more than a third (35.6%) of sex offenders against juvenile victims" (2009, p. 3). Deviant sexual behavior during adolescence has been found to be predictive of criminalized sexual and non-sexual offenses into adulthood [2].

Furthermore, Geradin and Thibau [3] identified trends indicating the number of juveniles with sexual behavior problems is rising.

In the last 30 years, there has been an emergence in programs designed for juveniles with sexual behavior problems, including at least 600 plus juveniles being admitted to secure and non-secure facilities [4]. An increased focus has been on securing financial resources for effective treatment of juvenile sex offenders, which reduces recidivism upon return to the community [5]. It is important that all spectrum of the professional and community system work towards best practice for treatment, which increases the possibility of offender success and effective return to society. Refer to [table 1](#) for evidence Best Practices Approaches for juveniles with sexual behavior problems.

Stakeholders such as juvenile justice jurisdictions, treatment programs, service providers, family members and other community members' respective roles and responsibilities are essential to the reintegration of offenders [6]. Treatment for juveniles with sexual behavior problems is considered to be tertiary, in that interventions are targeted at social problems, and focus on preventing future harm to others. Further emphasizing the importance of the handling of juveniles with sexual behavior problems, the Association for the Treatment of Sexual Abusers (ATSA) [7] refers to the community as the primary client of treatment. Public safety and victim protection are fundamental intervention goals [7,8]. Refer to [table 2](#) for a listing ATSA's task force sex offender treatment goals.

With this increased awareness, programmatic attention has been placed on preventing sexual assaults through comprehensive sex offender assessment, treatment, programming, and related attention to recidivism [2]. Ongoing literature supports the prioritization of programmatic planning and support of released juveniles which are worthy priorities [9]. Assessing and classifying the needs of juveniles with sexual behavior problems has been inconsistently applied by providers [10]. With the technological growth related to assessments' usefulness in predicting future sexual aggression, systems of care are increasingly aware of the various sexual risk tools used for juveniles with sexual behavior problems, and have begun

Citation: Dailey FLL, Underwood LA, Crump Y, Williams C, Newmeyer M, et al. (2016) Treatment Effectiveness of the Louisiana Sexual Behavior Problem Treatment Program. Int J Psychol Psychoanal 2:014

Received: February 19, 2016; **Accepted:** June 23, 2016; **Published:** June 25, 2016

Copyright: © 2016 Dailey FLL, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Table 1: Evidence-based treatment approaches for sexually maladaptive behaviors.

Treatment	Level of Care	Special Clinical Focus	Notable Outcomes
FIT	Community	Co-occurring Disorders	Decrease in Recidivism
MDT	Secure Facilities	“Treatment Resistant” Co-occurring Disorders	Reduces Aggression and Suicidal Ideation
DBT	Secure, Residential, Community	Personality Disorders	Reduces Suicidal Ideation
ART	Secure Facilities	Violent Offenders	Reduces Violent Recidivism
TEA	Residential and Community	Thinking Patterns	Increase in positive thinking patterns
TFAC	Secure, Residential, Community	Designed as a Group Intervention	Cognitive Restructuring
MET	Secure, Residential, Community	Utilizes Stages of Change model	Develop intrinsic motivation
MST	Community	Family/in-home Interventions	Reduces Recidivism and Out-of-home Placements
FFT	Community	Family/in-home Interventions	Strong Multicultural Component
MTFC	Community	Family/in-home Interventions	Reduces Recidivism
Milwaukee	Community	Connects to Resources	Reduces Psychosocial Impairment
IAP	Community	Transition from Secure Care to Community	Strong Multicultural Component
SBPTP	Secure, Residential, Community	Numerous Elements for an Integrated Approach	Numerous outcomes

Table 2: Sex offender treatment goals - national task force report supporting community safety.

1. Acceptance of responsibility for behavior without minimization or externalizing blame.
2. Identification of pattern or cycle of abusive behavior.
3. Interruption of cycle before abusive behavior occurs and control of behavior.
4. Resolution of victimization in the history of the abusive youth (i.e., sexual abuse, sexual trauma, physical abuse, emotional abuse, physical abuse, abandonment, rejection, loss, etc.).
5. Development of victim awareness/empathy to a point where potential victims are seen as people rather than objects.
6. Development of an internal sense of mastery and control.
7. Understanding the role of sexual arousal in sexually abusive behavior, reduction of deviant sexual arousal, definition of non-abusive sexual fantasy.
8. Development of positive sexual fantasy.
9. Understanding the consequences of offending behavior for the self, the victim, and their families in addition to developing victim empathy.
10. Identification (and remediation to the extent possible) of family issues or dysfunctions which support or trigger offending: attachment disorders and boundary problems in families.
11. Identification of cognitive distortions, irrational thinking or thinking errors which support or trigger offending.
12. Identification and expression of feelings.
13. Development of pro-social relationships with peers.
14. Development of realistic levels of trust in relating to adults.
15. Management of addictive/compulsive qualities contributing to reinforcement of deviancy.
16. Remediation of developmental delays/development of competent psychological health skills.
17. Resolutions of substance abuse and/or gang involvement.
18. Reconciliation of cross-cultural issues.
19. Management of concurrent psychiatric disorders.
20. Remediation of skill deficits which interfere with successful functioning.
21. Development of relapse prevention strategies.
22. Restitution/reparation to victims and community.

Note: Adapted from Underwood & Berenson, 2001 [8].

using these instruments to identify readiness to safely transition back into the community [11]. Judges and mental health professionals routinely request risk assessments during intake processes for juveniles. As secure care and non-secure care programs are working to successfully and safely transition and reintegrate juveniles with sexual behavior problems back into the community, their staff's use of risk assessments with appropriate levels of treatment dosage is critical. In spite of this, while there is some evidence that the level of sexual risk (low, moderate, high) is correlated with sexual recidivism, community readiness, and treatment completers, very few empirical studies exist [12] to determine this relationship. Please refer to table 3 for information on Treatment Modules and Treatment Issues.

Although there is now an array of treatment programs available to address the needs of juveniles with sexual behavior problems, programmatic efficacy results have been inconsistent [12]. Throughout the field of treatment for juveniles with sexual behavior problems, there is a heralded standard that treatment, above all, be evidenced-based and rely upon proven assessments [13,14] to guide all intervention practices. Treatment should follow the level of assessed risk the juvenile is to the community [15].

Assessments of juveniles with sexual behavior problems should be utilized at every point within the juvenile justice system to determine placement, treatment level, and overall service trajectory [16]. Right

hand, Prentky, Knight, Carpenter, Hecker, and Nagle [17] cautions that on-going reassessment of juveniles should be maintained as a requirement as the juvenile steps down from institutional, lock-down, secure settings and reintegrate into the community (non-secure) as a part of a comprehensive aftercare plan. Righthand et al. [17] identified that researchers have historically been interested in general juvenile delinquency and numerous efforts to develop scales that assess risk of anti-sociality and psychopathy. However, assessments specifically designed to assess sexual dynamics has been limited. McGrath, Cumming, Burchard, Zeoli, and Ellerby and Viljoen, Mordell, and Beneteau [18] identified three widely utilized assessments to assist in the identification of risk for a juvenile's sexual recidivism: the Estimate of Risk Adolescent Sex Offense Recidivism [14], the Juvenile Sexual Offense Recidivism Risk Assessment Tool – II [19], and the JSOAP-II [11]. Research concludes that these are valid measures at predicting juvenile recidivism [20].

Purpose of the Study

The purpose of this study is to assess the treatment effectiveness of the Louisiana Sexual Behavior Problem Treatment Program (SBPTP) on reducing risk for recidivism in juveniles with sexual behavior problems. Using the JSOAP-II, pre and post test scores for juveniles with sexual behavior problems in secure and non-secure care settings, secondary analyses on archival data was collected

Table 3: Juvenile sex offender treatment modules and treatment issues.

Treatment Module	Treatment Issue
1. Disclosure of the Committing Offense and Taking Responsibility for Actions	<ul style="list-style-type: none"> • Anticipation of the pattern and cycle of abuse • Understanding the consequences of sending to sell, victim, community
2. Cognitive Autobiography	<ul style="list-style-type: none"> • Identification and remediation of family issues and dysfunctions
3. History of Delinquency, Sexuality, Substance Abuse	<ul style="list-style-type: none"> • Resolution of Victimization History of the Offender • Understanding the Role of Sexual Arousal • Identification of Abuse Pattern • Identification of the Pattern and Cycle of Abuse
4. Offense Cycle	<ul style="list-style-type: none"> • Identification of Thinking Errors and Cognitive Distortions That Support the Trigger Offending Behaviors • Understanding the Role of Sexual Arousal • Management of the Addictive Qualities • Identification and Interruption of Cycle • Development of Internal Mastery and Control
5. Empathy and Restorative Justice	<ul style="list-style-type: none"> • Understand the Consequences of Sending to Self, Victim, and Community • Identification and Expression of Feeling • Development of Prosocial Relationship Skills • Development of Empathy
6. Relapse Prevention and Reintegration	<ul style="list-style-type: none"> • Management in Addictive Qualities • Identification and Interruption of Cycle • Development in Internal Mastery and Control • Development of Relapse Prevention Strategies

Note: National Task Force on Juvenile Sex Offending (NTFJSO, 1993) [33].

from participants who completed the SBPTP between 2008 and 2014. The clinical importance of predicting risk of committing additional sex offenses beyond their adjudication and subsequent treatment is imperative and a well-documented need within the field of mental health and juvenile sex offending. The need for additional empirical studies is replete throughout the literature [17,21,22]. Furthermore, there have been few widely accepted risk assessment tools for juveniles with sexual behavior problems [23]. In review of the JSOAP-II's psychometric properties, Hempel et al. [21] assert the JSOAP-II is among several other popularly used risk assessments (i.e., J-SORRAT-II, ERASOR, JRAS, SAVRY, and PCL:YV) that yield unequivocal positive results. This current work adds to the literature regarding a treatment program for juveniles with sexual behavior problems' effectiveness in reducing the sexual recidivism for its court mandated subjects.

Methodology

Research design

This study represents a quantitative quasi-experimental design of adjudicated male juveniles with sexual behavior problems assessing the treatment effectiveness of the Louisiana Sexual Behavior Problem Treatment Program (SBPTP) on reducing risk for recidivism in juveniles with sexual behavior problems. Using the JSOAP-II, pre and post test scores for juveniles with sexual behavior problems in secure and non-secure care settings, secondary analyses on archival data was collected from participants who completed the SBPTP between 2008 and 2014.

Research hypotheses

H1: There will be a significant reduction between JSOAP II total post-test scores and pre-test scores in secure care samples.

H2: There will be a significant reduction between post- test JSOAP II Scale 3 (intervention scale) scores and pre-test scores in secure care samples

H3: There will be a no significant difference between pre-test and post-test secure care Site A in secure care Site B JSOAP-II total scores.

H4: There will be no significant difference between pre-test and post-test care Site A and Site B JSOAP-II Scale 3 (Intervention scale) scores.

H5: Secure-care pre-test scores Scale 3 (Intervention scale) will be significantly higher than post-test scores for Scale 3 (Intervention) on the JSOAP-II.

H6: Secure-care pre--test scores for Scale 3 (Intervention scale) will be significantly higher than post-test scores for Scale 3 (Intervention scale) scores.

Definition of terms

Definitions for the following terms were adopted from the literature reviewed in order to facilitate a common foundation for the constructs described in this research study:

Adjudicated juvenile

An adolescent charged and tried for a sex offense and found guilty of that offense.

Sex offense

The National Crime Victimization Survey [24] "Forced sexual intercourse (vaginal, anal, or oral penetration) involving psychological coercion and physical force, as well as attacks or attempted attacks generally involving unwanted sexual contact between victim and offender" [25].

Recidivism

A person's relapse into criminal behavior, often after the person receives sanctions or undergoes intervention for a previous crime. Recidivism is measured by all criminal acts that resulted in re-arrest, reconviction or return to prison with or without a new sentence during a three-year period following the prisoner's release.

Population and Sampling

Subjects consisted of male juveniles who were adjudicated and sentenced by a court magistrate to a secure care program or a non-secure program after committing crimes that were sexually aggressive in nature. Subjects ranged in age from 12-20 years of age. Subjects' ethnicities varied, as did their number of previous incarcerations, number of victims, and their experience in various systems of care prior to their enrollment in the Sexual Behavior Problem Treatment Program (SBPTP) treatment program. These juveniles were adjudicated from 2008 through 2014 and completed the state's SBPTP

intervention. Subjects resided in two locations: a secure care facility and a non-secure residential or community/outpatient-based clinic. The juveniles participated in an intensive treatment for juveniles with sexual behavior problems that are structured for individual, group and family counseling intervention methods.

Confidentiality was assured by the researcher by implementing a Human Subjects Review Committee (IRB). The principal investigator developed a coding system and assigned a code to each participant's folder on a printed label. Only the assigned codes and not the subjects' names were recorded on data collection documents. All data collection documents were electronic and encrypted with passwords and stored on a primary jump drive and back-up drive, both were password protected.

Review of the Sexual Behavior Problem Treatment Program

The program for juveniles with sexual behavior problems is a multi-faceted treatment protocol that takes the juvenile through an initial phase of screening and assessment, through cognitive behavioral health treatment interventions, leading to successful discharge from the program. This approach relies upon a standardized treatment curriculum facilitated through both individual and structured sex offender specific group activities. The program is a four phased approach. Screening and assessment protocols ensure that participants receive a comprehensive behavioral health and sex offense specific needs assessment that is both timely and culturally sensitive. Admission, exclusion, and discharge criteria are part of the program and assist in ensuring treatment fidelity. The rationale for the criterion of adjudication is based on legal documentation of the juvenile having committed a sexual offense that is serious enough in nature to warrant placement in secure care [26].

Sex offense specific groups are part of the treatment curriculum and consist of curriculum lessons spread over the duration of the program to provide a treatment environment in which participants learn to recognize aberrant or distorted views that lead to sexual misconduct. Key components of treatment include (a) introductions to critical concepts, such as impulse control, (b) learning to understand the connection between problematic behaviors and the skills required to manage them, (c) the mental health therapists and direct supervision staff members' modeling of self-management and coping skills together with the residents practicing the skills through role-playing exercises, (d) clinical homework assignments (curriculum lessons) designed to promote retention, understanding, and application of learned skills, and (e) outcome assessment and measurement of concept and skills acquisition and utilization. At the completion of the program, participants would be expected to demonstrate requisite skills within the therapeutic environment and also in the social environment in which the individual lives and functions [26].

Instrumentation

Juvenile Sex Offender Assessment Protocol – II [27,28]. The J-SOAP-II is an assessment of risk factors that have been linked to both sexual and violent offending in juveniles. The measure is designed for use with males 12-18 years of age. No cutoff scores have been provided for risk level and the J-SOAP-II is recommended to be used as part of a more comprehensive assessment and not in isolation [29]. The J-SOAP-II has four scales that include measures of sexual drive/preoccupation, impulsive/antisocial behavior, intervention variables such as treatment motivation, and community stability/adjustment. Studies involving the J-SOAP-II indicate moderate to high inter rater reliability ranging from 0.75 to 0.91, as well as internal consistency alphas from 0.68 to 0.85.

Demographic Questionnaire

The demographic questionnaire was developed and utilized to obtain conceptual information on a wide variety of areas. The questionnaire was administered by the primary investigator's review

of each subject's archival data file. Information collected included 15 items regarding each subject.

Subjects

Subjects were chosen from archival data where those who completed the treatment program from 2008 to 2014. Data was collected from the subjects' initial intake assessment into the program and at their discharge from the program. The assessments were conducted in a classroom setting or office after the provider received the state court mandate to assess the youth for risk and sex offender treatment and service needs. Prior to administration, the provider administered a verbal description of the assessment process and its use. Subjects were provided an opportunity to consent or dissent prior to completing the instruments. All subjects were provided directions and monitoring during the test administration process. Following the administration, the provider collected the data, the data was securely stored for scoring at a later date.

Statistical Analyses

This study utilized six separate analyses conducted through the use of SPSS 20.

Data was analyzed as follows:

Analysis 1. A paired samples t-test was utilized to compare the pre-and post-test JSOAP-II scores means differences as it pertains to the impact of the SBPTP.

Analysis 2. A paired samples t-test was used to compare secure-care pre-test and post-test JSOAP-II Scale-3 (Intervention) scores as it pertains to the impact of the SBPTP.

Analysis 3. A mixed between-within Analysis of Variance (ANOVA) was utilized to compare the pre-test and post-test of secure care Site A and secure care Site B mean scores.

Analysis 4. A mixed between-within ANOVA was conducted to assess the impact of secure care site (Site A and Site B) on subjects' JSOAP-II Scale-3 scores across two time periods (pre-intervention and post-intervention).

Analysis 5. An independent samples t-test was conducted Scale 3 test scores reported a secure care pre and non-secure care.

Analysis 6. Independent sample t-test was conducted to compare the difference in scale 3 post-test scores reported among the secure care and non-secure care groups.

Results

The subject sample for this study included 100 adjudicated juveniles with sexual behavior problems residing in a secure care and non-secure care programs. The subjects range in age from 12 to 20 (as defined by state's legal statutes) and comprised of the following ethnicities: African American ($n = 30$), Caucasian ($n = 33$), Hispanic ($n = 2$), bi-racial ($n = 2$; one subject provided no specification of the two ethnicities and one subject specifying the two ethnicities were Caucasian and African American, and 33 subjects did not have ethnicity identified within their archival files. Table 4 provides additional demographic information for this sample. The analyses focus on subjects' JSOAP-II scores at two points in the SBPTP: at intake and at discharge. Overall, 73% of subjects significantly decreased their overall sexual recidivism risk scores and 83% significantly decreased Scale 3 (Intervention) scores; thereby showing significant improvement. Simultaneously, 18% showed no change in their scores and 9% showed increases (worsen) in these scores.

Hypothesis 1

Hypothesis 1 stated that there would be a reduction in the secure-care pre- and post-test JSOAP-II total scores. A paired samples t-test was conducted to evaluate the impact of services on pre and post JSOAP-II total scores for those in secure care. For those in secure care, there was a statistically significant difference from pre ($M =$

Table 4: Demographic characteristics of subjects.

Demographic	f	%
Age		
11	3	3.0
12-14	42	42.0
15-17	26	26.0
18-20	4	4.0
No age given	25	25.0
Initial Site		
Community	48	48.0
Other	52	52.0
Secure Site		
A - Swanson	21	21.0
B - Bridge City	23	23.0
Unknown	56	56.0
Site Security		
Secure	52	52.0
Non-Secure	48	48.0
Caregiver		
Father/Mother	4	4.0
Father primary	14	14.0
Mother primary	43	43.0
Grandparent	7	7.0
Other	32	32.0
IQ		
Low	12	12.0
Average	53	53.0
Above Average	3	3.0
N/G	32	32.0
Discharge Site		
Community	72	72.0
Other	28	28.0
Victims		
0	4	4.0
1	53	53.0
2	15	15.0
3	6	6.0
4	2	2.0
n/g	20	20.0
Previous Systems		
CPS	9	9.0
JJ	26	26.0
FC	3	3.0
N/G	17	17.0
No	45	45.0

21.85, *SD* = 9.31) to post (*M* = 15.72, *SD* = 8.39); *t*(51) = 5.03, *p* < 0.001 (two-tailed), supporting hypothesis 1. The mean decrease in JSOAP-II scores was 6.14 with a 95% confidence interval ranging from 3.69 to 8.59. The eta squared statistic (0.33) indicated a large effect size. See table 5 for mean and standard deviation scores for secure care JSOAP-II total scores.

Hypothesis 2

Hypothesis 2 stated that there would be a reduction in the secure-care pre- and post-test JSOAP-II Scale 3 (Intervention Scale). A paired samples t-test was conducted to evaluate the impact of services on pre and post JSOAP-II Scale-3 scores for those in secure care. For those

Table 5: Means and standard deviations according to group for hypothesis 1 and 2.

Variable	n	M	SD	t	p
JSOAP-II Total Scores					
Pre-test	52	21.85	9.31	5.03	< 0.001
Post-test	52	15.72	8.39		
JSOAP-II Scale 3 Scores					
Pre-test	52	7.78	3.21	6.65	< 0.001
Post-test	52	4.16	3.45		

Table 6: Multivariate effects (at *p* < 0.05) for hypotheses 3 and 4.

Variables	Wilk's Lambda	F	df	Error df	P
JSOAP-II Total Scores					
Site*Time	0.99	0.54	1	42	0.47
Time	0.63	24.74	1	42	< 0.001
JSOAP-II Scale 3 Scores					
Site*Time	0.98	1.06	1	42	0.31
Time	0.44	53.69	1	42	< 0.001

Table 7: Univariate effects for hypotheses 3 and 4.

Variables	df	dferror	F	Group	Means	p
JSOAP-II Total Scores						
Site	1	42	0.13			0.72
Pre-test				A	22.04	
				B	23.85	
Post-test				A	16.14	
				B	15.91	
JSOAP-II Scale 3 Scores						
Site	1	42	0.73			0.40
Pre-test				A	8.22	
				B	8.32	
Post-test				A	3.50	
				B	4.76	

in secure care, there was a statistically significant difference from pre (*M* = 7.78, *SD* = 3.21) to post (*M* = 4.16, *SD* = 3.45); *t*(51) = 6.65, *p* < 0.001 (two-tailed). The mean decrease in JSOAP-II scores was 3.62 with a 95% confidence interval ranging from 2.52 to 4.71. The eta squared statistic (0.46) indicated a large effect size. Thus, Hypothesis 2 was supported. See table 5 for mean and standard deviation scores for secure care Scale 3 (Intervention Scale) scores.

Hypothesis 3

Hypothesis 3 stated that there would be difference between pre-test and post-test secure care Site A and secure care Site B JSOAP-II total scores. A mixed between-within subjects' analysis of variance was conducted to assess the impact of secure care site (Site A or Site B) on subjects' JSOAP-II total scores across two time periods (pre-intervention and post-intervention). Results indicated that there was no significant interaction between site and time, Wilks' Lambda = 0.99, *F* (1, 42) = 0.54, *p* = 0.47, partial eta squared = 0.01, as well as for the main effect of site, *F* (1, 42) = 0.13, *p* = 0.72, partial eta squared = 0.003. However, there was a statistically significant main effect for time, Wilks' Lambda = 0.63, *F* (1, 42) = 24.74, *p* < 0.001, partial eta squared = 0.37, such that subjects at both sites showed a significant decrease in JSOAP-II total scores over time. Thus, Hypothesis 3 was supported. See table 6 for a summary of the secure Site A and Site B JSOAP-II total scores associated multivariate effects.

Table 7 provides univariate effects of Site A and Site B JSOAP-II Scale total scores associated univariate effects.

Hypothesis 4

Hypothesis 4 stated that there would be no difference between

pre-test and post-test Site A and secure Site B JSOAP-II Scale 3 (Intervention Scale) scores. A mixed between-within subjects' analysis of variance was conducted to assess the impact of secure care site (Site A or Site B) on subjects' JSOAP-II Scale-3 scores across two time periods (pre-intervention and post-intervention). Results indicated that there was no significant interaction between site and time, Wilks' Lambda = 0.98, $F(1, 42) = 1.06$, $p = 0.31$, partial eta squared = 0.03, as well as for the main effect of site, $F(1, 42) = 0.73$, $p = 0.40$, partial eta squared = 0.02. However, there was a statistically significant main effect for time, Wilks' Lambda = 0.44, $F(1, 42) = 53.69$, $p < 0.001$, partial eta squared = 0.56, such that subjects at both sites showed a significant decrease in JSOAP-II Scale-3 scores over time. Thus, Hypothesis 4 was supported. See table 6 for a summary of the secure Site A and Site B JSOAP-II Scale 3 (Intervention scale) scores associated multivariate effects.

Table 7 provides univariate effects of Site A and Site B JSOAP-II Scale 3 (Intervention Scale) scores associated univariate effects.

Hypothesis 5

Hypothesis 5 stated secure-care pre-test scores would have higher scores than non-secure care post-test scores for Scale 3 (Intervention Scale). An independent samples t-test was conducted to compare the difference in Scale-3 test scores reported among the secure care pre and non-secure care post groups. There was a significant difference in scores for the secure group ($M = 7.78$, $SD = 3.21$) and the non-secure group, ($M = 2.17$, $SD = 2.48$); $t(95.16) = 9.82$, $p < .001$ (two-tailed). The magnitude of the differences in the means (mean difference = 5.61, 95% CI: 4.48 to 6.75) was large (eta squared = 0.50). Thus, Hypothesis 5 was supported. See table 8 for a summary of the comparison means and standard deviations of the secure care pre-test total scores compared to the non-secure total post-test scores.

Hypothesis 6

Hypothesis 6 stated that secure-care post-test Scale 3 (Intervention Scale) scores would have higher scores than pre-test scores for non-secure care post-test scores for Scale 3 (Intervention Scale). An independent samples t-test was conducted to compare the difference in Scale-3 post-test scores reported among the secure care and non-secure care groups. There was a significant difference in scores for the secure group ($M = 4.16$, $SD = 3.45$) and the non-secure group, ($M = 2.17$, $SD = 2.48$); $t(92.66) = 3.34$, $p = 0.001$ (two-tailed). The magnitude of the differences in the means (mean difference = 2.00, 95% CI: .81 to 3.18) was moderate (eta squared = 0.10). See table 8 for a summary of the comparison means and standard deviations of the secure care Scale 3 (Intervention Scale) scores compared to the non-secure Scale 3 (Intervention Scale) scores.

Discussion

This study provides promising support for the use of the cognitive behavioral approach offered through SBPTP services, in the treatment of adjudicated male juveniles with sexual behavior problems residing in a secure care and non-secure care settings. Pre- and post-test data demonstrated statistically significant improvements.

Hypotheses 1 and 2 involve an analysis of the overall impact that SBPTP has on sexual risk of recidivism of juveniles with sexual behavior problems residing in secure care settings. There are three key highlights that likely account for the significant decrease in

sexual risk recidivism. First, as a product of the treatment program these juveniles are placed, it stands to reason that they would receive higher dose of treatment intervention. It follows that juveniles at intake and starting the SBPTP intervention would have higher scores at pre-test than those at post-test and having received the SBPTP intervention longer than those just starting the intervention. Hence, lowered sexual risk recidivism scores are expected at post-test than at pre-test. Second, the SBPTP program utilized cognitive behavioral treatment interventions supported by the literature in being effective in the treatment for juveniles with sexual behavior problems [8,30]. Third, the professionals and staff working within the treatment milieu were all trained regarding their intervention with juveniles with sexual behavior problems. Staff training is integral in successful implementation of treatment services for juveniles with sexual behavior problems [30]. The amalgamation of these aspects all work together to positively impact the overall risk for sexual recidivism in this population..

Hypotheses 3 and 4 involve analyses of the overall sexual recidivism risk of juveniles in two separate secure care facilities and analyzing if their JSOAP-II scores (total scores and intervention scores) were comparable. There are two key highlights that likely account for the similar scores between the two secure care sites. First, the SBPTP was developed as a best practices treatment program specifically for juveniles with sexual behavior problems and utilized literature supported interventions that have been consistently supported as effective in reducing risk factors that span various treatment settings. Second, both secure care sites share several commonalities. They are part of a state-wide and state facilitated treatment process. These sites are overseen by a licensed behavioral health provider, who is a specialized treatment provider for juveniles with sexual behavioral problems. This provider has the responsibility to ensure all the states' treatment professionals, on-site administrators, line staff, and any contracted providers are trained and operating within best practices associated with implementing a successful treatment program. Such ongoing training is consistent with components of evidence-based programs. The amalgamation of these positive aspects all work together to ensure programmatic consistency in SBPTP intervention.

Hypotheses 5 and 6 involve analyses that compare secure care scores for overall sexual recidivism risk with the post-test scores of non-secure care overall recidivism risks; the main element within this function is the issue of time as the secure care pre-test scores are taken at intake and the post-test non-secure care scores are taken at discharge. The researcher was specifically interested in the overall sexual risk recidivism of juveniles starting the SBPTP treatment compared to those juveniles who have gone through the program, involved in the community and are at discharge. There are two key highlights that likely account for the decrease in sexual risk recidivism for juveniles at the start of their SBPTP treatment intervention and for those who have completed the treatment intervention. First, and similar to Hypothesis 1, it is assumed that juveniles entering into the SBPTP have not received specialized treatment for sex offenses. Likewise, juveniles who are assessed at discharge have participated in multiple months (if they have not aged out of the systems at age 21 or did not receive a court magistrate reduction in their sentence length) of SBPTP treatment intervention. Additionally, the step-down program over the months allows the juveniles appropriate levels of behavioral rehearsals, role playing and safely transitioning to the community. Second, the protocols for sexual offending youth is to start them all in a higher security, restricted setting and systematically move them down to lower security, less-restricted settings as they progress positively through the SBPTP treatment interventions. The juveniles progress through the system helps to ensure that clinical goals are met and interventions specifically target areas of need and utilize areas of strength to best ensure that the juvenile's progress toward healthier attitudes and perspectives regarding sexual offending. The totality of these aspects work together to support juveniles' progress and a lowering of sexual recidivism risk factors as they progress through SBPTP treatment intervention.

Table 8: Means and standard deviations according to group for hypothesis 5 and 6.

Variable	n	M	SD	t	p
JSOAP-II Scores					
Secure - Pre	52	7.78	3.21	9.82	< 0.001
Non-secure - Post	48	2.17	2.48		
JSOAP-II Scale 3 Scores					
Secure	52	4.16	3.45	3.34	0.001
Non-secure	48	2.17	2.48		

Limitations of the Study

There are several limitations to the present study. First, the authors investigated only one treatment intervention for juveniles with sexual behavioral problems, and examined recidivism changes with only one assessment variable; this precludes the ability to compare pre-post changes with other programs employing a cognitive-behavioral approach, and the JSOAP-II with other recidivism risk assessment tools. Second, the treatment manual for SBPTP is not commercially published, preventing interested parties from validating treatment content and understanding mechanisms of change. Third, the sample was obtained from archival data and therefore not randomly selected nor randomly assigned to groups; this design limits ability to attribute group differences solely to treatment setting.

Implications for Treatment Providers

This study offers empirical support to the juvenile offender treatment literature by corroborating the success of at least one statewide program in guiding juveniles with sexual behavior problems toward healthier attitudes that yield lower risk of committing future sexual crimes post treatment. The first implication of this study is for treatment providers to reinforce the validity of SBPTP services as an alternative treatment approach for decreasing sexual recidivism. As part of an effective overall assessment and treatment intervention plan, providers should be specially trained in the provision of treatment for juveniles with sexual behavior problems, recognize this population's assorted risk factors, maintain ongoing measures of these risk factors (at least at 6 month intervals from intake and beyond-Grisso, 1998) [16], and utilize phased based treatment in a step-wise format [12,23,30,31]. Likewise, these providers should obtain court documentation of the actual charges related to sex offenses, as these help in the assessment process by allowing the provider to see a spectrum of lesser and more serious charges. Additionally, the literature supports various risk factors are associated with increased risk for recidivism (number of victims, age of victim, substance use, use of pornography, sex the victim; Hanson & Morton-Bourgon, 2005) [2]. Throughout the assessment process, providers should be keenly aware that juveniles with sexual behavior problems may differ from the charges themselves. There are incidences of plea-bargaining, denial of responsibility, minimization of delinquent acts, and minimization of the number of victims that are inherent in working with juveniles with sexual behavioral problems [2]. This process requires that treatment providers work cooperatively with other systems of care such as child welfare and juvenile justice professionals.

Recommendations for Future Research

Based on the identified limitations, several important recommendations are provided for future studies. One study might be to assess sexual recidivism risk through an experimental study that combine secure care and non-secure care program's analyses in a manner that compares two different offender risk recidivism interventions, randomly assign subjects, and utilize primary data to further determine collective recidivism rates. A second study might be to conduct research comparing the dynamic risk scores of juveniles in secure care versus residential programs and community programs through a within and between groups analysis of randomly selected juveniles from each group at six month intervals throughout their involvement in treatment. A third study could entail analysis of comprehensive program evaluation activities, including fidelity and effectiveness measures. This study might be designed to determine the reliability and validity treatment programs, its impact on negative symptom reduction, short and long-term effects of the program including recidivism. A fourth study might include analysis of the level of sexual risk (low, moderate, high) is correlated with recidivism, community readiness and treatment completers.

Conclusion

The results of this study provide support for the cognitive

behavioral approach offered through the SBPTP treatment of juveniles in secure care and non-secure care settings. Such an intervention targets identifying deviant thoughts and replacing them with more prosocial behaviors, specifically matching recidivism risk needs with the individual's overall treatment [32]. Simultaneously, the intervention addresses protective factors, risk factors, and services that pose challenges and opportunities for positive thought and behavioral change [9]. The implication for this research is that the SBPTP intervention has a significant positive impact on lowering sexual recidivism risks across settings. The analyses reveal (a) significant decreases in sexual risk recidivism in secure settings in JSOAP-II total scores, in that when comparing the mean decrease in JSOAP-II scores; (b) secure care sites are comparably delivering the SBPTP in a consistent manner that results in similar changes for juveniles with sexual behavioral problems within two sites; and the treatment program showed (c) significant decreases in Scale 3 (Intervention Scale). Ultimately, the data obtained through the research contributes to a growing body of empirical support of SBPTP as a best practice alternative to other treatment modalities.

Acknowledgement

Special thanks for the following statistician and research assistants: Dr. Sarah Wood, Aryssa Washington, Brad Fairchild, and Eric Williams.

References

1. Tabachnick J (2013) Why prevention? Why Now?. *International Journal of Behavioral Consultation and Therapy* 9: 55-61.
2. Hanson RK, Morton-Bourgon KE (2005) The characteristics of persistent sexual offenders: a meta-analysis of recidivism studies. *J Consult Clin Psychol* 73: 1154-1163.
3. Gerardin P, Thibaut F (2004) Epidemiology and treatment of adolescent sexual offending. *Pediatric Drugs* 6: 79-91.
4. Walker CE, McCormick D (2004) Current practices in residential treatment for adolescent sex offenders: a survey. *J Child Sex Abus* 13: 245-255.
5. Mercy JA (1999) Having new eyes: viewing child sexual abuse as a public health problem. *Sex Abuse* 11: 317-321.
6. Gerhard-Burnham B, Underwood LA, Speck K, Williams C, Merino C, et al. (2016) The Lived Experience of the Adolescent Sex Offender: A Phenomenological Case Study. *J Child Sex Abus* 25: 93-109.
7. Association for the Treatment of Sexual Abusers (ATSA) (2006) Report of the Task Force on Children with Sexual Behavior Problems.
8. Berenson D, Underwood LA (2001) A resource guide: Sex offender programming in youth correction and detention centers. Council for Correctional Administrators (CJCA) & The Federal Office of Juvenile Justice Delinquency Prevention (OJJDP): Washington DC.
9. Hunter JA, Figueredo AJ, Becker JV, Malamuth N (2007) Non-sexual delinquency in juvenile sexual offenders: The mediating and moderating influences of emotional empathy. *Journal of Family Violence* 22: 43-54.
10. Grisso T, Underwood LA (2002) Screening and assessing mental health and substance use disorder in the juvenile justice system: A resource guide for practitioners. Delmar, New York: The National Center for Mental Health and Juvenile Justice and Washington DC: The Office of Juvenile Justice and Delinquency Prevention Office of Justice Programs, US Department of Justice.
11. Prentky R, Righthand S (2003) Juvenile sex offender assessment protocol – II (JSOAP-II) manual.
12. Rehfuss MC, Underwood LA, Enright M, Hill S, Marshall R, et al. (2013) Treatment impact of an integrated sex offender program as measured by J-SOAP-II. *J Correct Health Care* 19: 113-123.
13. Dishion TJ, McCord J, Poulin F (1999) When interventions harm. Peer groups and problem behavior. *Am Psychol* 54: 755-764.
14. Worling JR, Curwen T (2000) Adolescent sexual offender recidivism: success of specialized treatment and implications for risk prediction. *Child Abuse Negl* 24: 965-982.
15. Pratt R (2013) A community treatment model for adolescents who sexually harm: Diverting youth from criminal justice to therapeutic response. *International Journal of Behavioral Consultation and Therapy* 9: 37-42.
16. Grisso T (1998) Forensic evaluation of juveniles. Sarasota FL: Professional Resource Exchange.
17. Righthand S, Prentky R, Knight R, Carpenter E, Hecker JE, et al. (2005) Factor structure and validation of the juvenile sex offender assessment protocol (J-SOAP). *Sex Abuse* 17: 13-30.

18. McGrath RJ, Cumming GR, Burchard BL, Zeoli S, Ellerby L (2010) Current practices and emerging trends in sexual Abuser management: The Safer Society 2009 North American Survey. Safer Society Press, Brandon, VT.
19. Epperson DL, Ralston CA, Fowers D, DeWitt J, Gore KS (2006) Actuarial risk assessment with juveniles who offend sexually: Development of the Juvenile Sexual Offense Recidivism Risk Assessment Tool-II (JSORRAT-II). Risk assessment of youth who have sexually abused: Theory, controversy, and emerging strategies 118-169.
20. Parks GA, Bard DE (2006) Risk factors for adolescent sex offender recidivism: Evaluation of predictive factors and comparison of three groups based upon victim type. *Sex Abuse* 18: 319-342.
21. Hempel I, Buck N, Cima M, van Marle H (2013) Review of risk assessment instruments for juvenile sex offenders: what is next? *Int J Offender Ther Comp Criminol* 57: 208-228.
22. Viljoen JL, Mordell S, Beneteau JL (2012) Prediction of adolescent sexual reoffending: a meta-analysis of the J-SOAP-II, ERASOR, J-SORRAT-II, and Static-99. *Law Hum Behav* 36: 423-438.
23. Underwood LA, Warren KW, Talbott L, Dailey FL, Jackson L (2014) Mental health treatment in juvenile justice secure care facilities: Practice and policy recommendations. *Journal of Forensic Psychology Practice* 1: 55-85.
24. US Department of Justice (2007) National Crime Victimization Survey 2007. Bureau of Justice Statistics, Washington DC.
25. McCollister KE, French MT, Fang H (2010) The cost of crime to society: new crime-specific estimates for policy and program evaluation. *Drug Alcohol Depend* 108: 98-109.
26. Underwood LA, Dailey FL, Grande T (2013) A Program Evaluation: Statewide Juvenile Sex Offender Treatment Program. State of Louisiana Office of Juvenile Justice (OJJ) and Office of Juvenile Justice Delinquency Prevention (OJJDP).
27. Prentky R, Righthand S (2003) Juvenile sex offender assessment protocol-II (J-SOAP-II) manual. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
28. Prentky R, Harris B, Frizzell K, Righthand S (2000) An actuarial procedure for assessing risk with juvenile sex offenders. *Sex Abuse* 12: 71-93.
29. Martinez R, Flores J, Rosenfeld B (2007) Validity of the Juvenile Sex Offender Protocol II (J-SOAP-II) in a sample of urban minority youth. *Criminal Justice and Behavior* 34: 1284-1295.
30. Underwood LA, Robinson SB, Mosholder E, Warren KM (2008) Sex offender care for adolescents in secure care: critical factors and counseling strategies. *Clin Psychol Rev* 28: 917-932.
31. Hunter JA (1998) Understanding juvenile sex offenders: Emerging research, treatment approaches, and management practices. The Center for Sex Offender Management.
32. Kraemer HC, Kazdin AE, Offord DR, Kessler RC, Jensen PS, et al. (1999) Measuring the potency of risk factors for clinical or policy significance. *Psychological Methods* 4: 257-271.
33. National Adolescent Perpetrator Network (NAPN) (1993) The revised report from the National Task Force on Juvenile Sex Offending. *Juvenile and Family Court Journal* 44: 5-120.