

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: Risk Management of Sexually Abusive Youth: A Follow Up Study

Author(s): Robert A. Prentky

Document No.: 214261

Date Received: May 2006

Award Number: 2002-IJ-CX 0029

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

**Risk Management of Sexually Abusive Youth:
A Follow-up Study**

(Grant # 2002-IJ-CX 0029)

Executive Summary

This grant project represents the continuation of ongoing programmatic research, initiated in 2001, on a child protection sample in the Commonwealth of Massachusetts. All of the children were in the custody of the Department of Social Services and all had been flagged for a special evaluation (Assessment for Safe and Appropriate Placement; ASAP) intended for those who engaged in sexually inappropriate, sexually coercive and/or sexually aggressive behavior. The primary objective of the research was to obtain reliable proximal outcome information on a sufficiently large subsample of sexual recidivists to permit examination of the predictive accuracy of the Juvenile Sex Offender Assessment Protocol – II (J-SOAP-II), a risk assessment scale designed for juvenile sexual offenders. The scientific foundation for this research on risk assessment with juvenile sex offenders is programmatic work begun by these same investigators in 1994 in Philadelphia. This early research, based on an inner city sample of youth, gave rise to the J-SOAP (Prentky, Harris, Frizzell, & Righthand, 2000), which has been the subject of at least eight known prior validity studies in four states (cf., Prentky & Righthand, 2003). The current project, however, reflected the first opportunity to gather data on a sufficiently large number of re-offenders to examine *predictive* validity.

Our original ASAP study examined 720 boys and girls who had been flagged for this special ASAP evaluation. Our rich data set allowed us to code over 200 variables relating to educational history, psychiatric history, abuse history, detailed caregiver and placement history, delinquent and nonsexual antisocial behaviors, and normative and deviant sexual behaviors. Some major findings from that initial study were: (1) the youngest youth in our sample evidenced as serious sexually coercive behaviors as the older youth, (2) the girls evidenced a high frequency of sexually inappropriate and coercive behaviors, often comparable to the boys, (3) the girls evidenced a high frequency of non-sexual delinquent behaviors, again often comparable to the boys, (4) repetitive changes in living situations was strongly associated with sexually deviant and coercive behaviors. We found that multiple changes in living situations over a short period of time were consistently and highly associated with an outcome of sexually inappropriate and aggressive behaviors, more so than either a history of sexual abuse or physical abuse alone. Moreover, the combination of changes in living situations and a history of severe sexual abuse was highly associated with an outcome of sexually inappropriate and aggressive behaviors.

In the present study, we gathered post-ASAP outcome and re-offense data on 822 boys ($n = 667$) and girls ($n = 155$) that had been in the custody of the Department of Social Services (DSS) and had been flagged for an ASAP evaluation. The average age at time of ASAP evaluation was 12.39

(range = 3 – 20) for the boys and 11.93 (range = 4 – 19) for the girls. The average age at the time of the first known sexual offense was roughly two years younger. Full scale IQ did not differ for the two groups: Boys (90.5 with a range of 40 – 134); Girls (88.2 with a range of 50 – 126). In addition to a relatively large sample of re-offenders ($n = 145$), this project had two additional unique features, a large number of girls and a large number of pre-adolescent boys ($n = 331$) (based on their age at the time of the first hands-on sexual offense). Thus, this study is a retrospective, 7-year follow up (1998 – 2005), with a minimum follow-up time of 6 months.

Participants were assigned to one of four major outcome groups: Group 1: DSS Sexual Reoffense ($n = 117$); Group 2: Criminal Justice (CJ) Sexual Reoffense ($n = 28$); Group 3: Criminal Justice Non-Sexual Reoffense ($n = 226$); and Group 4: No Reoffense ($n = 426$). There was inadequate follow-up information for 25 youth to permit group assignment, reducing the sample to a final N of 797 cases.

Groups 1 and 2 were mutually exclusive (i.e., non-overlapping). There were no significant differences between Group 1 and Group 2 with respect to IQ, racial composition, proportion of boys and girls, school stability and scores measuring Global Adjustment Index (GAI). The only difference between Groups 1 and 2 related to age of first hands-on sexual offense. Group 1 committed their first hands-on sexual offense at a younger age than Group 2. Since Groups 1 and 2 were very similar, they

were combined for all outcome analyses. In total, there were 145 youth who re-offended sexually.

The J-SOAP-II consists of 28 items, comprising four scales: (1) Sexual Drive and Preoccupation; (2) Impulsive, Antisocial Behavior; (3) Clinical Intervention; and (4) Community Stability. The first two scales (1 & 2) consist of static (historical or fixed) risk factors and the latter two scales (3 & 4) consist of dynamic risk factors. The J-SOAP Manual is in Appendix E. In the present outcome study, we were able to reliably code 26 out of the 28 items included in the J-SOAP-II.

We first calculated the sexual re-offense rates (percentage of those who recidivated) and the failure rates using survival analysis (Kaplan-Meier) for the boys and girls separately. The failure rate takes into account the amount of time (i.e., opportunity) that each individual has had to reoffend. The failure rate is not the same as the simple percentage of those known to have re-offended.

Our findings were:

- (1) Gender difference with respect to sexual re-offense; out of 147 girls with outcome data, 13 (9%) re-offended sexually (10.1% failure rate), out of a total of 626 boys, 116 (19%) re-offended sexually (27.6% failure rate).***
- (2) Rapidity of re-offense: the vast majority of sexual re-offenses occurred***

within 24 months of the ASAP evaluation (78.5% of the pre-adolescent boys, 86.2% of the adolescent boys, and 93% of the girls).

(3) Age difference with respect to sexual re-offense; Pre-adolescent boys

(those who were 11 or younger at the time of their first known hands-on sexual offense) had a significantly higher sexual recidivism rate (24%; failure rate = 32.6%) than the adolescent boys (13%; failure rate = 22%).

Next we examined risk ranges by dividing the distributions of scores for the full J-SOAP scale into three roughly equal groups; we also divided the distributions for the static scales (1+2) and the dynamic scales (3+4) separately.

Our findings were:

(1) Among the pre-adolescent boys, the “Low” risk group had a J-SOAP

score ranging from 6 to 25 with a sexual re-offense rate of 4.5%;

Among the adolescent boys, the “Low” risk group had a J-SOAP score ranging from 8 to 24 with a sexual re-offense rate of 7.7%.

(2) Among the pre-adolescent boys, the “Moderate” risk group had a J-SOAP score ranging from 26 to 33 with a sexual re-offense rate of 19.6%; Among the adolescent boys, the “Moderate” risk group

had a J-SOAP score ranging from 25 to 33 with a sexual re-offense rate of 12%.

(3) Among the pre-adolescent boys, the “High” risk group had J-SOAP

scores exceeding 33 with a sexual re-offense rate of 60%; Among the adolescent boys, the “High” risk group also had J-SOAP scores exceeding 33 with a sexual re-offense rate of 52%.

(4) The correlation between sexual re-offense and the J-SOAP risk group

assignment was .50 (Eta or .51 Spearman) for the pre-adolescents and .43 (Eta or .42 Spearman) for the adolescents.

(5) Both groups were skewed in the direction of higher risk: Pre-adolescents (skewness = -.499); Adolescents (skewness = -.254).

We next ran a simple regression analysis using the J-SOAP static score and the J-SOAP dynamic score as the two independent variables; the intent was to compare the relative predictive performance of the static vs. the dynamic scales.

Our findings were:

(1) The dynamic risk scales outperformed the static risk scales for both the pre-adolescents and the adolescents.

The statistical results from the simple regression analysis were:

(a) Among the Pre-adolescent boys, the beta values: dynamic risk scales

(beta = .405; t = 4.66, p < .001); static risk scales (beta = .138; t = 1.59, p

< .114); (b) Among the Adolescent boys, the beta values: dynamic risk scales (beta = .286; t = 2.27, p < .03); static risk scales (beta = .138; t = 1.10, p < .276).

We next used the Cox model, a regression method for survival data, to estimate the hazard ratios for each of the four J-SOAP scales. The hazard ratio is an estimate of the ratio of the hazard rate for those who re-offended sexually to those who did not. The hazard rate is the estimate of an occurrence of a particular “hazard” (in this case, sexual re-offense) given a certain “event” (in this case, a score on one of the J-SOAP scales). Hazard ratios are once again presented for the split samples of pre-adolescent and adolescent boys

Our findings were:

(1) Among the Pre-adolescent boys, Scale 1 had the largest hazard ratio

(6.34), followed closely by Scale 3 (4.53) and Scale 4 (4.35). For the full-scale score, the hazard ratio was close to 10 (9.97). A high score on the full J-SOAP scale increases approximately ten-fold the likelihood of a sexual re-offense.

(2) Among the Adolescent boys, Scale 1 had the largest hazard ratio

(13.07), followed by Scale 4 (5.70) and Scale 2 (3.43). For the full-scale

score, the hazard ratio was 5.76. In this group, a high score on Scale 1 alone increases thirteen-fold the likelihood of a sexual re-offense.

Next, we used logistic regression to predict sexual re-offense using the four J-SOAP scales. The Wald chi-square, a measure of the effect size, and the Likelihood Ratio, a general test of the null hypothesis, were reported.

Our findings were:

(1) Among the Pre-adolescent boys, there were large highly significant

Wald values associated with Scales 1, 3, & 4. Scale 2 was not predictive.

(2) Among the Adolescent boys, there were large highly significant Wald

values associated with Scales 1 & 4, followed by Scale 2. Scale 3 was not predictive.

(3) Scales 1 & 4 were highly predictive for both pre-adolescent and adolescent boys. Scale 3 was also highly predictive for the pre-adolescents but not for the adolescents. By contrast, Scale 2 was

predictive for the adolescents but not for the pre-adolescents.

Lastly, we used Receiver Operating Characteristics (ROC) analysis to examine the predictive accuracy of the J-SOAP and its component scales. ROC estimates predictive accuracy by plotting sensitivity (the true positive rate of prediction) by 1-specificity (the true negative rate of prediction). The advantage of ROC analysis is that it captures both types of potential error (false negatives and false positives). The area under the curve that results from this plot is estimated and a “C” or “AUC” value is reported. Chance prediction would yield a C value of 0.50. The median C value for 58 studies involving violence prediction with adults was 0.73, with a weighted average of 0.78 (Mossman, 1994). To the best of our knowledge, there are no equivalent C value guidelines for predicting violence in adolescents.

Our findings were:

- (1) The C values for predicting sexual re-offense using the full scale score from the J-SOAP were .824 for the Pre-adolescents and .803 for the Adolescents.***
- (2) Among the Pre-adolescents, three of the J-SOAP scales, when tested individually, had high C values as well: Scale 1 (C=.775), Scale 3 (C=.771) and Scale 4 (C=.751).***
- (3) Among the Adolescents, two of the J-SOAP scales, when tested individually, had high C values: Scale 1 (C=.830) and Scale 4 (C=.816).***

(4) Between both samples of boys, three of the five highest C values were associated with dynamic scales.

(5) The C values associated with the prediction of sexual re-offense using the full scale score from the J-SOAP are remarkably high for both the pre-adolescents (.824) and the adolescents (.803). These C values correspond to Cohen's d (1988) values of roughly 1.24 to 1.30, and point-biserial correlations (r_{pb}) of .528 to .545 (Rice & Harris, 2005). A large effect size, as defined by Cohen (1988), would be a d of 0.80 or higher and a corresponding r_{pb} , assuming a base rate of 25%, of .327 (Rice & Harris, 2005). We regard these results as quite remarkable.

Immediate Social Policy Implications & Directions for Future Research

Policy drives research, as well as law. Policy has crafted management strategies that are codified in federal and state legislation. These laws demand valid risk assessment. We regard the research findings from this project as highly policy relevant. We hope to illustrate this point over the next several pages.

Increasing attention to the problem of sexual violence by juveniles has prompted recent attempts to enact legislation that seeks to curb such violence. H. R. 2797 [Amie Zyla Act of 2005], introduced in the House of Representatives on June 8, 2005, would amend the Jacob Wetterling

Crimes Against Children and Sexually Violent Offender Registration Act to include juvenile sexual offenders. At the state level, the Commonwealth of Pennsylvania enacted Act 21 on August 14, 2003. Act 21 provides for the civil commitment of juvenile sexual offenders prior to their 21st birthday.

Federal and state legislation is mandating the assessment of risk among juvenile sex offenders. Such statutory management of juvenile sexual offenders demands reliable, valid methods for assessing the risk posed by these youth. Judgments about degree of risk clearly are central to all management decisions, including those having to do with civil commitment and need for (or level of) registration. At present, there is no existing procedure or protocol for assessing risk of sexual re-offense among juvenile offenders with clear evidence of predictive validity across a range of youth within the juvenile justice system. There is, in effect, no way of informing risk decisions that are called for by these statutory management strategies. Although the results from the present study provided strong evidence of the predictive validity of the J-SOAP, our findings are specific to a child welfare sample drawn from one northeastern state. The J-SOAP can not be assumed to have comparable predictive validity in racially and ethnically diverse samples of youth drawn from the juvenile justice system. Since the J-SOAP is used predominantly on youth in the juvenile justice system, it is imperative to examine its predictive accuracy on large samples of such youth. Whether it is the J-SOAP or some other promising alternative, we must consider it a high priority to

conduct the minimal research necessary to develop a reliable and accurate method of assessing risk *prior* to implementing these laws.

Beyond the practical consideration articulated above, we should keep in mind the serious unintended consequence of mislabeling youth as “dangerous” when they are not. We may inadvertently produce the very outcome that we are trying to avoid. It is imperative that we identify those youth who are truly at high risk and not mislabel those who are not. Not only do we stigmatize youth, with all of the predictable debilitating consequences of such stigma, but we may expose low risk youth to high risk environments and high risk peers, thereby creating “dangerousness” where there wasn’t before. In summary, inappropriate use of restrictive management strategies through uninformed and inaccurate risk decisions will inevitably result in a larger proportion of mistakes that translate into a significant and unnecessary human and monetary cost to society. The goal of avoiding these “false positive mistakes” requires a sophisticated, empirically informed understanding of how to assess risk in adolescents.

The hallmark of adolescence is change across all domains of development, and one of the cardinal “symptoms” associated with this turbulent period is emotional instability. The teenagers in Aristotle’s time were no different. Over 2,000 years ago, Aristotle observed that, “Youth are heated by Nature as drunken men by wine.” Xenophon, apparently a student of Socrates, wrote of adolescents in a similar vein. Roughly 400 years ago, Shakespeare interjected, in Act III of *The Winter’s Tale*, “I would

that there were no age between 10 and 23, for there's nothing in between but getting wenches with child, wrongdoing the ancientry, stealing, fighting..." About 100 years ago, a pioneer of American psychology, G. Stanley Hall, referred to adolescence as a time of "heightened storm and stress." Surely what has been quite evident for thousands of years should be evident today as we approach the task of assessing the risk posed by these inherently "unstable" youth.

Even under "normal" conditions, adolescence is a time of extraordinary maturational change in virtually all domains, from physical to cognitive, social, sexual, and emotional. There is a large literature documenting the pervasive developmental "flux" of adolescents. Even the central nervous systems of adolescents are immature. A recent conference hosted by the New York Academy of Sciences was devoted to the topic of adolescent brain development (proceeding published in *Annals* 1021 by The Academy; Dahl & Spear, 2004). In addition, there are marked changes in both reproductive and stress hormones that are associated with maturational changes in sexual arousal, emotional intensity and lability, changes in sleep and appetite, and risk taking behaviors. As Dr. Steinberg (2004) noted, "increased risk taking in adolescence is normative, biologically driven, and inevitable," (p. 57). Adolescence is characterized, even under the best of conditions, by poor decision-making, as rational decisions give way to intense emotions. In addition, there is a complex social chemistry in which peers become powerful influences on behavior.

In sum, adolescence is a developmental twilight zone between childhood and adulthood that is often characterized by radical emotional changes in response to hormonal shifts, high-intensity feelings, emotionally-charged, impulsive, risky behaviors, and poor decision –making. Most of all, it is a time of change. Change cannot be captured by static or fixed risk predictors. Optimal risk prediction in this population must take into account the normative, pervasive developmental flux that defines this transitional period in our lives.

To complicate matters, many of the youth that are assessed for risk have been subjected to varying degrees of maltreatment. Childhood abuse and maltreatment is a robust, and many would say universal, risk factor in antisocial behavior. In addition to the obvious emotional and psychological impact of maltreatment, there is a substantial literature documenting permanent brain damage that may be associated with early and protracted maltreatment. Such abuse produces a cascade of stress-related hormones (principally cortisol and adrenalin) in the young, developing brain, permanently altering the development of certain structures (e.g., hippocampus, corpus callosum, and prefrontal cortex). All-in-all, the task of assessing risk in this population of pervasively developmentally immature and often abuse-reactive youth is highly complex, not to be equated with the task of assessing risk in adults, and hinges on risk predictors that can capture stable and acute risk-relevant changes.

In a recent Tribune-Review article by Cholodofsky (July 2, 2005), it was noted that the Commonwealth of Pennsylvania may spend \$8 million on five (5) civilly committed youth. If we are prepared to spend extraordinary sums of money to register, not to mention civilly commit, young adults for offenses they committed as juveniles, we must take the initial step and invest the money in the research needed to provide the basis for registration and civil commitment – reliable assessment of risk.

There can be little doubt at this point that the potential risk for sexually aggressive behavior posed by juveniles is fully appreciated. With this awareness comes an attendant sense of social responsibility to marshal our forces to address the problem. The problem is highly complex, however, and will not be solved simply by legislative fiat. The first step is an empirically informed and validated procedure for assessing risk among adolescents who evidence a propensity for sexually abusive behavior. Once we have a mechanism for screening out those who are truly dangerous, we can examine the efficacy of a variety of management strategies, including indeterminate detention.

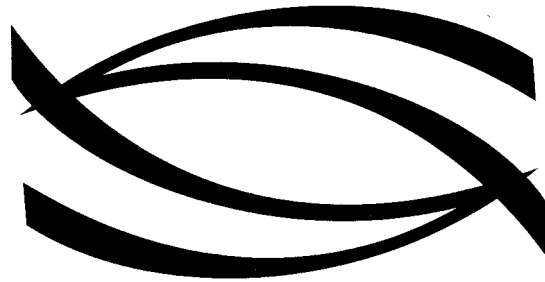
Dissemination of Findings

Beyond the customary ways in which scholarly research is disseminated, through presentations at professional meetings and publications in professional journals and books, we would strongly encourage the Institute to consider one of its in-house mechanisms. Of the many ways in which NIJ disseminates the findings from grantees' projects,

the most appropriate in our case would probably be a Research in Brief, which targets high-level policymakers in addition to researchers. Because of the clear and urgent policy implications of this research, we might also suggest a brief Research for Policy statement.

Justice Resource Institute

Research Department



Risk Management of Sexually Abusive Youth: A Follow Up Study

Final Technical Report

2002-IJ-CX 0029

Risk Management of Sexually Abusive Youth: A Follow-up Study

Executive Summary

This grant project represents the continuation of ongoing programmatic research, initiated in 2001, on a child protection sample in the Commonwealth of Massachusetts. All of the children were in the custody of the Department of Social Services and all had been flagged for a special evaluation (Assessment for Safe and Appropriate Placement; ASAP) intended for those who engaged in sexually inappropriate, sexually coercive and/or sexually aggressive behavior. The primary objective of the research was to obtain reliable proximal outcome information on a sufficiently large subsample of sexual recidivists to permit examination of the predictive accuracy of the Juvenile Sex Offender Assessment Protocol – II (J-SOAP-II), a risk assessment scale designed for juvenile sexual offenders. The scientific foundation for this research on risk assessment with juvenile sex offenders is programmatic work begun by these same investigators in 1994 in Philadelphia. This early research, based on an inner city sample of youth, gave rise to the J-SOAP (Prentky, Harris, Frizzell, & Righthand, 2000), which has been the subject of at least eight known prior validity studies in four states (cf., Prentky & Righthand, 2003). The current project, however, reflected the first opportunity to gather data on a sufficiently large number of re-offenders to examine *predictive* validity.

Our original ASAP study examined 720 boys and girls who had been flagged for this special ASAP evaluation. Our rich data set allowed us to code

over 200 variables relating to educational history, psychiatric history, abuse history, detailed caregiver and placement history, delinquent and nonsexual antisocial behaviors, and normative and deviant sexual behaviors. Some major findings from that initial study were: (1) the youngest youth in our sample evidenced as serious sexually coercive behaviors as the older youth, (2) the girls evidenced a high frequency of sexually inappropriate and coercive behaviors, often comparable to the boys, (3) the girls evidenced a high frequency of non-sexual delinquent behaviors, again often comparable to the boys, (4) repetitive changes in living situations was strongly associated with sexually deviant and coercive behaviors. We found that multiple changes in living situations over a short period of time were consistently and highly associated with an outcome of sexually inappropriate and aggressive behaviors, more so than either a history of sexual abuse or physical abuse alone. Moreover, the combination of changes in living situations and a history of severe sexual abuse was highly associated with an outcome of sexually inappropriate and aggressive behaviors.

In the present study, we gathered post-ASAP outcome and re-offense data on 822 boys ($n = 667$) and girls ($n = 155$) that had been in the custody of the Department of Social Services (DSS) and had been flagged for an ASAP evaluation. The average age at time of ASAP evaluation was 12.39 (range = 3 – 20) for the boys and 11.93 (range = 4 – 19) for the girls. The average age at the time of the first known sexual offense was roughly two years younger. Full scale IQ did not differ for the two groups: Boys (90.5 with a range of 40 – 134); Girls (88.2 with a range of 50 – 126). In addition to a relatively large sample of re-offenders ($n = 145$), this

project had two additional unique features, a large number of girls and a large number of pre-adolescent boys ($n = 331$) (based on their age at the time of the first hands-on sexual offense). Thus, this study is a retrospective, 7-year follow up (1998 – 2005), with a minimum follow-up time of 6 months.

Participants were assigned to one of four major outcome groups: Group 1: DSS Sexual Reoffense ($n = 117$); Group 2: Criminal Justice (CJ) Sexual Reoffense ($n = 28$); Group 3: Criminal Justice Non-Sexual Reoffense ($n = 226$); and Group 4: No Reoffense ($n = 426$). There was inadequate follow-up information for 25 youth to permit group assignment, reducing the sample to a final N of 797 cases.

Groups 1 and 2 were mutually exclusive (i.e., non-overlapping). There were no significant differences between Group 1 and Group 2 with respect to IQ, racial composition, proportion of boys and girls, school stability and scores measuring Global Adjustment Index (GAI). The only difference between Groups 1 and 2 related to age of first hands-on sexual offense. Group 1 committed their first hands-on sexual offense at a younger age than Group 2. Since Groups 1 and 2 were very similar, they were combined for all outcome analyses. In total, there were 145 youth who re-offended sexually.

The J-SOAP-II consists of 28 items, comprising four scales: (1) Sexual Drive and Preoccupation; (2) Impulsive, Antisocial Behavior; (3) Clinical Intervention; and (4) Community Stability. The first two scales (1 & 2) consist of static (historical or fixed) risk factors and the latter two scales (3 & 4) consist of dynamic risk factors. The J-SOAP Manual is in Appendix E. In the present

outcome study, we were able to reliably code 26 out of the 28 items included in the J-SOAP-II.

We first calculated the sexual re-offense rates (percentage of those who recidivated) and the failure rates using survival analysis (Kaplan-Meier) for the boys and girls separately. The failure rate takes into account the amount of time (i.e., opportunity) that each individual has had to reoffend. The failure rate is not the same as the simple percentage of those known to have re-offended.

Our findings were:

- (1) Gender difference with respect to sexual re-offense; out of 147 girls with outcome data, 13 (9%) re-offended sexually (10.1% failure rate), out of a total of 626 boys, 116 (19%) re-offended sexually (27.6% failure rate).***
- (2) Rapidity of re-offense: the vast majority of sexual re-offenses occurred within 24 months of the ASAP evaluation (78.5% of the pre-adolescent boys, 86.2% of the adolescent boys, and 93% of the girls).***
- (3) Age difference with respect to sexual re-offense; Pre-adolescent boys (those who were 11 or younger at the time of their first known hands-on sexual offense) had a significantly higher sexual recidivism rate (24%; failure rate = 32.6%) than the adolescent boys (13%; failure rate = 22%).***

Next we examined risk ranges by dividing the distributions of scores for the full J-SOAP scale into three roughly equal groups; we also divided the distributions for the static scales (1+2) and the dynamic scales (3+4) separately.

Our findings were:

- (1) Among the pre-adolescent boys, the “Low” risk group had a J-SOAP score ranging from 6 to 25 with a sexual re-offense rate of 4.5%; Among the adolescent boys, the “Low” risk group had a J-SOAP score ranging from 8 to 24 with a sexual re-offense rate of 7.7%.**
- (2) Among the pre-adolescent boys, the “Moderate” risk group had a J-SOAP score ranging from 26 to 33 with a sexual re-offense rate of 19.6%; Among the adolescent boys, the “Moderate” risk group had a J-SOAP score ranging from 25 to 33 with a sexual re-offense rate of 12%.**
- (3) Among the pre-adolescent boys, the “High” risk group had J-SOAP scores exceeding 33 with a sexual re-offense rate of 60%; Among the adolescent boys, the “High” risk group also had J-SOAP scores exceeding 33 with a sexual re-offense rate of 52%.**
- (4) The correlation between sexual re-offense and the J-SOAP risk group assignment was .50 (Eta or .51 Spearman) for the pre-adolescents and .43 (Eta or .42 Spearman) for the adolescents.**
- (5) Both groups were skewed in the direction of higher risk: Pre-adolescents (skewness = -.499); Adolescents (skewness = -.254).**

We next ran a simple regression analysis using the J-SOAP static score and the J-SOAP dynamic score as the two independent variables; the intent was to compare the relative predictive performance of the static vs. the dynamic scales.

Our findings were:

(1) The dynamic risk scales outperformed the static risk scales for both the pre-adolescents and the adolescents.

The statistical results from the simple regression analysis were:

(a) Among the Pre-adolescent boys, the beta values: dynamic risk scales (beta = .405; $t = 4.66$, $p < .001$); static risk scales (beta = .138; $t = 1.59$, $p < .114$); (b) Among the Adolescent boys, the beta values: dynamic risk scales (beta = .286; $t = 2.27$, $p < .03$); static risk scales (beta = .138; $t = 1.10$, $p < .276$).

We next used the Cox model, a regression method for survival data, to estimate the hazard ratios for each of the four J-SOAP scales. The hazard ratio is an estimate of the ratio of the hazard rate for those who re-offended sexually to those who did not. The hazard rate is the estimate of an occurrence of a particular “hazard” (in this case, sexual re-offense) given a certain “event” (in this case, a score on one of the J-SOAP scales). Hazard ratios are once again presented for the split samples of pre-adolescent and adolescent boys

Our findings were:

(1) Among the Pre-adolescent boys, Scale 1 had the largest hazard ratio (6.34), followed closely by Scale 3 (4.53) and Scale 4 (4.35). For the full-scale score, the hazard ratio was close to 10 (9.97). A high score on the full J-SOAP scale increases approximately ten-fold the likelihood of a sexual re-offense.

(2) Among the Adolescent boys, Scale 1 had the largest hazard ratio

(13.07), followed by Scale 4 (5.70) and Scale 2 (3.43). For the full-scale score, the hazard ratio was 5.76. In this group, a high score on Scale 1 alone increases thirteen-fold the likelihood of a sexual re-offense.

Next, we used logistic regression to predict sexual re-offense using the four J-SOAP scales. The Wald chi-square, a measure of the effect size, and the Likelihood Ratio, a general test of the null hypothesis, were reported.

Our findings were:

- (1) Among the Pre-adolescent boys, there were large highly significant Wald values associated with Scales 1, 3, & 4. Scale 2 was not predictive.*
- (2) Among the Adolescent boys, there were large highly significant Wald values associated with Scales 1 & 4, followed by Scale 2. Scale 3 was not predictive.*
- (3) Scales 1 & 4 were highly predictive for both pre-adolescent and adolescent boys. Scale 3 was also highly predictive for the pre-adolescents but not for the adolescents. By contrast, Scale 2 was predictive for the adolescents but not for the pre-adolescents.*

Lastly, we used Receiver Operating Characteristics (ROC) analysis to examine the predictive accuracy of the J-SOAP and its component scales. ROC estimates predictive accuracy by plotting sensitivity (the true positive rate of prediction) by 1-sensitivity (the true negative rate of prediction). The advantage of ROC analysis is that it captures both types of potential error (false negatives

and false positives). The area under the curve that results from this plot is estimated and a “C” or “AUC” value is reported. Chance prediction would yield a C value of 0.50. The median C value for 58 studies involving violence prediction with adults was 0.73, with a weighted average of 0.78 (Mossman, 1994). To the best of our knowledge, there are no equivalent C value guidelines for predicting violence in adolescents.

Our findings were:

- (1) The C values for predicting sexual re-offense using the full scale score from the J-SOAP were .824 for the Pre-adolescents and .803 for the Adolescents.***
- (2) Among the Pre-adolescents, three of the J-SOAP scales, when tested individually, had high C values as well: Scale 1 (C=.775), Scale 3 (C=.771) and Scale 4 (C=.751).***
- (3) Among the Adolescents, two of the J-SOAP scales, when tested individually, had high C values: Scale 1 (C=.830) and Scale 4 (C=.816).***
- (4) Between both samples of boys, three of the five highest C values were associated with dynamic scales.***
- (5) The C values associated with the prediction of sexual re-offense using the full scale score from the J-SOAP are remarkably high for both the pre-adolescents (.824) and the adolescents (.803). These C values correspond to Cohen’s d (1988) values of roughly 1.24 to 1.30, and point-biserial correlations (r_{pb}) of .528 to .545 (Rice & Harris, 2005). A large effect size, as defined by Cohen (1988), would be a d of 0.80 or***

higher and a corresponding r_{pb} , assuming a base rate of 25%, of .327 (Rice & Harris, 2005). We regard these results as quite remarkable.

Immediate Social Policy Implications & Directions for Future Research

Policy drives research, as well as law. Policy has crafted management strategies that are codified in federal and state legislation. These laws demand valid risk assessment. We regard the research findings from this project as highly policy relevant. We hope to illustrate this point over the next several pages.

Increasing attention to the problem of sexual violence by juveniles has prompted recent attempts to enact legislation that seeks to curb such violence. H. R. 2797 [Amie Zyla Act of 2005], introduced in the House of Representatives on June 8, 2005, would amend the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act to include juvenile sexual offenders. At the state level, the Commonwealth of Pennsylvania enacted Act 21 on August 14, 2003. Act 21 provides for the civil commitment of juvenile sexual offenders prior to their 21st birthday.

Federal and state legislation is mandating the assessment of risk among juvenile sex offenders. Such statutory management of juvenile sexual offenders demands reliable, valid methods for assessing the risk posed by these youth. Judgments about degree of risk clearly are central to all management decisions, including those having to do with civil commitment and need for (or level of) registration. At present, there is no existing procedure or protocol for assessing risk of sexual re-offense among juvenile offenders with clear evidence of

predictive validity across a range of youth within the juvenile justice system. There is, in effect, no way of informing risk decisions that are called for by these statutory management strategies. Although the results from the present study provided strong evidence of the predictive validity of the J-SOAP, our findings are specific to a child welfare sample drawn from one northeastern state. The J-SOAP can not be assumed to have comparable predictive validity in racially and ethnically diverse samples of youth drawn from the juvenile justice system. Since the J-SOAP is used predominantly on youth in the juvenile justice system, it is imperative to examine its predictive accuracy on large samples of such youth. Whether it is the J-SOAP or some other promising alternative, we must consider it a high priority to conduct the minimal research necessary to develop a reliable and accurate method of assessing risk *prior* to implementing these laws.

Beyond the practical consideration articulated above, we should keep in mind the serious unintended consequence of mislabeling youth as “dangerous” when they are not. We may inadvertently produce the very outcome that we are trying to avoid. It is imperative that we identify those youth who are truly at high risk and not mislabel those who are not. Not only do we stigmatize youth, with all of the predictable debilitating consequences of such stigma, but we may expose low risk youth to high risk environments and high risk peers, thereby creating “dangerousness” where there wasn’t before. In summary, inappropriate use of restrictive management strategies through uninformed and inaccurate risk decisions will inevitably result in a larger proportion of mistakes that translate into a significant and unnecessary human and monetary cost to society. The goal

of avoiding these “false positive mistakes” requires a sophisticated, empirically informed understanding of how to assess risk in adolescents.

The hallmark of adolescence is change across all domains of development, and one of the cardinal “symptoms” associated with this turbulent period is emotional instability. The teenagers in Aristotle’s time were no different. Over 2,000 years ago, Aristotle observed that, “Youth are heated by Nature as drunken men by wine.” Xenophon, apparently a student of Socrates, wrote of adolescents in a similar vein. Roughly 400 years ago, Shakespeare interjected, in Act III of *The Winter’s Tale*, “I would that there were no age between 10 and 23, for there’s nothing in between but getting wenches with child, wrongdoing the ancients, stealing, fighting...” About 100 years ago, a pioneer of American psychology, G. Stanley Hall, referred to adolescence as a time of “heightened storm and stress.” Surely what has been quite evident for thousands of years should be evident today as we approach the task of assessing the risk posed by these inherently “unstable” youth.

Even under “normal” conditions, adolescence is a time of extraordinary maturational change in virtually all domains, from physical to cognitive, social, sexual, and emotional. There is a large literature documenting the pervasive developmental “flux” of adolescents. Even the central nervous systems of adolescents are immature. A recent conference hosted by the New York Academy of Sciences was devoted to the topic of adolescent brain development (proceeding published in *Annals* 1021 by The Academy; Dahl & Spear, 2004). In addition, there are marked changes in both reproductive and stress hormones

that are associated with maturational changes in sexual arousal, emotional intensity and lability, changes in sleep and appetite, and risk taking behaviors. As Dr. Steinberg (2004) noted, “increased risk taking in adolescence is normative, biologically driven, and inevitable,” (p. 57). Adolescence is characterized, even under the best of conditions, by poor decision-making, as rational decisions give way to intense emotions. In addition, there is a complex social chemistry in which peers become powerful influences on behavior. In sum, adolescence is a developmental twilight zone between childhood and adulthood that is often characterized by radical emotional changes in response to hormonal shifts, high-intensity feelings, emotionally-charged, impulsive, risky behaviors, and poor decision –making. Most of all, it is a time of change. Change cannot be captured by static or fixed risk predictors. Optimal risk prediction in this population must take into account the normative, pervasive developmental flux that defines this transitional period in our lives.

To complicate matters, many of the youth that are assessed for risk have been subjected to varying degrees of maltreatment. Childhood abuse and maltreatment is a robust, and many would say universal, risk factor in antisocial behavior. In addition to the obvious emotional and psychological impact of maltreatment, there is a substantial literature documenting permanent brain damage that may be associated with early and protracted maltreatment. Such abuse produces a cascade of stress-related hormones (principally cortisol and adrenalin) in the young, developing brain, permanently altering the development of certain structures (e.g., hippocampus, corpus callosum, and prefrontal cortex).

All-in-all, the task of assessing risk in this population of pervasively developmentally immature and often abuse-reactive youth is highly complex, not to be equated with the task of assessing risk in adults, and hinges on risk predictors that can capture stable and acute risk-relevant changes.

In a recent Tribune-Review article by Cholodofsky (July 2, 2005), it was noted that the Commonwealth of Pennsylvania may spend \$8 million on five (5) civilly committed youth. If we are prepared to spend extraordinary sums of money to register, not to mention civilly commit, young adults for offenses they committed as juveniles, we must take the initial step and invest the money in the research needed to provide the basis for registration and civil commitment – reliable assessment of risk.

There can be little doubt at this point that the potential risk for sexually aggressive behavior posed by juveniles is fully appreciated. With this awareness comes an attendant sense of social responsibility to marshal our forces to address the problem. The problem is highly complex, however, and will not be solved simply by legislative fiat. The first step is an empirically informed and validated procedure for assessing risk among adolescents who evidence a propensity for sexually abusive behavior. Once we have a mechanism for screening out those who are truly dangerous, we can examine the efficacy of a variety of management strategies, including indeterminate detention.

Dissemination of Findings

Beyond the customary ways in which scholarly research is disseminated, through presentations at professional meetings and publications in professional

journals and books, we would strongly encourage the Institute to consider one of its in-house mechanisms. Of the many ways in which NIJ disseminates the findings from grantees' projects, the most appropriate in our case would probably be a Research in Brief, which targets high-level policymakers in addition to researchers. Because of the clear and urgent policy implications of this research, we might also suggest a brief Research for Policy statement.

ACKNOWLEDGEMENTS

The JRI Research Department wishes to acknowledge the invaluable support of the Massachusetts Department of Social Services and National Institute of Justice, without which this research project could never have been conducted.

In particular, we would like to acknowledge the assistance of all Area Office Directors and Staff. We would also like to thank the Criminal System History Board and the Sex Offender Registry Board for their efforts and allowing us to gather invaluable information from their agencies.

In addition, a very special thanks to Senator Stan Rosenberg, Dr. Craig Latham and Dr. Steve Bengis for their tireless advocacy on behalf of the children in the Commonwealth of Massachusetts.

Table of Content

I. Introduction	1-15
II. Method.....	15-24
Background Information.....	15-18
Design.....	18-19
Procedure.....	19-23
Participants.....	23-24
III. Results	24-37
Demographic Characteristics of 4 Groups.....	24-25
Reliability.....	25-25
Survival Analysis	26-27
J-SOAP Scores by Group	27-28
Trichotomization of J-SOAP Distribution & Reoffense.....	28-31
Comparative Efficacy of Static & Dynamic Scales Predicting Reoffense.....	31-32
Hazard Estimates Using Cox Proportional Hazards Model.....	32-33
Outcome Prediction using J-SOAP.....	33-34
ROC Analysis	35-37
IV. Discussion of Findings	38-43
VI. Conclusion.....	43-51
VII. References.....	52-65

VIII. Appendices	66-162
A. Tables 1 – 17.....	67-89
B. Figures 1 - 5.....	90-95
C. Inter-rater Reliability Table	96-98
D. Coding Dictionary	99-119
E. J-SOAP-II Manual.....	120-160
F. JRI Staff.....	161-162

List of Tables & Figures

Table 1	Gender Comparison on Demographic Characteristics.....	67
Table 2	Demographic Characteristics by Group	68
Table 3	Survival Analysis – Summary of Censored & Uncensored Cases	69
Table 4	Product – Limit Survival Estimate (Boys).....	70-71
Table 5	Product – Limit Survival Estimate (Pre-Adolescent Boys).....	72-73
Table 6	Product – Limit Survival Estimate (Adolescent Boys).....	74-75
Table 7	Product – Limit Survival Estimate (Girls)	76
Table 8	J-SOAP Static, Dynamic, & Total Scores by Groups (Boys Only).....	77
Table 9	Full J-SOAP Scale Score, 3 Risk Ranges & Associated Reoffense Rates (Preadolescent Boys).....	78
Table 9A	Full J-SOAP Scale Score, 3 Risk Ranges & Associated Reoffense Rates (Adolescent Boys).....	78
Table 10	J-SOAP Static Score (Scales 1 & 2), 3 Risk Ranges & Associated Reoffense Rates (Preadolescent Boys).....	79
Table 10A	J-SOAP Static Score (Scales 1 & 2), 3 Risk Ranges & Associated Reoffense Rates (Adolescent Boys).....	79
Table 11	JSOAP Dynamic Score (Scales 3 + 4), 3 Risk Ranges & Associated Reoffense Rates	80
Table 11A	JSOAP Dynamic Score (Scale 3 + 4), 3 Risk Ranges & Associated Reoffense Rates	80
Table 12	Cox Regression (All Boys).....	81
Table 12A	Cox Regression (Pre-Adolescent Boys).....	82
Table 12B	Cox Regression (Adolescent Boys).....	82
Table 13	Overview of Test of Null Hypotheses	83
Table 14	Logistic Regression (All Boys).....	84

Table 14A	Logistic Regression (Pre-Adolescent Boys).....	85
Table 14B	Logistic Regression (Adolescent Boys).....	86
Table 15	ROC Analysis (All Boys).....	87
Table 16	ROC Analysis (Pre-Adolescent Boys).....	88
Table 17	ROC Analysis (Adolescent Boys).....	89

Figure 1	Product Limit Survival Function Estimates (Gender).....	91
Figure 2	Product Limit Survival Function Estimates (Boys Age Groups).....	92
Figure 3	J-SOAP Total Score ROC Analysis (All Boys).....	93
Figure 4	J-SOAP Total Score ROC Analysis (Pre-Adolescent Boys).....	94
Figure 5	J-SOAP Total Score ROC Analysis (Adolescent Boys).....	95

Introduction / Literature Review

Crimes of sexual violence are often hidden or invisible to the juvenile justice system (Fromuth, Burkhart, & Jones, 1991). Evidence supporting high invisible rates of sexual assault by youth comes from studies of victims (e.g., Finkelhor, 1979; Showers, Farber, Joseph, Oshins, & Johnson, 1983) and studies of adult sex offenders (e.g., Abel, Rouleau, & Cunningham-Rathner, 1986; Knight & Prentky, 1993; Marshall, Barbaree, & Eccles, 1991). It has been estimated that 20% of all rapes and 30-50% of all child molestations are committed by adolescent males (Becker, Kaplan, Cunningham-Rathner, & Kavoussi, 1986; Brown, Flanagan, & McLeod, 1984; Deisher, Wenet, Paperny, Clark, & Fehrenbach, 1982; Groth, Longo, & McFadin, 1982). Data from multiple sources indicate, moreover, that juveniles who repeat crimes of sexual assault are a relatively small, but notable group (Alexander, 1999; Association for the Treatment of Sexual Abusers, 2001; Becker 1990; Center for Sex Offender Management, 2002; Hunter, 2000; Langstrom & Grann, 2000; Prentky, Harris, Frizzell, & Righthand, 2000; Worling & Curwen, 2000). Overall, the gravity and the prevalence of adolescent sexual aggression and increased attention to the problems posed by sexually coercive adolescent boys and girls have dispelled the notion that this is a problem of insufficient magnitude to warrant empirical attention (Barbaree & Marshall, 2006).

As the Surgeon General's report on youth violence noted, in spite of many years of research that have provided important insights into factors associated with the development of youth violence, research on factors that aggravate and

mitigate the risk of violence remains a clear priority (U. S. Department of Health and Human Services, 2001). Clearly, the same message may be gleaned from the NATO Conference on Multi-Problem Violent Youth (Corrado, Roesch, Hart, & Gierowski, 2002). If research on risk of general violence among juveniles is lacking, research designed to identify specific factors associated with the risk of sexual violence among juveniles is needed even more. In particular, the subtle nuances of dynamic risk predictors, including protective factors that may prevent violence, have received relatively little empirical attention. Dynamic risk factors are potentially changeable with time or level of functioning as opposed to static risk factors, which are unchangeable and are based on history, such as number of prior arrests or victims. Protective factors are those that mitigate risk. Research that focuses on factors that mitigate or buffer risk is needed as well. Overall, research efforts thus far devoted to untangling problems associated with assessment of risk among juvenile sexual offenders fail to match even remotely the presumed gravity of the behavior, as reflected by extreme management strategies such as Pennsylvania's Act 21, which allows the state to civilly commits juvenile sex offenders for one day to life.

Risk Factors Associated with Reoffense

In their recent chapter, Worling and Langstrom (2006) reviewed the extant empirical support for a wide range of risk predictors, separating predictors into those possessing empirical support: 1) deviant sexual interest, 2) prior criminal sanctions for sexual offending, 3) sexual offending against multiple victims, 4) sexual offending against a stranger, 5) social isolation, and 6) failure to

participate in specialized treatment for sexual offending. Those that are ***promising include***: 1) problematic parent-adolescent relationships, and 2) attitudes supportive of sexual reoffending, and those that are identified as ***possible***: 1) high-stress family environment, 2) obsessive sexual interest/sexual preoccupation 3) impulsivity, 4) selection of male victims, 5) negative peer associations, 6) environment supporting an opportunity to reoffend, 7) past sexual assault against a child, 8) threats, violence, or weapons used during a sexual offense, 9) interpersonal aggression, and 10) antisocial interpersonal orientation. Worling and Langstrom (2006) also identified a number of risk predictors as ***unlikely***: 1) history of sexual victimization, 2) history of nonsexual offending, 3) sexual offenses that include penetration, 4) denial, and 5) lack of victim empathy. The literature of presumptive risk predictors for juvenile sex offenders is quite substantial. Rich (2003), for example, listed 136 different risk factors that he gleaned from the clinical and empirical literature. Discerning which of these predictors has adequate cross-study empirical support, however, is complicated by sample heterogeneity (i.e., some studies examined only adolescents while others include varying numbers of pre-adolescents; although most studies include only males, some include females; although most studies are drawn from the juvenile justice system, some come from the child welfare system; some studies focus on residential samples while others use community-based samples). There does, however, appear to be some reasonable consensus regarding those risk predictors that are empirically defensible and those that are not.

In reviewing the risk predictor group classifications provided by Worling and Langstrom (2006), one of the interesting areas of ambiguity is antisociality. According to Worling & Langstrom (2006), antisociality would, at best, be considered *possible* as a risk factor. Antisociality (e.g., having a “socially deviant lifestyle”), however, is one of the two robust dimensions for predicting risk among adult sex offenders, as well as among generic samples of delinquent youth (e.g., Hawkins, Herrenkohl, Farrington, Brewer, Catalano, & Harachi, 1998). Juvenile sexual offenders have also been characterized as high in delinquency and impulsive, antisocial behavior (Ageton, 1983; Awad & Saunders, 1991; Awad, Saunders & Levene, 1984; Becker, Cunningham-Rouleau, & Kaplan, 1986; Fehrenbach, Smith, Monastersky, & Deisher, 1986; Knight & Prentky, 1993; Prentky & Knight, 1993; Shoor, Speed, & Bartelt, 1966; Spaccarelli, Bowden, Coatsworth, & Kim, 1997; Van Ness, 1984). Ageton’s (1983) integrated delinquency model, borrowing from social-control, strain, and social-learning theories, pointed to juvenile sexual offenders as primarily delinquent and hence difficult to distinguish from other delinquents with no known history of sexual assault. A more recent study of chronic delinquents by Spaccarelli, Bowden, Coatsworth, and Kim (1997) found essentially no differences between juveniles arrested for sexual assault and juveniles arrested for nonsexual, violent assault, supporting the earlier study by Ageton (1983).

A number of studies (Kahn & Chambers, 1991; Lab, Shields & Schondel, 1993; Langstrom, 2002; Rasmussen, 1999; Sipe, Jensen, & Everett, 1998; Worling & Curwen, 2000) have shown that a history of nonsexual offending is not

associated with committing a subsequent sexual offense. However, Nisbet, Wilson, & Smallbone (2004), found a significant correlation between a history of nonsexual offenses and sexual reoffense. Indeed, youth with such a history were three times more likely to commit a subsequent sexual offense as an adult.

Delinquency essentially represents a continuum of impulsive, antisocial behaviors, ranging from running away and truancy to serious crimes involving interpersonal violence. From the standpoint of assessing risk, it is a behaviorally complex dimension that may include static risk predictors (e.g., *number of prior offenses, having been arrested before age 16, having committed multiple types of offenses*), stable dynamic risk predictors (e.g., *impulsivity, history of conduct disorder, history of anger management problems*) and perhaps even acute dynamic risk predictors, such as *alcohol and drug abuse*. Perhaps, this very complexity lends ambiguity to its role as a risk predictor among teenagers, known for their developmentally-normative impulsive and risk-taking behavior. Depending on how delinquency is assessed and the composition of the study sampled, delinquency may, or may not, discriminate between *persisters* and *desisters*.

Worling & Curwen, (2000) found sexual interest in children (as assessed by self-reported sexual fantasies of children, child-victim grooming behaviors, and intrusive sexual assault activities) was associated with sexual recidivism. Similarly, Schram, Milloy, and Rowe (1991) found a trend between therapist assessed *deviant arousal* and sexual reoffending. Kenny, Keogh, & Seidler (2001) also found that juveniles with a *prior charge* for sexual offending were

more likely to report deviant sexual fantasies involving young children or the use of force. By contrast, however, Gretton, McBride, Hare, O'Shaughnessy & Kumka, (2001) found that penile plethysmograph (PPG) assessment findings were not related to sexual re-offending. Similarly, Kahn and Chambers (1991) found only a small, nonsignificant difference in deviant arousal between juveniles who re-offended sexually and those who did not. In general, documenting compelling evidence to support the risk-relevance of sexual deviance, particularly when it has been defined in terms of PPG-assessed deviant arousal, has been elusive.

A reasonable explanation for these inconclusive findings was offered by Hunter and Becker, who cautioned that juveniles may not yet have developed a fixed pattern of sexual arousal and interest (Hunter, Goodwin, & Becker. 1994). Another possible explanation is that adolescents are so universally responsive to sexually explicit materials that it is difficult to differentiate normal from deviant arousal. Finally, even if "sexual preference" could be assessed reliably in adolescence, it may only be those youngsters with sexual attraction to much younger children that are identified using deviant sexual interest as a risk factor.

Older age at time of assessment has been positively associated with subsequent sexual offenses (Nisbet, Wilson, & Smallbone, 2004). The authors noted that the younger the offender the more likely the offense was situational or opportunistic. This finding, however, has not been consistently supported in the literature (Worling & Curwen, 2000).

Another factor with support from several studies is *prior sanctions* for sexual offending (Langstrom, 2002; Langstrom & Grann, 2000; Schram, Milloy, &

Rowe, 1992; Ross and Loss, 1991). This factor is, of course, entirely consistent with the adult sexual offender risk assessment literature. Individuals who are apprehended and punished but nevertheless persist in their sexual offending are considered to be at higher risk (Langstrom, 2002; Langstrom & Grann, 2000; Schram et. al., 1991). Again, consistent with the literature on risk among adult sexual offenders, an *offense committed against a stranger or more than one victim* has also been found to be correlated with reoffense (Langstrom, 2002; Smith & Monastersky, 1986; Worling, 2002). Having *multiple victims* and reoffending after a previously charged sexual offense may reflect persistent deviant sexual interests and behavior (Langstrom, 2002; Langstrom & Grann, 2000, Ross & Loss, 1991; Schram et al; 1991).

Youth who are *socially isolated* and/or possess *poor social skills* or have marked deficits in social skills (Cottle, Lee, & Helibrun, 2001; Kenny, Keogh, & Seidler, 2001; Langstrom & Grann, 2000; Lipsey & Derzon, 1998) are generally considered to be at increased risk. As a risk factor, this presumably would target those juveniles with much younger victims.

Juveniles who hold *attitudes supportive of sexual deviancy* (Kahn & Chambers, 1991), along with those individuals who *failed to complete a sexual offense-specific treatment program* (Borduin, Henggeler, Blaske, & Stein, 1990; Seabloom, Seabloom, Seabloom, Barron & Hendrickson, 2003; Worling & Curwen, 2000), are also reportedly at increased risk. *Denial* has been shown to have an inverse relationship to recidivism (Kahn & Chambers, 1991; Langstrom & Grann, 2000; Worling, 2002). As Worling (2005) speculated, “Perhaps some mechanisms

that result in denial of the sexual offense (e.g., extreme shame, embarrassment, or fear of sanctions) also act to reduce the odds of a future sex offense” (p. 18-9).

As with adult sexual offenders, failure to express *empathy* for one’s victim is not predictive of reoffense (Langstrom & Grann, 2000; Smith & Monastersky, 1986). This may be due to the difficulty in measuring empathy reliably. Although problems assessing *empathy* and *remorse* are evident with adults as well, these problems are especially vexing with children and adolescents, because the emergence of the capacity for empathy is age-related. Research clearly supports the general conclusion that adults possess a greater capacity for empathy than children, and that older children are more empathetic and prosocial than younger children. Older children are better able to recognize emotional states in others, are more capable of relating to and sharing others people’s feelings, are better able to feel empathy for different kinds of people, and are better able to express their empathy by being generous toward others. Younger children, by contrast, have greater self-involvement, frequently objectify others, and are more likely to express empathy only toward people that are like themselves in age, ethnicity, and gender. In general, the mechanism that seems to be most frequently identified to explain differences, including age-related differences, in capacity for empathy is perspective taking (i.e., the ability to take someone else’s point of view).

A *history of sexual victimization* (i.e., the youth’s history of having been a victim of sexual assault) has generally not been predictive of re-offense (Hagan & Cho, 1996; Langstrom, 2002; Rasmussen, 1999; Worling & Curwen, 2000).

Although a large proportion of juvenile sex offenders have been sexually abused prior to committing their first offense, the research is quite inconclusive with respect to the predictive efficacy of this adverse life experience (Worling & Langstrom, 2006). Childhood sexual abuse, like other forms of abuse, becomes critical in the presence of a variety of other factors (Kaufman & Zigler, 1987), such as the *age of onset*, the *duration* of the abuse, the child's *relationship* to the perpetrator, the *invasiveness* and / or *violence* in the abuse, the co-occurrence of other types of abuse, the availability of *supportive caregivers*, the *ego strength* of the child at the time of the abuse, and treatment (Prentky, 1999). Thus, sexual abuse may only differentiate between those who are at lower or higher risk of re-offense when it is examined in a more refined way by focusing on one of more of the morbidity factors mentioned above (e.g., age of onset, duration or intrusiveness; e.g., Burton, 2000, 2003). When studies examine the more serious expressions of sexual abuse, such as restricting cases to those involving *early onset* or *penetration*, the results clearly favor predictive efficacy. In general, the role of a history of sexual abuse as a moderator of sexually aggressive outcome appears to be highly complex and interactive with other life experiences.

Similarly, committing a sexual offense against a *male victim* has been inconclusive as a risk predictor among juveniles (Langstrom & Grann, 2000; Rasmussen, 1999; Smith & Monastersky, 1999; Worling, 1995; Worling & Curwen, 2000), as well as adults (Prentky, Knight, & Lee, 1997). Some studies have found higher rates of sexual recidivism among juveniles who have victimized males (Smith & Monastersky, 1986), whereas others have not (e.g. Rasmussen, 1999).

Rasmussen (1999) found higher rates of sexual recidivism among juveniles who had multiple female victims. Worling (1995) found, however, that 75% of juvenile offenders who assaulted one male child reported a history of sexual abuse, compared with 25% of those juveniles who assaulted a female child. Varied results were also reported for past sexual assaults against *a child victim* (Hagan & Cho, 1996; Kahn & Chambers, 1991; Langstrom, 2002; Rasmussen, 1999; Sipe, Jensen and Everett, 1998; Smith & Monastersky, 1986; Worling & Curwen, 2000). Mixed results have also been reported for *use of threats, violence or weapons* in a previous sexual assault (Kahn & Chambers, 1991; Langstrom, 2002).

Juveniles who offend against *same-age peers, and/or adults* tend to have more extensive histories of antisocial behaviors and nonsexual criminal histories and thus resemble generic delinquents (Hunter, 2000, 2006; Hunter, Hazelwood, & Slesinger, 2000). Juveniles who molest younger children, however, are much more likely to “look” sexually deviant, engage in paraphilias and other inappropriate sexual behaviors. They also tend to be more immature, socially inadequate individuals who do not usually have histories of nonsexual offenses or associate with delinquent peers (Hunter, 2000, 2006; Hunter, Hazelwood, & Slesinger, 2000). Thus, the predictive factors associated with risk may be quite distinct for the two groups.

In summary, the empirical literature on the predictive efficacy of risk factors for adolescent sexual offenders is reasonably consistent with the equivalent risk literature on adult sexual offenders. There is strong and consistent support for such static predictors as *prior sanctions* for sexual

offending, having *stranger victims* and having *multiple victims*. Some risk predictors received mixed support, in good part, because they appear to be more narrowly targeting certain types of offenders. To the extent that these types of offenders are represented in the sample, the risk predictors receive support. For example, *social isolation, social immaturity, poor social skills, and inadequate peer relations* characterize juvenile offenders who molest younger children, and not juveniles who assault peers or adults. By contrast, a history of *delinquency* and *impulsive, antisocial behavior* characterizes juveniles who assault peers and adults, and not juveniles who molest younger children. *Sexual deviance* has been a consistently strong risk predictor for adults but seems to be more problematic for juveniles, undoubtedly because, as Hunter, Goodwin, & Becker, (1994) noted, patterns of sexual preference (and deviance) are not fixed in adolescents. Thus, sexual deviance occasionally works as a risk predictor among juveniles, especially those who molest younger children (Hunter & Becker, 1994). A *history of sexual abuse* has received only weak support as a risk predictor for adult sexual offenders and mixed support among juvenile sexual offenders. One reason for the potentially greater utility of sexual abuse history among adolescents is simply that the adverse experience is much more recent for juveniles (i.e., closer in time to the criterion being predicted, namely a new sexual assault). As a predictor, however, sexual abuse remains variable in its efficacy, even with adolescents. A critical issue may be “methodological,” namely how sexual abuse is rated. As noted earlier, sexual abuse history can be an extremely mixed aggregation of experiences, ranging from unwanted touching

to violent penetration. When it is rated dichotomously (presence or absence of any history of sexual abuse), it fails as a predictor. When it is more restrictive, targeting only those with severe histories of abuse, it is more successful as a predictor. Although there are indeed some risk predictors that appear to have comparable utility for adult and juvenile offenders, there are many more predictors that either have limited utility or must be tailored to risk-specific needs of adolescence. It appears, moreover, that a different set of predictors work for juveniles that assault children than juveniles that assault peers or adults. Although there is no risk literature per se comparing adolescents with pre-adolescents, it would certainly appear that there are developmentally-sensitive, risk-relevant differences between these two groups.

Despite the ample literature, both clinical and empirical, on risk factors that may be associated with recidivism among juvenile sex offenders, there are, to the best of our knowledge, only two empirically-driven programs aimed at developing and validating a risk assessment instrument designed for these sexually abusive youth. These efforts include those of Worling and his colleagues, *Estimate of Risk Of Adolescent Sexual Offender Recidivism* (Bourgon, 2002; Worling, 2004; Worling & Curwen, 2001) and Prentky, Righthand and their colleagues, *Juvenile-Sex Offender Assessment Protocol*, (Prentky, Harris, Frizzell, & Righthand, 2000; Righthand, Carpenter, & Prentky, 2001; Righthand, Prentky, Hecker, Carpenter, & Nangle, 2000; Righthand, Prentky, & Knight, Carpenter, Hecker, & Nangle, 2005).

The original version of this risk assessment scale for juvenile sex offenders was developed at Joseph J. Peters Institute (JJPI) in Philadelphia in

1994 (Prentky, Harris, Frizzell, & Righthand, 2000). The risk assessment variables were developed after reviews of the literature that covered five areas: (1) clinical studies of juvenile sex offenders, (2) risk assessment/ outcome studies of juvenile sex offenders, (3) risk assessment/ outcome studies of adult sex offenders, (4) risk assessment/outcome studies from the general juvenile delinquency literature, and (5) risk assessment studies on mixed populations of adult offenders.

The initial construction / validation study of J-SOAP, utilizing a sample of predominantly inner city youth from Philadelphia, yielded encouraging and instructive findings (Prentky et al., 2000). These results along with a review of comments provided by juvenile correctional caseworkers, clinicians, and forensic evaluators in Maine, pointed to areas that required clarification and revision. The wording and scoring criteria for all items were carefully examined for ambiguity, and additional behavioral examples and anchors were included. These changes, detailed in Righthand, et al. (2005), were included in the first Juvenile Sex Offender Assessment Manual (Prentky & Righthand, 2001). More recently, based on the results of the studies described in the Manual, the J-SOAP was revised again. Again, an attempt was made to better anchor items in clear, behavioral terms. These changes are described in detail in the J-SOAP-II Manual (Prentky & Righthand, 2003) (cf. Appendix E).

Four subscales were developed and were intended to capture the two major historical [static] domains that are of importance for risk assessment with this population (Scale I: Sexual Drive/Sexual Preoccupation and Scale II:

Impulsive, Antisocial Behavior), and the two major dynamic areas that could potentially reflect behavior change (Scale III: Clinical/Treatment and Scale IV: Community Adjustment). The latter two subscales were of particular importance, because the original risk assessment protocol was developed to assess not only risk at discharge but change as a function of treatment.

Considering the ample documentation of the risk-relevance of delinquency and antisocial behavior among some juvenile sex offenders (e.g., Hunter, Hazelwood, & Slesinger, 2000; Johnson & Knight, 2000; Kahn & Chambers, 1991; Rubinstein, Yeager, Goodstein, & Lewis, 1993; Smith & Monastersky, 1986), as well as the stability and continuity of such behavior from childhood into adolescence and adulthood in some youth, assessment of impulsive, delinquent, and early onset conduct-disordered behavior was considered a critical part of J-SOAP.

The empirical literature is more *inconclusive* about the role of sexual deviance, sexual drive, and sexual preoccupation as risk factors in juvenile sex offenders. Nevertheless, it seemed critically important during the development stage of J-SOAP to examine preliminarily risk involving highly sexualized and atypical or deviant sexual behavior, particularly among those youth not characterized by delinquency and antisociality. For that reason, considerable attention was paid to the identification of markers that might prove useful as risk predictors for sexualized youth (e.g., Gil and Johnson, 1993). This decision has been rewarded by the predictive validity data from the present study, which yielded strong support for Scale 1.

The latter two scales (scale 3 & scale 4) were considered of particular importance, however, since, unlike adults, adolescents are still very much in developmental “flux.” No aspect of their development, physical, social, sexual, neurocognitive or intellectual development, is fixed or stable. Indeed, even brain development is not complete (Dahl & Spear, 2004). In addition, the life circumstances of adolescents may change rapidly, often within a very short time frame. Thus, the risk “temperature” of an adolescent is arguably much more in flux and unstable than that of an adult, increasing the importance of stable and acute dynamic risk related factors. Refining dynamic risk predictors for juveniles is a consummate challenge and the ultimate quest in improving risk and needs management decisions for this population.

METHOD

Background Information

In 1998, Massachusetts established a program with the principal mandate of examining children and adolescents who have been removed from abusive homes and placed elsewhere, often in foster care, and because of their dysfunctional and frequently abusive backgrounds are at risk to engage in dangerous behavior including those who act out in sexually inappropriate ways, endangering other children. The program, Assessment for Safe and Appropriate Placement [ASAP], was designed to improve the management and care of these children who had begun to engage in sexually inappropriate and/or coercive acts with other children.

The Rosenberg law G.L.c.119 § 33B that was enacted in 1997 mandated the ASAP program in the Department of Social Services (DSS). This program was established to assure that children who are in the care of DSS are placed in the least restrictive, appropriate setting as possible given the youth's history of engaging in sexually coercive or firesetting behavior. Our original study focused on the subsample of youth from the ASAP program that were evaluated for their sexual behavior, not their firesetting behavior. This current follow-up study focused on the same subsample and examined proximal risk to reoffend sexually.

The State appropriation for ASAP included seed money to start a research project aimed at the eventual development of a screening procedure to assess the risk of harm among youngsters who display sexually coercive behaviors. The initial support, beginning in February 2001, and lasting until the end of that fiscal year in July 2001, enabled us to develop a research team and lay out a complex strategy for this undertaking. The National Institute of Justice (NIJ) awarded a two-year grant to complement and support State funding for this research project.

Pertinent findings from our original study were: (1) the youngest youth in our sample evidenced as serious sexually coercive behaviors as the older youth, (2) the girls evidenced a high frequency of sexually inappropriate and coercive behaviors, often comparable to the boys, (3) the girls evidenced a high frequency of non-sexual delinquent behaviors, again often comparable to the boys, (4) repetitive changes in living situations was strongly associated with sexually deviant and coercive behaviors. We found that multiple changes in living

situations over a short period of time were consistently and highly associated with an outcome of sexually inappropriate and aggressive behaviors, more so than either a history of sexual abuse or physical abuse alone. Moreover, the combination of changes in living situations and a history of severe sexual abuse was highly associated with an outcome of sexually inappropriate and aggressive behaviors.

Over the course of the last 18 months we have completed a follow up study on the ASAP sample. That follow-up serves as the basis for this report. As part of the follow-up study, it was our goal to gather as much post ASAP information on as many children as we could that had been in DSS custody and ASAP evaluated since the inception of the ASAP Program in 1998. This is, effectively, a retrospective, 7-year follow up (1998 – 2005). Many of the children who were first ASAP evaluated in 1998 and 1999 and were 14 – 17 years old at the time and are now adults, in 2005. Thus, the task was to obtain reliable proximal outcome information on a sufficiently large and heterogeneous subsample to yield representative groups of “desisters” and “persisters.” Most violence begins in adolescence and ends with the transition into adulthood. It is the childhood onset trajectory that is typically associated with persistent violence into adulthood (Moffitt, 1993). Although these “trajectories” have considerable empirical support when generic samples of delinquents are examined, the unfolding and continuity of sexual deviance and sexual violence remains enigmatic. The only etiologic window into these complex sexually deviant

outcomes is to compare those youngsters who engage in sexually deviant behavior and desist with those who engage in comparable behavior and persist.

Design

We grouped participants into one of four major outcome categories:

- ❖ Group 1: DSS Sexual Reoffense
- ❖ Group 2: Criminal Justice (CJ) Sexual Reoffense
- ❖ Group 3: Criminal Justice Non-Sexual Reoffense, and
- ❖ Group 4: No Reoffense

Groups 1 and 2 were exclusive. Participants were classified into Group 1 when there was clear evidence of a sexual re-offense in the DSS record but NO evidence of any sexual re-offense in any of the criminal justice sources that we relied on. Participants were assigned to Group 2 when they had been charged or arrested for a new sexual offense. The information used for coding purposes was an arraignment date. All arraigned youth were included, even if the charge was dismissed. If there was evidence of a sexual re-offense in both the DSS records and the CJ records, the assigned was to Group 2 (i.e., for classification purposes, a CJ sexual reoffense took precedence). Participants were assigned to Group 3 (CJ nonsexual reoffense) when they had been arraigned for a new non-sexual criminal offense, based on Criminal History Systems Board (CHSB) records, and there was no evidence of a new sexual offense. A new sexual offense always took precedence. If someone were arraigned on both a new sexual and non-sexual offense, he (or she) would have been placed in Group 2. All participants with no CJ or DSS evidence of any new re-offense were placed into Group 4.

Twenty-five cases could not be classified into one of the four groups due to insufficient follow-up information, leaving a total of 797 cases.

Procedure for Data Collection

When follow-up information was inadequate or insufficient for coding, a site visit to the DSS office was scheduled. Occasionally, these time-consuming site visits were avoided when target questions could be answered via a phone call to the social worker at the DSS office. In conjunction with retrieving additional post ASAP information from DSS records and DSS social workers, we worked closely with the Criminal History Systems Board (CHSB) and the Sex Offender Registry Board (SORB). Both agencies allowed us access to their criminal records. We submitted several lists, which eventually included all 822 names, to be cross-checked through their systems. We confirmed a youth's criminal justice involvement from their Criminal Offender Record Information (CORI). The CORI's included information regarding charges, arraignment dates, and dispositions. The only way an individual could be placed in one of the two CJ groups [Group 2 (sexual reoffense) or Group 3 (non-sexual reoffense)] was if there was a CORI indicating that the youth had actually been arraigned for a particular charge. If there was mention in the DSS record of a criminal offense, more often than not, it was supported by a CORI.

Sexual "reoffense" was defined as any new sexually inappropriate or coercive "hands-on" behavior. The word "new" referred to any behavior that came after the ASAP evaluation. Since most of the youth in our sample were not adjudicated, we could not use conventional criminal justice system dispositional

markers (e.g. charge, arrest, conviction, or incarceration). Included in Group 2, were (7) individuals who had been criminally charged with a subsequent hands-off sexual offense (e.g., lewd and lascivious or indecent exposure), post-ASAP, however, these seven individuals were excluded from all analyses examining reoffense (because it was not a hands-on offense) From the standpoint of risk, Groups 1 and 2 were not different (mean total J-SOAP scores of 35.85 and 33.00, respectively) and thus, were combined for purposes of data analysis.

Follow-up time began on the date of the ASAP evaluation and ended on the date of the last documented information that we had on a particular individual. Out of the 822 cases from the original dataset, 25 were unable to be coded and a group assignment was unable to be determined because there was no follow up information. Typically, these were cases where the last known information was the ASAP evaluation, the case has been closed by DSS, and therefore the file was archived, and unavailable to us.

The first task of this project was to create a dictionary that allowed us to examine the proximal outcome differences between the four groups. The focus of this outcome project was twofold: (1) outcome defined in terms of re-offense, or re-commission of sexually inappropriate behavior, and (2) outcome defined in terms of static, stable and dynamic risk factors. The dictionary consisted of 51-89 items, depending upon group assignment. The final version of the coding dictionary covered demographic data, stable dynamic risk factors, response to treatment, the continuation of sexually inappropriate behaviors, penal history, and acute dynamic risk factors at the time of a reoffense, as well as information

about activities that resulted in criminal sanctions (c.f. Appendix D). Our team of coders was comprised of the same individuals who coded the original data, so training was minimal. Although we already had a coding dictionary that had been developed for use with juvenile sex offenders, we had to revise and adapt selected portions of that dictionary specifically for the present project. This task required adapting items for use with younger youth.

Many items from both our original and follow-up dictionaries were derivatives from the Juvenile Sex Offender Assessment Protocol-II (J-SOAP-II). The J-SOAP-II is an empirically-informed assessment guide developed to assist clinicians in identifying factors that may increase or decrease the risk of sexual and criminal nonsexual recidivism by youth with histories of sexually coercive behavior. J-SOAP was designed to be used with boys in the age range of 12 to 18 who have adjudications for contact sexual offenses or have histories of contact sexually coercive behavior that have not resulted in adjudication. By assisting users in identifying relevant areas of risk and patterns among risk factors, the J-SOAP can facilitate the identification of risk-related needs that, if effectively addressed, may reduce the risk of repeat offending and, help these youth develop prosocial, non-abusive relationships and lifestyles.

J-SOAP-II consists of four scales:

- (1) Sexual Drive/Sexual Preoccupation;**
- (2) Impulsive, Antisocial Behavior;**
- (3) Clinical Intervention; and**
- (4) Community Stability.**

Scales 1 and 2 assess risk factors that may be primarily considered fixed or static in nature (e.g., *Prior legally charged sex offenses*, *Number of sexual abuse victims*, *Male child victim*, and *Sexual victimization history* on Scale 1 and *Ever arrested before age 16*, *Multiple types of offenses*, and *History of physical assault and/or exposure to family violence* on Scale 2), though some of the items on these two scales clearly are more dynamic in nature (e.g., *Sexualized aggression* and *Sexual drive and preoccupation* on Scale 1 and *Caregiver Consistency*, and *Pervasive anger* on Scale 2). Scales 3 and 4 assess stable and acute dynamic risk factors. Scale 3, in particular, may function at two levels, tapping both acute dynamic risk (i.e., change in risk status as a function treatment intervention), as well as stable dynamic risk (e.g., relative absence of *Empathy or Remorse* capturing the affective deficits in four-factor, structural models of psychopathy [Forth, Kosson, & Hare, 2003] and poor *Quality of peer relationships* reflecting social skills deficits).

Overall, we were able to code reliably 26 out of the 28 items included in the J-SOAP-II. The two items that we could not assess reliably based on past and present information that we gathered were *Prior Legally Charged Sex Offenses* and *Degree of Planning*, both on Scale 1. *Prior Legally Charged Sex Offenses* could not be coded, since very few of the youth in our sample were legally charged for any sexual offense prior to their ASAP evaluation. *Degree of Planning* is coded on the J-SOAP according to the “modus operandi” of the youth’s sex offenses. We were unable to code from our file data this facet of offense history with adequate reliability.

In the present follow up study, we also encountered some obstacles in the reliable coding of Scale 3 (Clinical Intervention) items. Rather than “bootstrapping” ratings using information that was similar but not precisely faithful to the meaning of the J-SOAP items, we coded Scale 3 items only when those items could be rated with a high degree of reliability. In essence, we choose to sacrifice sample size to insure the integrity of the ratings. Using this approach to coding Scale 3, we ended up with Scale 3 scores on 205 boys, roughly one-third of our total sample of 648 boys. Thus, our analyses using the total J-SOAP score, which includes Scale 3, are based on a sample of 205 boys.

Like any scale that is developed to assess risk, J-SOAP requires ongoing validation on diverse samples. Further revision and adaptation will undoubtedly occur as we learn more about how J-SOAP-II works with different groups (by gender, by age / developmental stage, perhaps by typological status [e.g., rapist or child molester], perhaps by placement [e.g., community-based, child welfare system, juvenile justice system]). Despite significant methodological challenges, we have made notable progress and the returns on predictive validity studies thus far, including the present one, have been very encouraging.

Participants

This report is based on a sample of 822 cases (667 boys, and 155 girls) from all 28 DSS area offices in Massachusetts. The juveniles in our sample ranged in age from 3 to 20, with a modal age of 14 and an average age of 12.4 (boys) and 11.9 (girls) at time of ASAP (cf. Table 1). Age at first hands-on sex offense occurred, on average, two years prior to the ASAP evaluation. The

average age at first hands-on sex offense was 10.26 for the boys [$SD = 3.21$] and 9.85 for the girls [$SD = 3.47$]. The majority of the sample was made up of Caucasians (60% male and 55% female). The girls had a higher proportion of mixed race (e.g., Cape Verdean, Portuguese, Mulatto) youth (23% vs. 11%). IQ was coded as the highest Full Scale (FS) score reported in the youth's DSS record. Most of the juveniles had IQ scores ranging from borderline average to average. The mean FS IQs for the boys and girls were 90.46 [$SD = 16.04$] & 88.17 [$SD = 14.41$], respectively, with IQs ranging from 40 - 134 for the boys and 50 - 126 for the girls.

Results

Demographic Characteristics of Four Groups

The demographic characteristics of the four participant groups are provided in Table 2. Groups 1, 2, & 3 all have roughly equal proportions of boys (88-90%) and girls (10-12%). Only Group 4, the non-reoffenders, has a different gender composition (75% boys and 25% girls). The four groups were non-significantly different with respect to IQ. The average Full Scale IQ ranged from 85.9 (Group 2) to 90.8 (Group 3).

Racially, the make-up of the groups differ somewhat. Group 1 is predominantly Caucasian (60%) with all other racial groups equally accounting for the remaining 40%. By contrast, Group 2 is 46% Caucasian and 25% Hispanic. Group 3 is similar to Group 2, with 51% Caucasians and 23% Hispanics. Group 4, the non-reoffenders, had the highest proportion of Caucasians (63%) and the lowest proportion of African-Americans and Hispanics (20.5% combined). By

contrast, African-Americans and Hispanics, in combination, accounted for 38-39% of Groups 2 & 3.

Groups 1 & 2 are non-significantly different with respect to IQ, racial composition, proportion of boys and girls, school stability, or the score on our Global Adjustment Index. The two groups did differ, however, with respect to age. Group 1, the DSS sexual reoffenders, committed their first hands-on sexual offense at a younger age (average 8.94 vs. 11.00) and thus were ASAP-evaluated at a younger age (average 10.79 vs. 13.82). As previously mentioned, since Groups 1 and 2 were quite similar, except for onset age, we combined the two groups for purposes of analyzing re-offense. A total of 145 (18.2%) participants in the sample were classified into Groups 1 or 2 as sexual re-offenders. Notably, however, 117 of the 145 (or 81%) were classified to Group 1. In-other-words, the vast majority of the youth in our sample who re-offended sexually were not known to the criminal justice system.

Reliability

Inter-rater reliability was calculated as the percent of agreement between two independent, “blind coders” using a random selection of 15% ($n = 20$) of the 797 follow-up cases. Appendix C lists percent agreement for all 66 follow-up variables used in the analyses described in this report. Overall, 65 variables (98%) had good to excellent agreement ($\geq .80$). Of those 65 items, the percent of agreement for 54 fell between 1.00 - .91, while the percent of agreement for the other 11 fell between .80 - .89. One variable (quality of peer relationships) had moderate agreement of (.79).

Survival Analysis

Survival functions were estimated using the Kaplan-Meier product-limit method, which makes no assumptions about the form of the estimated function. We provide a summary of censored and uncensored cases and failure rates for boys and girls separately, followed by an analysis of pre-adolescent boys and adolescents boys separately, in Table 3. Table 3 also includes the log-rank test of the null hypothesis that there is no difference between the boys and girls (or between the pre-adolescent and adolescent boys). The log-rank test is very similar to the Mantel-Haenszel test. Product – limit survival estimates for those groups are provided in Table 4 (all boys), Table 5 (pre-adolescent boys only), Table 6 (adolescent boys only), and Table 7 (all girls). Since only 13 girls failed, we could not further examine that sample by age, as we did for the boys.

A total of 116 boys re-offended sexually (19% of the sample), extending over a period of 67 months, yielding a sexual failure rate of 27.6%. Slightly less than half of the failures (49%) occurred during the first 12 months, and 80% of the failures occurred within the first 24 months. Although 9 of the boys (7%) re-offended 4 to 5 years after the ASAP evaluation, the vast majority who re-offended sexually (93%) did so within the first 3 years.

Among the pre-adolescent boys only ($n = 331$), 79 re-offended sexually (24% of the sample), extending over a period of 67 months, yielding a sexual failure rate of 32.6%. Over three-quarters of the preadolescent failures (78.5%) occurred within the first 24 months. Only 5 of the pre-adolescent boys (6.3%) re-offended after the 36th month.

Among the adolescent boys only ($n = 220$), 29 re-offended sexually (13.2% of the sample), extending over a period of 63 months, yielding a sexual failure rate of 22.0%. Over eight-five percent of the adolescent failures (86.2%) occurred within the first 24 months. Only 3 of the adolescent boys (10.3%) re-offended after the 36th month.

A total of 13 girls re-offended sexually (9% of the sample), extending over a period of 26 months, yielding a sexual failure rate of 10.10%. Close to two-thirds of the failures (61.5%) occurred during the first 12 months, and 93% of the failures occurred within the first 24 months. Thus, for both the boys and girls, the vast majority of sexual re-offenses occurred within 24 months of the ASAP evaluation. Common tests of equality, however, point to significant differences between the survival curves (e.g., Logrank = 8.78, $df = 1$, $p < .003$; $-2\log(LR) = 11.99$, $df = 1$, $p < .001$).

The two noteworthy observations are: (1) the vast majority of those who failed did so within the first 24 months [78.5% of the pre-adolescent boys; 86.2% of the adolescent boys; 93% of the girls], and (2) the highest failure rate was observed among the pre-adolescent boys.

J-SOAP Static, Dynamic, & Total Scores for each of the 4 Groups.

Average J-SOAP scores, Scales 1 + 2 (static), Scales 3 + 4 (dynamic) and the full-scale score (Scale 1 – 4) are provided in Table 8. Range test, Student-Newman-Keuls (SNK) examining group differences are notated with superscripts. In no case are Groups 1 & 2 significantly different. In all cases, Groups 1, 2, and 3 scored significantly greater than Group 4 (the no reoffense group). On Scales 1 +

2, Groups 1 and 2 are significantly greater than Group 3 (non-sexual reoffense). On Scales 3 + 4 and on the J-SOAP total score, Group 1 is significantly greater than Group 3.

Trichotomization of J-SOAP Scale Distributions and Re-offense

The distribution of J-SOAP full-scale scores was divided into three equal groups for the adolescents and separately for the pre-adolescents. As noted, the distinction between adolescent and pre-adolescent was made using the variable Age at First Known Hands-on Sexual Offense. The preadolescent - adolescent split was <12 and 12 –17. Tables 9 and 9A report the proportion of each of the J-SOAP defined risk groups that re-offended sexually. A corresponding analysis could not be done for the girls, since there were only 13 girls that re-offended.

As noted, Scale 3 was a delimiter on the number of cases with a J-SOAP full scale score. Since Scale 3 could only be coded reliably on about one-third of the sample of boys (204 out of 667), that “N” (204) became the number of youth with full scale J-SOAP scores. Although J-SOAP does not require that a child be in treatment to complete Scale 3, for-the-most-part, it was the youth that had been referred to treatment that had adequate data for coding Scale 3 items. We examined whether this subgroup of boys with a full J-SOAP score differed in risk from the larger group of boys that could not be coded on Scale 3. We found that this subgroup of 204 boys scored significantly higher in risk (i.e., a significantly higher proportion of these youth re-offended sexually than those youth who could not be coded on Scale 3) ($\chi^2 = 9.31, df = 1, p < .005$). Of those with no known sex offender specific treatment exposure, 16.2% committed another sex

offense. Of those coded on Scale 3, 26.5% re-offended sexually. There are two possible explanations. The most plausible is that those youth who were initially deemed at greater risk were the ones that were provided sex offender-specific therapy. This study did not look at treatment efficacy, and, despite the seeming inefficacy of the intervention, we cannot examine or even comment on the question of treatment effectiveness. We did not code for when treatment took place, location of treatment, duration of treatment, or type of treatment. The second unavoidable explanation has to do with system factors such as availability of bed space, or lack thereof, insurance matters and limited programming availability for youth with sexual behavior problems.

As may be observed in Table 9, the lowest risk group for the pre-adolescents, with a JSOAP score ranging from 6 to 25, had a 4.5% sexual re-offense rate. The equivalent range (8 – 24) and re-offense rate (7.7%) was similar for the adolescents. The middle or “moderate” group occupied a narrow band of scores (26 – 33 for the pre-adolescents and 25 – 33 for the adolescents), with re-offense rates between 10 – 20% (19.6% for the pre-adolescents and 12% for the adolescents). The “high” group, with J-SOAP scores ranging from the mid-thirties and greater, had sexual re-offense rates exceeding 50% (60% for the pre-adolescents and 52% for the adolescents). With sexual re-offense as the dependent variable, the Eta value (nominal by interval) was .50 for the pre-adolescents and .43 for the adolescents. The Spearman correlation between re-offense and the J-SOAP risk group was .51 for the pre-adolescents and .42 for the adolescents.

It is evident from looking at the distribution of J-SOAP scores that our current sample is skewed toward higher risk. As may be observed in Tables 9 and 9A, one-third of the sample accounts for one-half of the full scale range for both pre-adolescents and adolescents (e.g., among the adolescents, the full range is 8 – 45 and the range for the “low” risk group is 8 – 24). The same is true for the pre-adolescents. Skewness was $-.254$ ($SE = .276$) for the adolescents and $-.499$ ($SE = .203$) for the pre-adolescents.

The distribution of J-SOAP static scores (Scales 1 + 2) was also divided into three groups for the adolescents and separately for the pre-adolescents. As may be observed in Table 10, the lowest risk group for the pre-adolescents, with a score ranging from 2 to 12, had a 9.0% sexual re-offense rate. The equivalent range (3 – 12) was similar for the adolescents with a lower re-offense rate (3.7%). The moderate group occupied a narrower range of scores (13 – 16 for both the pre-adolescents and the adolescents), with re-offense rates again higher for the pre-adolescents (15.3% for the pre-adolescents and 8.0% for the adolescents). The high group, with J-SOAP scores ranging from 17 – 24 for both the pre-adolescents and adolescents, had corresponding sexual re-offense rates of 38.5% (pre-adolescents) and 25.5% (adolescents). With sexual re-offense as dependent, the Eta value was .30 for the pre-adolescents and .27 for the adolescents. The Spearman correlation between re-offense and the J-SOAP risk group based on Scales 1 & 2 was .298 for the pre-adolescents and .271 for the adolescents.

The distribution of J-SOAP dynamic scores (Scales 3 + 4) was also divided into three groups for the adolescents and separately for the pre-adolescents. As may be observed in Table 11, the lowest risk group for the pre-adolescents, with a score ranging from 0 to 9, had a 6.4% sexual re-offense rate. The range for the adolescents (1- 9) was the same, with a higher re-offense rate (12.5%). The range for the moderate group (10 – 15) was the same for the pre-adolescents and the adolescents, with similar re-offense rates (18.6% & 16%, respectively). The range for the high group (16 – 23) was again the same for pre-adolescents and adolescents, with higher re-offense rates among the preadolescents (60% & 40.7%, respectively). With sexual re-offense as dependent, the Eta value was .51 for the pre-adolescents and .30 for the adolescents. The Spearman correlation between re-offense and the J-SOAP risk group based on Scales 3 & 4 was .50 for the pre-adolescents and .28 for the adolescents.

Comparative Efficacy of Static & Dynamic Scales for Predicting Re-offense

In simple regression, using sexual re-offense as the dependent variable and two predictors (static score [Scales 1 + 2] and dynamic score [Scales 3 + 4]), the dynamic risk predictors outperformed the static risk predictors for both the pre-adolescents and the adolescents. Among the pre-adolescent boys, the beta for dynamic risk predictors was .405 ($t = 4.66, p < .001$) and the beta for the static risk predictors was .138 ($t = 1.59, p < .114$). Among the adolescent boys, the beta for dynamic risk predictors was .286 ($t = 2.27, p < .03$) and the beta for the static risk predictors was .138 ($t = 1.10, p < .276$). In subsequent stepwise regression analyses in which the four J-SOAP scales were entered, the only scale included

in the model for adolescents was the dynamic Scale 4 ($\beta = .459, t = 4.44, p < .000$). For the pre-adolescents, three of the scales were entered into the final model: Scale 1 ($\beta = .280, t = 3.50, p < .001$), Scale 3 ($\beta = .171, t = 1.83, p < .07$) and Scale 4 ($\beta = .306, t = 2.98, p < .003$). Again, both Scales 3 and 4 reflect dynamic risk.

Hazard Estimates using the Cox Proportional Hazards Model

We employed the Cox model, a regression method for survival data, to estimate the hazard ratios and confidence intervals for each of the J-SOAP scales using the boys only, followed by re-analysis using only the pre-adolescents and then the adolescents. We once again subdivided the full sample of boys into pre-adolescent and adolescent. As explained above, pre-adolescents were those who committed their first known sexual hands-on offense between ages 3 and age 11. Adolescents were those who committed their first known sexual hands-on offense between the ages of 12 – 17. The hazard ratio is an estimate of the ratio of the hazard rate for those who re-offended sexually to those who did not. Recidivism can be operationalized as a hazard rate, or the conditional probability of failure at time t , in this case the probability that a post-ASAP youngster will reoffend sexually at time t (Prentky, Knight, Lee, & Cerce, 1995). In this model, the independent variable is the categorical J-SOAP scale score.

Tables 12, 12A, & 12B present the maximum likelihood estimates for each of the J-SOAP scales separately and the total scale score for the full sample of boys, the pre-adolescent boys alone, and the adolescent boys alone, respectively. Table 13 provides two tests of the null hypothesis ($\beta = 0$) for each analysis. The two tests included in Table 13 are the Likelihood Ratio (*LR*), a

goodness-of-fit test that approximates a chi square distribution, and Wald, a test that is commonly used to determine whether an effect exists, also approximating a chi square distribution.

When the entire sample of boys was examined, the Hazard Ratio (*HR*) for the total J-SOAP score was 7.62. Scale 1 taken alone was comparable (*HR* = 7.86). Among the pre-adolescents, Scales 1 (*HR* = 6.34), Scale 3 (*HR* = 4.53, Scale 4 (*HR* = 4.35), and the total scale (*HR* = 9.97) were all highly effective. Among the adolescents, Scale 1 (*HR* = 13.07), Scale 2 (*HR* = 3.43), Scale 4 (*HR* = 5.70), and the total scale (*HR* = 5.76) were quite effective. When we examine the age-split groups (Tables 12A & 12B), there are two important findings. Across all three analyses – for both the combined and split samples – Scales 1 & 4 work comparably and quite effectively. Similarly, the total scale score also works comparably and effectively. Scales 2 & 3 work differently, however. As expected, Scale 2, which assesses delinquency and impulsive antisocial behavior, is not effective with pre-adolescents (*HR* = 1.35) but is effective with adolescents (*HR* = 3.43). By contrast, Scale 3, which assesses treatment-related dynamic factors, is ineffective with the adolescents (*HR* = 1.86) but is effective with the pre-adolescents (*HR* = 4.53).

Outcome Prediction Using J-SOAP

Logistic regression was used to predict the binary dependent outcome variable (sexual reoffense). The independent variable was the individual J-SOAP scale scores. Tables 14, 14A, and 14B present estimates and standard errors for the individual parameter and associated intercept, the Wald chi square, which is a

test of equality of the logit coefficients (i.e., unstandardized logistic regression coefficients, referred to in the tables as parameter estimates) and can be interpreted as an effect size indicator, and the Likelihood Ratio, a general test of the null hypothesis.

Although all four scales individually predicted outcome, along with the total score, *for the full sample of boys*, the Wald values were clearly the largest for Scale 1 and Scale 4, with Scale 3 evidencing a difference between the subgroups of boys, and Scale 2 being comparatively weak for both subgroups. Among the pre-adolescents (Table 14A), there are large, highly significant Wald values in all analyses except for Scale 2, which is non-predictive. By contrast, among the adolescents (Table 14B), Scales 1 and 4 are highly significant, followed by Scale 2, with Scale 3 being non-significant (non-predictive). Thus, the static Scale 1 and the dynamic Scale 4 were highly effective both for the pre-adolescents and the adolescents. The dynamic scale 3 was also very effective for the pre-adolescents but not for the adolescents. Predictably, in this child welfare sample, the static Scale 2 (delinquent and antisocial behavior) was not effective for either subgroup. With regard to Scale 3, as we explained above, power was significantly reduced due to our inability to code reliably about two-thirds of the boys on the Scale 3 items. Of the 216 boys coded on Scale 3, 140 were pre-adolescents and 76 were adolescents. Thus, our pre-adolescent Scale 3 sample was roughly twice the size as the adolescent Scale 3 sample. This sample size difference and the resultant diminished statistical power may have accounted for the failure to find Scale 3 efficacy in the smaller group of adolescents.

Predictive Accuracy as Assessed by ROC Analysis

The Receiver Operating Characteristics (ROC) curve estimates predictive accuracy by plotting sensitivity by 1-specificity. Sensitivity is the true positive rate of prediction (i.e., how likely the prediction will be positive when the person is truly dangerous). Specificity is the true negative rate of prediction (i.e., how likely the prediction will be negative when the person is truly not dangerous). Thus, the ROC curve captures both types of potential error (false negatives and false positives). Although there is no uniformly accepted index of accuracy for predictive models using dichotomous dependent variables (Ash & Schwartz, 1994), the C statistic, derived from ROC analysis, is generally regarded as an index that should be reported (Harrell, Lee, Califf, Pryor, & Rosati, 1984). The C statistic reflects the area under the curve (AUC) derived by plotting sensitivity by 1 – specificity. AUC corresponds to the probability of accurately predicting that a randomly selected, truly dangerous individual is more likely to be dangerous than a randomly selected, truly non-dangerous individual. As a basis for comparison, Mossman (1994), examined 58 studies of violence prediction, finding that the median AUC for all 58 studies was 0.73, and the weighted average was 0.78. Chance prediction would yield an AUC of 0.50. To be sure, of course, the studies reviewed by Mossman involved prediction of violence in adult population. To the best of our knowledge, there are no equivalent AUC guidelines for predicting violence among children. One might surmise, however, given the daunting problems associated with accurate estimation of risk of violence in children, that the AUC values would be smaller.

Table 15 presents the results of the Receiver Operating Characteristics (ROC) analysis using the entire sample of boys. Figures 3, 4, and 5 depict the ROC curves for the prediction of sexual recidivism using the full J-SOAP scale score. Figure 3 is for the entire sample of boys and Figures 4 & 5 are for the pre-adolescents and adolescents separately.

The *C* (AUC) value when the J-SOAP full scale score is used to predict sexual recidivism is .809 (cf. Table 15). Taken individually, Scale 1 alone has a comparable *C* value of .807. The *C* value for Scale 4 as well, .772, is quite high. Notably, the *C* value for Scale 2 alone was poor (.571). Table 15 also provides the range of probability levels that yield maximum predictive accuracy (greatest sensitivity and greatest specificity, or fewest numbers of false positive and false negative errors). For the J-SOAP total score, the ideal *p* level range is from .24 to .32. At its best, the J-SOAP total score provided a sensitivity of 83.7 with a corresponding specificity of 73.3 (*p* level of .24) or a sensitivity of 71.4 and a corresponding specificity of 80.0 (*p* level .30). When the scales were used independently, the ideal *p* levels were roughly .15 to .22.

Table 16 presents the results of the Receiver Operating Characteristics (ROC) analysis for the pre-adolescent boys only. Quite remarkably, the *C* value when the J-SOAP full-scale score is used to predict sexual recidivism was even larger (.824). Three of the individual scales, Scales 1, 3, and 4, all had *C* values at or above .75. Not surprisingly, Scale 2, alone did poorly, with a *C* value of .553. For the J-SOAP total score, the ideal *p* level range for the pre-adolescents was from .28 to .32. At its best, the J-SOAP total score provided a sensitivity of 84.8

with a corresponding specificity of 73.8 (p level of .28) or a sensitivity of 75.8 and a corresponding specificity of 76.2 (p level .30).

Table 17 presents the results of the Receiver Operating Characteristics (ROC) analysis for the adolescent boys only. The C value when the J-SOAP full-scale score was used to predict sexual recidivism was .803. Two of the individual scales, Scales 1 and 4, had high C values at or above .81. Scales 2 and 3, performed less well, with C values of .671 and .643, respectively. For the J-SOAP total score, the ideal p level range for the adolescents was from .22 to .26. At its best, the J-SOAP total score provided a sensitivity of 78.6 with a corresponding specificity of 77.8 (p level of .24).

As noted above, based on the summary findings of Mossman (1994), these C values for J-SOAP, for the full sample of boys, as well as the subgroups of adolescents and pre-adolescents examined separately, are remarkably high (C : .809, .824, .803, respectively). These C values correspond to Cohen's d (1988) values of roughly 1.24 to 1.30, and point-biserial correlations (r_{pb}) of .528 to .545 (Rice & Harris, 2005). A large effect size, as defined by Cohen (1988), would be a d of .80 or higher and the corresponding r_{pb} , assuming a base rate of 25%, would be .327 (Rice and Harris, 2005). We regard these results are quite remarkable, given the extraordinary methodological problems associated with assessment of risk in samples of adolescent sex offenders. These results are comparable to the best results reported on the Violence Risk Appaisal Guide (VRAG), a seasoned, much researched instrument for assessing risk of violence among adults (Rice & Harris, 2005).

DISCUSSION

This grant project represents the continuation of ongoing programmatic research, initiated in 2001, on a child protection sample in the Commonwealth of Massachusetts. All of the children were in the custody of the Department of Social Services and all had been flagged for a special evaluation (Assessment for Safe and Appropriate Placement; ASAP) for those identified as posing a risk by virtue of their sexually inappropriate and coercive behavior. The mission of this research has been to develop and validate risk assessment protocols for juvenile and pre-adolescent sexual offenders in order to improve discretionary and management decisions for these children. The scientific basis for this research on risk assessment with juvenile sex offenders is programmatic work begun by these same investigators in 1994 in Philadelphia. This early research gave rise to the Juvenile-Sex Offender Assessment Protocol (J-SOAP), which has been the subject of at least 8 known prior validity studies in four states. This project, however, reflected the first opportunity to gather data on a sufficiently large number of persisters to examine *predictive* validity.

Beginning in 2001, we gathered file data on 822 boys and girls, all wards of the Department of Social Services who had been flagged for an ASAP by virtue of their sexually inappropriate behaviors. Over the course of the last 18 months we conducted a follow up study on the ASAP sample. That follow-up serves as the basis for this report. In addition to a relatively large sample of persisters, this project has two additional unique features, a large number of girls (n = 155) and

a large enough sample of boys to permit splitting into pre-adolescents and adolescents.

Although the follow-up period extended 89 months ($M = 34.88$, $SD = 19.35$), the vast majority of persisters re-offended within 36 months (107 of 166 boys (92%), and 100% of the 13 girls). Indeed, a substantial proportion of the boys (93, 80%) and girls (12, 92%) reoffended within 24 months. At the end of the study, the sexual failure rate for the boys was 27.6% and 10.1% for the girls. The survival curves for the two groups were significantly different (Log-Rank = 6.32, $p < .01$; $-2\text{Log}(LR) = 6.92$, $p < .01$). The failure rate for the adolescent boys was 22%, with 86.2% failing within the first 24 months. By contrast, the failure rate for the pre-adolescent boys was 32.6%, with 78% failing within the first 24 months. The survival curves for these two groups were significantly different (Log-Rank = 7.43, $p < .01$; $-2\text{Log}(LR) = 6.79$, $p < .01$) as well. Overall, the three most evident findings are: (1) rapidity of reoffense for those who persisted, (2) the rapid desistence of the girls; the girls represented 18% of our original sample but only 9% of the cohort of girls re-offended sexually (10% failure rate), and (3) the significantly higher failure rate of pre-adolescents compared with adolescents (32.6% vs. 22%), essentially providing further support for the early onset persistence trajectory.

In the general delinquency literature, there is a robust finding that persistence into adulthood and/or degree of violence are associated with an early age of onset of antisocial behavior (e.g., Lipsey & Derzon, 1998; Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998; Sullivan, Veysey, &

Dorangrichia, 2003). Although it certainly appears from the present findings that early onset of sexually inappropriate and coercive behaviors is associated with the persistence of sexual offending, longitudinal studies into adulthood are required.

Using a trichotomization of the distribution of J-SOAP scores, we created three risk categories (“low,” “moderate,” and “high”) and examined those risk categories by reoffense rates. This nominal 3-group categorization yielded corresponding sexual reoffense rates of Low (4.5%), Moderate (19.6%), and High (60%) for pre-adolescents and Low (7.7%), Moderate (12%), and High (52%) for adolescents. Similar results were obtained when we examined a 3-group breakdown resulting from trichotomizations of distributions of static score and dynamic scores. In general, the “low” risk group had a corresponding sexual re-offense rate of 10% or less, while the “moderate” risk group had a corresponding sexual re-offense rate of 15% - 20%. Among the pre-adolescents, the “high” risk group had sexual re-offense rates ranging from 60% for the full score and 60% for the dynamic score alone to 38.5% for the static score alone. Among the adolescents, the “high” risk group had sexual re-offense rates ranging from 52% for the full score to 40.7% for the dynamic score alone to 25.5% for the static score alone. As was pointed out earlier, our sample is negatively skewed (skewed in the direction of risk), such that a disproportionate number of youth fall at the higher end of the risk range. Thus, on two accounts, the results from this study may not be readily generalizable: (1) the system (child welfare) from which our sample derives may be quite different from youth drawn from the juvenile

justice system, and (2) the high base rate for sexual re-offense. From the standpoint of assessing risk, our child welfare population is certainly unique in one noteworthy respect. The youth in our sample were not distinguished by notable track records of delinquent and antisocial behavior, as one might expect to find in a juvenile justice population. By contrast, our sample was distinguished by a considerable history of sexually deviant and coercive behavior. Consequently, among the static scales, Scale 1, which assesses sexual deviance, sexual preoccupation, and sexual drive, predicted re-offense very effectively, while Scale 2, which assesses antisociality, predicted poorly. Since a large proportion of our youth were in the community, the dynamic Scale 4, which assesses adjustment in the community, was a very strong predictor of re-offense. Similarly, among those youth that we could code on Scale 3, which assesses clinical intervention, that scale worked quite effectively for predicting re-offense.

Scale 3 appears to be an unexpectedly complex set of risk predictors, perhaps functioning at multiple levels. Righthand, Knight, & Prentky (2002), along with Knight & Sims-Knight (2003), speculated that the J-SOAP Scale 3 may serve a dual purpose as an acute dynamic indicator of change as a function of treatment (its original intended purpose), as well as a stable dynamic indicator of traits associated with "arrogant and deceitful interpersonal style" (Cooke and Michie, 2001). As noted by Righthand, Prentky, Knight, Carpenter, Hecker, & Nangle (2005), "the bifurcation of Factor I of Hare's (1991) Psychopathy Checklist, as proposed by Cooke and Michie (2001), may be an even more critical distinction

for juveniles than for adults, since the identification and targeting of specialized intervention of “interpersonal” and “affective” features of psychopathy may be more favorable with youngsters than with adults.” (pp. 23-24) The risk relevant findings for the boys and girls in the Prentky, Righthand, Pimental, & Cavanaugh (2005) study regarding child maltreatment and caregiver instability, as well as deficits in empathy and remorse observed in Prentky et al. (2005) are consistent with these hypotheses.

For purposes of this project, we have focused primarily on the most important question of predictive validity using logistic regression and ROC analyses. As noted, these analyses provide strong evidence for the predictive validity of the J-SOAP with remarkably high C values from the ROC analyses. Although J-SOAP was developed for adolescents, the scale worked very well, indeed even better, with the pre-adolescents.

Martinez, Rosenfeld, & Flores (2004) looked at 61 male adolescents in the metropolitan New York City area who had been accused or convicted of sexually abusive behavior. Although Scale 4 alone was significantly correlated with recidivism ($r = .48$), the J-SOAP total score and Scale 1 were significantly correlated with violence during the index offense ($r = .35$ & $.36$, respectively). In a study of 153 male adolescents in the custody of the Maine Department of Corrections, Hecker, Scoular, Righthand, & Nangle (2002) reported a Scale 1 ROC C value of $.79$. In another path analytic study employing the same Maine sample, Righthand, Knight, & Prentky (2002) found that Scale 1 and Scale 2 together predicted the amount of force used in the index offense. In a study of 256 male

adolescents in the Virginia Department of Juvenile Justice, Waite, Pinkerton, Wieckowski, McGarvey, & Brown (2002) reported that a modified Scale 2 significantly predicted re-arrest in a ten-year follow-up. Unfortunately, there is a paucity of empirical studies on risk prediction with juvenile sexual offenders. It is thus difficult to draw direct comparisons between the results reported here and other studies in the literature. Clearly, this is a much needed area for empirical scrutiny.

CONCLUSION

Broad stroke solutions to sexual offending invariably fail to account for the marked heterogeneity among sexual offenders. Sexual offenders vary in every way imaginable, including their risk of repeated offending and their responsiveness to societal interventions. This is especially true for juveniles. Even under “normal” conditions, adolescence is a time of extraordinary maturational change in virtually all domains, from physical to cognitive, social, sexual, and emotional. There is a large literature documenting the pervasive developmental “flux” of adolescents. Even the central nervous systems of adolescents are immature. A recent conference hosted by the New York Academy of Sciences was devoted to the topic of adolescent brain development (proceedings published in *Annals 1021* by The Academy; Dahl & Spear, 2004). In addition, there are marked changes in both reproductive and stress hormones that are associated with maturational changes in sexual arousal, emotional intensity and lability, changes in sleep and appetite, and risk taking behaviors. As Dr. Steinberg (2004) noted, “increased risk taking in adolescence is normative,

biologically driven, and inevitable,” (p. 57). Adolescence is characterized, even under the best of conditions, by poor decision-making, as rational decisions give way to intense emotions. Dr. Dahl (Dahl, 2004) remarked that, “Adolescents make a lot of decisions that the average 9 year old would say was a dumb thing to do” (p. 19). In addition, there is a complex social chemistry in which peers become powerful influences on behavior. In sum, adolescence is a developmental twilight zone between childhood and adulthood that is often characterized by radical emotional changes in response to hormonal shifts, high-intensity feelings, emotionally-charged, impulsive, risky behaviors, and poor decision –making. Dr. Dahl commented that, “It’s like turbo-charging an engine without a skilled driver,” (p. 19), (Dahl, 2004). There is a profound lack of synchrony between the physically mature body of the adolescent – the engine in Dahl’s metaphor – and the immature mind and nervous system of the adolescent – the unskilled driver. Adolescence is a time of change, and change cannot be captured by static or fixed risk predictors. Optimal risk prediction in this population must take into account the normative, pervasive developmental flux that defines this transitional period in our lives.

To complicate matters, many of the youth that are assessed for risk have been subjected to varying degrees of maltreatment. Childhood abuse and maltreatment is a robust, and many would say universal, risk factor in antisocial behavior. In addition to the obvious emotional and psychological impact of maltreatment, there is a substantial literature documenting permanent brain damage that may be associated with early and protracted maltreatment (DeBellis,

2004; Perry, 1001, 2001a; Teicher, 2001; 2002). Such abuse produces a cascade of stress-related hormones (principally cortisol and adrenalin) in the young, developing brain, permanently altering the development of certain structures (e.g., hippocampus, corpus callosum, and prefrontal cortex). All-in-all, the task of assessing risk in pervasively developmentally immature, often abuse-reactive, youth is highly complex, not to be equated with the task of assessing risk in adults, and hinges on risk predictors that can capture stable and acute risk-relevant changes. In sum, the cardinal distinguishing feature of risk modeling with juveniles is their developmental immaturity.

In addition to the aforementioned problem of the inherent instability associated with changes in development coupled with the chaos in the lives of these juveniles, it is clear that some risk predictors simply work much better in childhood than adolescence and visa versa. This was clearly illustrated in the Surgeon General's report (U. S. Department of Health and Human Services, 2001), wherein the effect sizes (ES) for risk predictors change, sometimes dramatically, when applied to 6-11 year olds and then applied to 12-14 year olds. Some risk factors appear to remain constant across these two age groups, while some are much stronger among the 6-11 year olds, and some are much stronger among the 12-14 year olds. Substance abuse, for instance, has an *ES* of .30 for the 6-11 year olds and .06 for the 12-14 year olds. Conversely, antisocial peers has an *ES* of .37 for the 12-14 year olds and .04 for the 6-11 year olds. Clearly, risk models must be developmentally-sensitive.

This was clearly evident in the present study, wherein two of the J-SOAP scales “flipped” in predictive importance, depending upon whether they were applied to pre-adolescents or adolescents. Predictably, Scale 2, which assesses delinquency and juvenile antisocial behavior, worked much better with adolescents than with pre-adolescents. Unpredictably, Scale 3, which assesses factors associated with response to treatment, worked much better for pre-adolescents than with adolescents. Although J-SOAP, as a whole, did a remarkably good job of predicting sexual reoffense with children (pre- adolescents ranging in age from 3 to 11 at the time of their first known hands-on sexual offense), clearly more work is required to reduce the weight given to static risk factors and increase the weight given to dynamic risk factors. Moreover, J-SOAP predictably performed less well with girls, and we must yet confront the unique challenges of tailoring risk predictors more closely to that subgroup.

Perhaps the most difficult challenge, however, is to understand the highly complex, risk-relevance of adverse life events, which for many juveniles is contemporaneous with the assessment of risk. Youth, who commit sexual offenses, as well as other delinquent behaviors, frequently have experienced a wide range of adverse life events, and some have suffered repeated instances of child maltreatment and trauma. Although these adverse life experiences during childhood have been associated with a wide range of negative outcomes, including delinquency and sexual offending, the risk-relevance of these life experiences is highly complex and requires careful disentanglement. Our previous research project pointed to a powerful, though typically overlooked or

ignored, adverse life event – caregiver instability / multiple changes in living situations and frequent changes in caregivers. This factor alone, more than any other form of abuse or maltreatment, was proximally associated with sexual deviance and sexual aggression. The co-existence of this factor with other risk-aggravating or risk-mitigating factors must be examined. Clearly, much work remains on the mitigating effects of protective factors and constitutional resiliency.

FUTURE DIRECTIONS

Hart (1999) has noted, “...the purpose of risk assessment is to speculate in an educated way about the violence (sex offending) that an individual might commit, and to identify what is required to stop such violence from occurring.” (p. 487). Given the improbability of success using only conventional static risk prediction with young people, and the tendency for clinicians to overpredict future sexually abusive behavior by juveniles (Schram et al., 1991), a different strategy is required. A more appropriate goal, and one that is likely to be more successful, involves assessing risks and needs associated with sexual offending and developing strategies that reduce risk and strengthen factors that may mitigate risk. This goal is entirely consistent with Andrews’ Risk and Need Principles (e.g., Andrews & Bonta, 1998; Andrews, Zinger, Hoge, Gendreau, & Cullen, 1990; Gendreau, Little, & Goggin, 1996), developed to guide effective interventions with individuals involved in the criminal justice system. The *Risk Principle* proposed that the most intensive and highest level of services be reserved for the highest risk individuals; those who are likely to benefit most,

whereas lower risk individuals may benefit as well or more from less intensive interventions. *The Need Principle* pointed out, if the goal is to reduce criminogenic risk, interventions should target factors that increase risk with the goal of reducing these risk factors (“criminogenic needs”) and, thereby, reducing risk.

Bourke and Donohue (1996), in their article, *Assessment and Treatment of Juvenile Sex Offenders: An Empirical Review*, observed that studies consistently reveal that juvenile sex offenders are a heterogeneous population. Consistent with the findings of the present study, Bourke and Donahue observed that youth who commit sex offenses often had an array of mental health and cognitive difficulties including conduct disorders, attention-deficit hyperactivity disorder, antisocial personality disorder, narcissistic personality disorder, learning disabilities, affective disorders, post-traumatic stress disorders and substance abuse. They concluded, “The high rate of co-morbid diagnoses found within this population emphasizes the importance of utilizing sensitive, comprehensive, standardized methods when assessing and treating JSO’s (juvenile sex offenders)” (p.50).

This view of assessment is consistent with the principles for guiding effective interventions outlined by Andrews and his colleagues (Andrews & Bonta, 1998; Andrews, et al., 1990). Risk assessment is required to identify appropriate targets of intervention and suggest the most effective treatment intensity. Clinical assessment is needed to assess responsivity factors and promote treatment effectiveness. A comprehensive assessment strategy is likely

to be most effective for reducing the risk of repeated sexual, as well as nonsexual, offending and for helping youth who have committed sex offenses develop prosocial, nonabusive relationships and lifestyles.

As has been observed in the research on serious and persistent delinquents (Loeber, Farrington, & Waschbusch, 1998), the juvenile sex offender recidivism studies suggest there is a relatively small group of serious and persistent juvenile sex offenders. Identifying these youths early is critically important for 1) community safety and 2) for designing and implementing optimal intervention and management strategies, while ensuring that our interventions do more good than harm. The present study underscores that these goals are clearly achievable.

Immediate Social Policy Implications & Directions for Future Research

Increasing attention to the problem of sexual violence by juveniles has prompted recent attempts to enact legislation that seeks to curb such violence. H. R. 2797 [Amie Zyla Act of 2005], introduced in the House of Representatives on June 8, 2005, would amend the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act to include juvenile sexual offenders. At the state level, the Commonwealth of Pennsylvania enacted Act 21 on August 14, 2003. Act 21 provides for the civil commitment of juvenile sexual offenders prior to their 21st birthday.

Federal and state legislation is mandating the assessment of risk among juvenile sex offenders. Such statutory management of juvenile sexual offenders demands reliable, valid methods for assessing the risk posed by these youth.

Judgments about degree of risk clearly are central to all management decisions, including those having to do with civil commitment and need for (or level of) registration. At present, there is no existing procedure or protocol for assessing risk of sexual re-offense among juvenile offenders with clear evidence of predictive validity across a range of youth within the juvenile justice system. There is, in effect, no way of informing risk decisions that are called for by these statutory management strategies. Although the results from the present study provided strong evidence of the predictive validity of the J-SOAP, our findings are specific to a child welfare sample drawn from one northeastern state. The J-SOAP can not be assumed to have comparable predictive validity in racially and ethnically diverse samples of youth drawn from the juvenile justice system. Since the J-SOAP is used predominantly on youth in the juvenile justice system, it is imperative to examine its predictive accuracy on large samples of such youth. Whether it is the J-SOAP or some other promising alternative, we must consider it a high priority to conduct the minimal research necessary to develop a reliable and accurate method of assessing risk *prior* to implementing these laws.

Beyond the practical consideration articulated above, we should keep in mind the serious unintended consequence of mislabeling youth as “dangerous” when they are not. We may inadvertently produce the very outcome that we are trying to avoid. It is imperative that we identify those youth who are truly at high risk and not mislabel those who are not. Not only do we stigmatize youth, with all of the predictable debilitating consequences of such stigma, but we may expose low risk youth to high risk environments and high risk peers, thereby creating

“dangerousness” where there wasn’t before. In summary, inappropriate use of restrictive management strategies through uninformed and inaccurate risk decisions will inevitably result in a larger proportion of mistakes that translate into a significant and unnecessary human and monetary to society. The goal of avoiding these “false positive mistakes” requires a sophisticated, empirically informed understanding of how to assess risk in adolescents.

In a recent Tribune-Review article by Cholodofsky (July 2, 2005), it was noted that the Commonwealth of Pennsylvania may spend \$8 million on five (5) civilly committed youth. If we are prepared to spend extraordinary sums of money to register, not to mention civilly commit, young adults for offenses they committed as juveniles, we must take the initial step and invest the money in the research needed to provide the basis for registration and civil commitment – reliable assessment of risk.

There can be little doubt at this point that the potential risk for sexually aggressive behavior posed by juveniles is fully appreciated. With this awareness comes an attendant sense of social responsibility to marshal our forces to address the problem. The problem is highly complex, however, and will not be solved simply by legislative fiat. The first step is an empirically informed and validated procedure for assessing risk among adolescents who evidence a propensity for sexually abusive behavior.

References

- Abel, G. R., Rouleau, J. L., & Cunningham-Rathner, J. (1986). Sexually aggressive behavior. In W. J. Curran, A. L. McGarry, and S. A. Saleem (Eds.), *Forensic psychiatry and standards for interdisciplinary practice* (pp. 289-313). Philadelphia, PA: F. A. Davis.
- Ageton, S. S. (1983). *Sexual assault among adolescents*. Lexington, MA: Lexington Books.
- Alexander, M. A. (1999). Sexual offender treatment efficacy revisited. *Sexual Abuse: A Journal of Research and Treatment, 11*, 101-116.
- Andrews, D. A., & Bonta, J. (1998). *The psychology of criminal conduct*. Cincinnati, OH: Anderson.
- Andrews, D. A., Zinger, I, Hoge, R.D., Bonta, J., Gendreau, P. & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*, 369-404.
- Ash, A. S., & Schwartz, M. (1994). Evaluating the performance of risk adjustment methods: Dichotomous measures. In L. I. Lezzoni (Ed.), *Risk adjustment for measuring healthcare outcomes* (pp. 313-346). Ann Arbor, MI: Health Administration Press.
- Association for the Treatment of Sexual Abusers (2001). *Practice standards and guidelines for members of the Association for the Treatment of Sexual Abusers*. Beaverton, OR: Author.
- Awad, G. A., & Saunders, E. (1991). Male adolescent sexual assaulters, clinical observations. *Journal of Interpersonal Violence, 6*, 446-460.

- Awad, G. A., Saunders, E. & Levene, J. (1984) A clinical study of male adolescent sex offenders. *International Journal of Offender Therapy and Comparative Criminology*, 20, 105-116.
- Barbaree, H. E. & Marshall, W. L. (Eds.), (2006). *The Juvenile Sex Offender*, (2nd Ed.). New York, NY: Guilford Press.
- Becker, J. V. (1990). Treating adolescent sexual offenders. *Professional Psychology: Research and Practice*, 21, 362-365.
- Becker, J. V., Cunningham-Rathner, J., & Kaplan, M. (1986). Adolescent sexual offenders: Demographics, criminal, and sexual histories and recommendations for reducing future offenses. *Journal of Interpersonal Violence*, 1, 431-443.
- Becker, J. V., Kaplan, M. S., Cunningham-Rathner, J. & Kavoussi, R. (1986). Characteristics of adolescent incest sexual perpetrators: Preliminary findings. *Journal of Family Violence*, 1(1), 85-97.
- Borduin, C. M., Henggeler, S. W., Blaske, D. M., & Stein, R. J. (1990). Multisystemic treatment of the adolescent sex offender. *International Journal of Offender Therapy and Comparative Criminology*, 34. 105-113.
- Borduin, C. M., & Schaeffer, C. M. (2002). Multisystemic treatment of juvenile sexual offenders: A progress report. *Journal of Psychology and Human Sexuality*, 13, 25-42.
- Bourgon, G. (2002, October). "The ERASOR" Evaluating its psychometric properties. Paper presented at the 21st Annual Meeting of the Association for Treatment of Sexual Abusers, Montreal, Quebec, Canada.
- Bourke, M.L. & Donohue, B. (1996). Assessment and treatment of juvenile sex offenders: An empirical review. *Journal of Child Sexual Abuse*, 5(1), 47-70.

- Brown, E. J., Flanagan, T. J., & McLeod, M. (Eds.), (1984). *Sourcebook of criminal justice statistics: 1983*. Washington, DC: Bureau of Justice Statistics.
- Burton, D. L. (2000). Were adolescent sexual offenders children with sexual behavior problems? *Sexual Abuse: A Journal of Research and Treatment*, 12, 37-48.
- Burton, D. L. (2003). Male adolescents: Sexual victimization and subsequent sexual abuse. *Child and Adolescent Social Work Journal*, 29(4), 277-296.
- Center for Sex Offender Management (2002, June). *An overview of sex offender management*. Silver Springs, MD: Author.
- Cholodofsky, R. (2005, July 2). Sexual predator program costs may reach \$8 million. *Pittsburgh Tribune-Review*. Retrieved April 5, 2005, from <http://pittsburghlive.com>.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Earlbaum.
- Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopathy: Toward a hierarchical model. *Psychological Assessment*, 13(2), 171-188.
- Corrado, R. R., Roesch, R., Hart, S. D., & Gierowski, J. K., (Eds.), (2002). *Multi-problem violent youth: A foundation for comparative research on needs, interventions and outcomes*. Washington, DC: IOS Press.
- Cottle C. C., Lee, R. J., & Heilbrun, K. (2001). The prediction of criminal recidivism in juveniles. *Criminal Justice and Behavior*, 28, 367-394.
- Dahl, R. E. (2004). Adolescent brain development: A period of vulnerabilities and opportunities. Keynote address. *Annals of New York Academy of Sciences*, 1021, 1-22.

- Dahl, R. E., & Spear, L. P. (Eds.), (2004). *Adolescent brain development: vulnerabilities and opportunities*. Annals Vol. 1021. New York: The New York Academy of Science.
- DeBellis, M. D. (2004). Developmental traumatology: Neurobiological development in maltreated children with PTSD. Retrieved online on January 10, 2005, at www.psychiatrytimes.com/p990968.html
- Deisher, R. W., Wenet, G. A., Paperny, D. M., Clark, T. F. & Fehrenbach, P. A. (1982). Adolescent sex offense behavior: The role of the physician. *Journal of Adolescent Health, 2*, 279-286.
- DeMatteo, D., & Marczyk, G. (2005). Risk factors, protective factors, and the prevention of antisocial behavior among juveniles. In Heilbrun, K., Sevink-Goldstein, N. E., & R. E. Redding (Eds.), *Juvenile delinquency: Prevention, assessment, and intervention* (pp19-44). New York, NY: Oxford Press.
- Fehrenbach, P. A., Smith, W. Monastersky, C. & Deisher, R.W. (1986). Adolescent sex offenders: Offender and offense characteristics. *American Journal of Orthopsychiatry, 56*(2), 225-233.
- Finkelhor, D. (1979). *Sexually victimized children*. NY: Free Press.
- Forth, A. E., Kosson, D. S., & Hare, R. D. (2003). *The Psychopathy Checklist: Youth Version*. Toronto, Canada: Multi-Health Systems.
- Fromuth, M. E., Burkhart, B. R., & Jones, C. W. (1991). Hidden child molestation: An investigation of adolescent perpetrators in a nonclinical sample. *Journal of Interpersonal Violence, 6*, 376-384.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works? *Criminology, 34*, 401-433.

- Gil, E., & Johnson, T. C. (1993). *Sexualized children*. Washington, DC: Launch Press.
- Gretton, H. M., McBride, M., Hare, R.D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex offenders. *Criminal Justice and Behavior, 28*, 427-449.
- Groth, A., Longo, R. E. & McFadin, B. (1982). Undetected recidivism among rapists and child molesters. *Crime and Delinquency, 28*(3), 450-458.
- Hagan, M. P., & Cho, M. E. (1996). A comparison of treatment outcome between adolescent rapists and child molesters. *International Journal of Offender Therapy and Criminology, 40*, 113-122.
- Hagan, M.P., Gust-Brey, K.L., Cho, M. E. & Dow, E. (2001) Eight-Year Comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents and the general population. *International Journal of Offender Therapy and Criminology, 45*, 314-323.
- Hare, R. D. (1991). *The Hare Psychopathy Checklist-Revised*. Toronto: Multi-Health Systems.
- Harrell, F. E., Lee, K. L., Califf, R. M., Pryor, D. B., & Rosati, R. A. (1984). Regression modeling strategies for improved prognostic prediction. *Statistics in Medicine, 3*, 143-152.
- Hart, S. D. (1999). Assessing violence risk: Thoughts and second thoughts. *Contemporary Psychology: APA Review of Books, 44*(6), 486-488.
- Hawkins, J. D., Herrenkohl, T. L., Farrington, D. P., Brewer, D., Catalano, R. F., &

- Harachi, T. W. (1998). A review of predictors of youth violence. In R. Loeber and D. P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 106-146). Thousand Oaks, CA: Sage Publications.
- Hecker, J., Scoular, Righthand, S., & Nangle, D. (2002, Oct.). *Predictive validity of the J-SOAP over 10-plus years: Implications for risk assessment*. Paper presented at the Annual Meeting of the Association of Treatment of Sexual Abusers, Montreal, Quebec, Canada.
- Hunter, J. A. (2000). Understanding juvenile sexual offenders: Research findings and guidelines for effective management and treatment. *Juvenile Justice Fact Sheet*. Charlottesville, VA: Institute of Law, Psychiatry, and Public Policy, University of Virginia.
- Hunter, J. A. (2006). Understanding diversity in juvenile sexual offenders: Implications for assessment, treatment and legal management. In R. E. Longo and D. S. Prescott (Eds.), *Current perspectives: Working with sexually aggressive youth and youth with sexual behavior problems*. Holyoke, MA: NEARI Press.
- Hunter, J. A., & Becker, J. V. (1994). The role of deviant arousal in juvenile sexual offending: Etiology, evaluations, and treatment. *Criminal Justice and Behavior*, 21(1), 132-149.
- Hunter, J. A., Goodwin, D.W., & Becker, J. V. (1994). The relationship between phallometrically measured deviant sexual arousal and clinical characteristics in juvenile sexual offenders. *Behavior, Research and Therapy*, 32(5), 533-538.
- Hunter, J. A., Hazelwood, R. R., & Slesinger, D. (2000). Juvenile perpetrated sexual crimes: Patterns of offending and predictors of violence. *Journal of Family*

Violence, 15(1), 81-93.

- Johnson, G. M., & Knight, R. A. (2000). Developmental antecedents of sexual coercion in juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment, 12(1), 165-178.*
- Kahn, T. J., & Chambers, H. J. (1991). Assessing offense risk with juvenile sex offenders. *Child Welfare, 70, 333-345.*
- Kaufman, J., & Zigler, E. (1987). Do abused children become abused parents? *American Journal of Orthopsychiatry, 57, 186-192.*
- Kenny, D.T., Keough, T. & Seidler, K. (2001). Predictors of recidivism in Australian juvenile sex offenders: Implications for treatment. *Sexual Abuse: A Journal of Research and Treatment, 13, 131-148.*
- Kilpatrick, D., Edmunds, C., & Seymour, A. (1992). *Rape in America: A report to the Nation.* National Victim Center, Arlington, VA.
- Knight, R. A., & Prentky, R. A. (1993). Exploring characteristics for classifying juvenile sex offenders. In H. E. Barbaree, W. L. Marshall, & S. M. Hudson (Eds.), *The juvenile sex offender* (pp. 45-79). NY: The Guilford Press.
- Knight, R. A., & Sims-Knight, J. E. (2003). The development antecedents of sexual coercion against women in adolescents. In R. Geffner & K. Franey (Eds.), *Sex offenders: Assessment and treatment.* New York: Haworth Press.
- Lab, S. P., Shields, G., & Schondel, C. (1993). Research note: An evaluation of juvenile sex offender treatment. *Crime and Delinquency, 39, 543-553.*
- Langstrom, N. (2002). Long-term follow-up of criminal recidivism in young sex offenders: Temporal factors and risk factors. *Psychology, Crime & Law, 8, 41-58.*

- Langstrom, N., & Grann, M. (2000). Risk for criminal recidivism in young sex offenders. *Journal of Interpersonal Violence, 15*, 855-871.
- Lipsey, M. W., & Derzon, J. H. (1998). Predictors of violent or serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D. P. Farrington, & D. A. Waschbusch (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage.
- Loeber, R., Farrington, D. P., Stouthamer-Loeber, M., & Van Kammen, W. B. (1998). *Antisocial behavior and mental health problems: Explanatory factors in childhood and adolescence*. Mahawah, NJ: Lawrence Erlbaum Associates.
- Loeber, R., Farrington, D. P., & Waschbusch, D. A. (Eds.), (1998). *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage Publications.
- Marshall, W. L., Barbaree, H. E., & Eccles, A. (1991). Early onset and deviant sexuality in child molesters. *Journal of Interpersonal Violence, 6*, 323-336.
- Martinez, R., Rosenfield, B., & Flores, J. (2004, March). *Predictive validity of the J-SOAP-II for sexual offending minority youth*. Paper presented at the Annual Meeting of American Psychology-Law Society, Scottsdale, AZ.
- Mossman, D. (1994). Assessing predictions of violence: Being accurate about accuracy. *Journal of Consulting and Clinical Psychology, 62*, 783-792.
- Moffitt, T. E. (1993). Adolescence-limited and life-course persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*, 674-701.
- Nisbet, I. A., Wilson, P. H., & Smallbone, S. W. (2004). A prospective longitudinal study of sexual recidivism among adolescent sex offenders. *Sexual Abuse: A*

- Journal of Research and Treatment*, 16(3), 223-234.
- Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. *Psychological Bulletin*, 86, 852-875.
- Perry, B. D. (2001). Violence and childhood: How persisting fear can alter the developing child's brain. Retrieved online on August 3, 2005 at www.childtrauma.org
- Perry, B. D. (2001a). The neurodevelopmental impact of violence in childhood. In D. Schetky and E. Benedek (Eds.), *Textbook of child and adolescent forensic psychiatry* (pp. 221-238). Washington DC: American Psychiatric Press, Inc.
- Prentky, R. A. (1999). Child sexual molestation. In V. B. Hasselt and M. Hersen (Eds.), *Handbook of psychological approaches with violent offenders* (pp. 267-300). New York: Kluwer Academic/Plenum Publishers.
- Prentky, R. A., Harris, B., Frizzell, L., & Righthand, S., (2000). An actuarial procedure for assessing risk in juvenile sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 12(2), 71-93.
- Prentky, R. A., & Knight, R. A. (1993). Age of onset of sexual assault: Criminal and life history correlates. In G. C. N. Hall, R. Hirschman, J. R. Graham, & M. S. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment, and treatment* (pp. 43-62). London: Taylor and Francis.
- Prentky, R. A., Knight, R. A., & Lee, A. F. S. (1997). Risk factors associated with recidivism among extrafamilial child molesters. *Journal of Consulting and Clinical Psychology*, 65(1), 141-149.
- Prentky, R. A., Knight, R. A., Lee, A. S., & Cerce, D. (1995). Predictive validity of

- lifestyle impulsivity for rapists. *Criminal Justice and Behavior*, 22(2), 106-128.
- Prentky, R. A., & Righthand, S. (2001). *Juvenile Sex Offender Assessment Protocol (J-SOAP)*. Bridgewater, MA: Justice Resource Institute.
- Prentky, R. A. & Righthand, S. (2003). *Juvenile Sex Offender Assessment Protocol-II (J-SOAP-II) Manual*. Bridgewater, MA: Justice Resource Institute.
- Prentky, R. A., Righthand, S. Pimental, A., & Cavanaugh, D. J. (2005). *Assessing risk and needs in boys and girls with sexual behavior problems: The discriminate validity of the juvenile sex offender assessment protocol*. Manuscript submitted for publication.
- Rasmussen, L.A. (1999). Factors related to recidivism among juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 11, 69-82.
- Rice, M. E., & Harris, G. T. (2005). Comparing effect sizes in follow-up studies: ROC area, Cohen's *d*, and *r*. *Law and Human Behavior*, 29(5), 615-620.
- Rich, P. (2003). *Juvenile sexual offenders: Understanding, assessing, and rehabilitating*. Hoboken, New Jersey: John Wiley.
- Righthand, S., Carpenter, E. M., & Prentky, R. A. (2001, Nov.). *Risk assessment with juveniles who sexually offended: A comparative analysis of community and residential youths*. Poster session presented at the Annual Meeting of the Association for the Treatment of Sexual Abusers Treatment Conference in San Antonio, TX.
- Righthand, S., Knight, R., & Prentky, R. (2002). *A path analytic investigation of proximal antecedents of J-SOAP risk domains*. Paper presented at the Association for the Treatment of Sexual Abusers' 21st Annual Research and Treatment Conference in Montreal, Quebec, Canada.

- Righthand, S., Prentky, R. A., Hecker, J. E., Carpenter, E., & Nangle, D. (2000). *JJPI-Maine Juvenile Sex Offender Risk Assessment Schedule (J-SOAP)*. Poster session presented at the Annual Meeting of the Association for the Treatment of Sexual Abusers' 19th Annual Research and Treatment Conference in San Diego, CA.
- Righthand, S., Prentky, R. A., Knight, R. A., Carpenter, E., Hecker, J. E., & Nangle, D. (2005). Factor structure and validation of the *Juvenile Sex Offender Assessment Protocol (J-SOAP)*. *Sexual Abuse: A Journal of Research and Treatment, 17*(1), 13-30.
- Ross, J., & Loss, P. (1991). Assessment of the juvenile sex offender. In G. D. Ryan and S. L. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp. 199-251). Lexington, MA: Lexington Books.
- Rubenstein, M., Yeager, C. A., Goodstein, C., & Lewis, D. O. (1993). Sexually assaultive male juveniles: A follow-up. *American Journal of Psychiatry, 150*, 262-265.
- Schram, D. D., Milloy, C. D., & Rowe, W. E. (1991). *Juvenile sex offenders: A follow-up study of reoffense behavior*. Olympia, WA: Washington Institute of Public Policy.
- Seabloom, W., Seabloom, M. E., Seabloom, E., Barron, R., & Hendrickson, S. (2003). A 14-to-24 year longitudinal study of a comprehensive sexual health model treatment program for adolescent sex offenders: Predictors of successful completion and subsequent criminal recidivism. *International Journal of Offender Therapy and Criminology, 47*, 113-122.
- Shoor, M., Speed, M. H., & Bartelt, C. (1966). Syndrome of the adolescent child

- molester. *American Journal of Psychiatry*, 122, 783-789.
- Showers, J., Farber, E., Joseph, J., Oshins, L., & Johnson, C. (1983). The sexual victimization of boys: A three-year survey. *Health Values: Achieving High-Level Wellness*, 7, 15-18.
- Sipe, R., Jensen, E. L. & Everett, R.S. (1998). Adolescent sexual offenders grown up: Recidivism in young adulthood. *Criminal Justice and Behavior*. 25, 109-124.
- Smith, W.R., & Monastersky, C. (1986). Assessing juvenile sex offenders' risk for recidivism. *Criminal Justice and Behavior*, 13, 115-140.
- Spaccarelli, S., Bowden, B., Coatsworth, J. D., & Kim, S. (1997). Psychosocial correlates of male sexual aggression in a chronic delinquent sample. *Criminal Justice and Behavior*, 24(1), 71-95.
- Steinberg, L. (2004). Risk taking in adolescence: What changes and why? *Annals of the New York Academy of Sciences*, 1021, 51-58.
- Sullivan, C. J., Veysey, B. M., & Dorangrichia, L. (2003). Examining the relationship between problem history and violent offending in high-risk youth. *Journal of Offender Rehabilitation*, 38(2), 17-39.
- Teicher, M. H. (2001). Wounds that time won't heal: The neurobiology of child abuse. *Cerebrum*, 2(4), 50-67.
- Teicher, M. H. (2002, March). The neurobiology of child abuse. *Scientific American*, 68-75.
- U. S. Department of Health and Human Services, (2001). *Youth violence: A report of the Surgeon General*. Rockville, MD.
- Van Ness, S. R. (1984). Rape as instrumental violence: A study of youth offenders.

Journal of Offender Counseling Services and Rehabilitation, 9, 161-170.

Waite, D., Pinkerton, R, Wieckowski, E., McGarvery, E., & Brown, G. L. (2002, Oct.).

Tracking treatment outcome among juvenile sexual offenders: A nine-year follow-up study. Paper presented at the Annual Meeting of the Association for the Treatment of Sexual Abusers, Montreal, Quebec, Canada.

Worling, J.R. (1995) Sexual abuse histories of adolescent male sex offenders: Differences on the basis of the age and gender of their victims. *Journal of Abnormal Psychology, 104 (4), 610-613.*

Worling, J. R. (2000). Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction. *Child Abuse and Neglect, 24(7), 965-982.*

Worling, J. R. (2001). Personality-based typology of adolescent male sexual offenders: Differences in recidivism rates, victim-selection characteristics, and personal victimization histories. *Sexual Abuse: A Journal of Research and Treatment, 13, 149-166.*

Worling, J. R. (2002). Assessing risk of sexual assault recidivism with adolescent sex offenders. In M.C. Calder (Ed.) *Young people who sexually abuse: Building the evidence base for your practice* (pp 365-375). Lyme Regis. Dorset, UK: Russell.

Worling, J. R. (2004). The Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR): Preliminary psychometric data. *Sexual Abuse: A Journal of Research and Treatment, 16(3), 235-254.*

Worling, J. R. (2005). Assessing sexual offense risk for adolescence. In B. K. Schwartz (Ed.), *The Sex Offender: Issues in assessment, treatment, and*

supervision of adult and juvenile populations. Vol. 5 (pp. 18-1-18.17)

Kingston, N.J.: Civic Research Institute.

Worling, J. R., & Curwen, T. (2000). Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction. *Child Abuse and Neglect, 24*, 965-982.

Worling, J. R., & Curwen, T. (2001). *The "ERASOR:" Estimate of Risk of Adolescent Sexual Recidivism (Version 2.0)*. Toronto, Ontario, Canada: Safe-T Program, Thistleton Regional Centre.

Worling, J. R., & Langstrom, N. (2003). Assessment of criminal recidivism risk with adolescents who have offended sexually. *Trauma, Violence, and Abuse: Review Journal, 4*, 341-362.

Worling, J. R., & Langstrom, N. (2006). Risk of sexual recidivism in adolescents who offend sexually: Correlates and assessment. In H. E. Barbaree, and W. L. Marshall, (Eds.), *The juvenile sex offender*, 2nd edition, (pp. 219-247. New York, NY: Guilford Press.

APPENDIX

A

Tables 1 - 17

Table 1***Gender Comparison on Demographic Characteristics – Full Sample***

Total N = 822		Boys	Girls	
		(n = 667)	(n = 155)	χ^2
Race ^a :				20.8****
	Caucasian	59.8%	55.4%	
	African-American	11.4%	12.2%	
	Hispanic	17.5%	9.0%	
	Other	11.2%	23.2%	
				<u>F</u>
I.Q:				
	<i>M / SD</i>	90.47/16.04	88.17/14.41	1.91
	<i>Range</i>	40 - 134	50 - 126	
Age at Fist Hands-on Offense:				
	<i>M / SD</i>	10.26 / 3.21	9.85 / 3.47	1.78
	<i>Range</i>	3 - 17	3 - 18	
Age at Time of ASAP:				
	<i>M / SD</i>	12.39 / 2.95	11.93 / 3.31	2.98
	<i>Range</i>	3 - 20	4 - 19	

^a *df* = 4

Table 2**Demographic Characteristics by Group^a**

	Group 1	Group 2	Group 3	Group 4	X^2	<i>df</i>
	<i>(n =117)</i>	<i>(n = 28)</i>	<i>(n =226)</i>	<i>(n =426)</i>		
	(%)	(%)	(%)	(%)		
Gender:					24.99****	3
Boys	89.7	89.3	88	75		
Girls	10.3	10.7	12	25		
Race:					29.69****	12
Caucasian	59.8	46.4	51.3	63.3		
African-American	13.7	14.3	15.5	8.5		
Hispanic	14.5	25.0	23.0	12.0		
Other (Asian, Cape Verdian, Mixed)	11.9	14.2	10.2	16.1		
					<u><i>F</i></u>	
I.Q	89.4	85.9	90.8	90.2	.75	
Age at Fist Hands-on Offense	8.9	11	11.2	9.9	14.48	
Age at Time of ASAP	10.8	13.8	13.5	12.0	29.43	

^a Note: No follow up information was available for 25 cases, therefore, could not be assigned to a group.

** $p < .01$; **** $p < .001$

Table 3*Survival Analysis – Summary of Censored & Uncensored Cases*

	N	% Reoffend	Failure Rate N / (%)	Censored	Log-Rank^a	-2 log (LR)^a
Boys	626	19%	116 (27.6)	510 (81%)	6.32**	6.92**
Girls	147	9%	13 (10.1)	134 (91%)		
Pre- Adolescent Boys	331	24%	79 (32.6)	252 (76%)	7.43**	6.79**
Adolescent Boys	220	13%	29 (22.0)	191 (87%)		

^a test of equality, *df* = 1

** *p* < .001

Table 4***Product – Limit Survival Estimate (Boys)***

<i>Time (Months Post-ASAP)</i>	<i>Survival Rate</i>	<i>Survival S.E.</i>	<i># Failures (Cumulative)</i>	<i>Failure Rate</i>
0	1.00	0	0	0
1	.992	.004	5	.008
2	.986	.005	9	.014
3	.976	.006	15	.024
4	.968	.007	20	.032
5	.960	.008	25	.040
6	.953	.008	29	.047
7	.948	.009	32	.052
8	.939	.010	38	.062
9	.930	.010	43	.070
10	.925	.011	46	.075
11	.920	.011	49	.080
12	.912	.012	54	.088
13	.903	.012	59	.097
14	.898	.012	62	.102
15	.887	.013	68	.113
16	.881	.013	71	.119
17	.872	.014	76	.128
18	.866	.014	79	.134
19	.864	.014	80	.136

21	.858	.015	83	.142
22	.852	.015	86	.148
23	.846	.015	89	.154
24	.837	.016	93	.163
26	.835	.016	94	.166
28	.830	.016	96	.171
29	.827	.016	97	.173
31	.822	.017	99	.179
32	.813	.017	102	.187
33	.870	.017	103	.190
34	.807	.018	104	.193
35	.801	.018	106	.200
36	.797	.018	107	.203
37	.794	.018	108	.206
38	.786	.019	110	.019
41	.782	.019	111	.214
43	.777	.020	112	.223
45	.772	.020	113	.228
58	.762	.022	114	.238
63	.747	.027	115	.253
67	.724	.34	116	.276
84	.724	-	116	-

Table 5***Product – Limit Survival Estimate (Pre-Adolescent Boys)***

<i>Time (Months Post-ASAP)</i>	<i>Survival Rate</i>	<i>Survival S.E.</i>	<i># Failures (Cumulative)</i>	<i>Failure Rate</i>
0	1.00	0	0	0
1	.985	.007	5	.015
2	.973	.009	9	.027
3	.958	.011	14	.042
4	.946	.013	18	.054
5	.943	.013	19	.058
6	.933	.014	22	.067
7	.927	.014	24	.073
8	.918	.015	27	.082
9	.909	.016	30	.091
10	.903	.016	32	.097
11	.896	.017	34	.104
12	.884	.018	38	.116
13	.868	.019	43	.132
14	.865	.019	44	.135
15	.852	.020	48	.149
16	.848	.020	49	.152
17	.838	.021	52	.162
18	.835	.021	53	.166
19	.831	.021	54	.169

21	.824	.022	56	.176
22	.820	.022	57	.180
23	.812	.022	59	.188
24	.800	.023	62	.200
28	.792	.023	64	.208
29	.787	.024	65	.213
31	.778	.024	67	.222
32	.769	.025	69	.232
33	.764	.025	70	.237
34	.758	.026	71	.242
35	.753	.026	72	.247
36	.747	.026	73	.253
38	.735	.027	75	.265
41	.728	.028	76	.272
45	.721	.029	77	.279
58	.706	.032	78	.294
67	.674	.044	79	.326
84	.674	-	79	-

Table 6***Product – Limit Survival Estimate (Adolescent Boys)***

<i>Time (Months Post-ASAP)</i>	<i>Survival Rate</i>	<i>Survival S.E.</i>	<i># Failures (Cumulative)</i>	<i>Failure Rate</i>
0	1.00	0	0	0
3	.995	.005	1	.005
4	.991	.007	2	.009
5	.982	.009	4	.019
6	.977	.010	5	.023
7	.972	.011	6	.028
8	.963	.013	8	.038
9	.958	.014	9	.042
10	.953	.015	10	.047
11	.948	.015	11	.052
12	.943	.016	12	.057
14	.933	.017	14	.067
15	.928	.018	15	.073
16	.917	.019	17	.083
17	.911	.020	18	.089
18	.900	.021	20	.099
21	.895	.022	21	.105
22	.883	.023	23	.117
23	.877	.024	24	.123
24	.871	.024	25	.129

32	.862	.026	26	.138
37	.851	.028	27	.149
43	.835	.031	28	.165
63	.780	.061	29	.220
81	.780	-	29	-

Table 7***Product – Limit Survival Estimate (Girls)***

Time (Months Post-ASAP)	Survival Rate	Survival S.E.	# Failures (Cumulative)	Failure Rate
0	100	0	0	0
2	.993	.007	1	.007
3	.980	.012	3	.020
4	.973	.014	4	.028
7	.951	.018	7	.049
11	.944	.019	8	.056
14	.928	.022	10	.072
17	.920	.023	11	.080
22	.911	.025	12	.090
27	.899	.027	13	.101 ^a
86	.899	-	13	-

Table 8*J-SOAP Static¹, Dynamic², Total² Scores by Groups (Boys Only)*

	DSS Sexual Reoffed	CJ Sexual Reoffend	CJ Non-Sexual Reoffend	Non- Reoffend	<i>F</i>
JSOAP					
Scale 1 + 2					
<i>M</i>	17.23 ^a	17.76 ^a	15.36 ^b	13.05 ^c	36.91****
<i>SD</i>	3.57	4.63	3.80	4.38	
Scale 3 + 4					
<i>M</i>	17.17 ^a	15.27 ^{ab}	13.53 ^b	9.30 ^c	25.20****
<i>SD</i>	5.01	5.35	5.14	5.49	
Total Score					
<i>M</i>	35.85 ^a	33.00 ^{ab}	30.87 ^b	23.89 ^c	29.04****
<i>SD</i>	6.56	10.71	6.62	8.09	

¹ *df* = 3, 648 ² *df* = 3, 205^{abc} reflects SNK group differences (*p* < .05)

Table 9***Full J-SOAP Scale Score, 3 Risk Ranges & Associated Re-offense Rates******(Pre-Adolescent Boys)***

	Low	Moderate	High	χ^2	Spearman <i>r</i>	Eta
N	44	46	50	37.88****	.51	.50
Scale Range	6 – 25	26 – 33	34 – 44			
% Sexually Reoffend	4.5%	19.6%	60%			

**** $p < .001$ **Table 9A*****Full J-SOAP Scale Score, 3 Risk Ranges & Associated Re-offense Rates******(Adolescent Boys)***

	Low	Moderate	High	χ^2	Spearman <i>r</i>	Eta
N	26	25	25	16.66****	.42	.43
Scale Range	8 – 24	25 – 33	34 – 45			
% Sexually Reoffend	7.7%	12%	52%			

**** $p < .001$

Table 10*JSOAP Static Score (Scales 1+2), 3 Risk Ranges & Associated Re-offense Rates**(Pre-Adolescent Boys)*

	Low	Moderate	High	χ^2	Spearman <i>r</i>	Eta
N	143	142	162	41.16****	.30	.30
Scale Range	2 – 12	13 – 16	17 – 24			
% Sexually Reoffend	9.0%	15.3%	38.5%			

**** $p < .001$ **Table 10A***JSOAP Static Score (Scales 1+2), 3 Risk Ranges & Associated Re-offense Rates**(Adolescent Boys)*

	Low	Moderate	High	χ^2	Spearman <i>r</i>	Eta
N	89	91	99	21.58****	.27	.27
Scale Range	3 – 12	13 – 16	17 – 24			
% Sexually Reoffend	3.7%	8.0%	25.5%			

**** $p < .001$

Table 11*JSOAP Dynamic Score (Scales 3+4), 3 Risk Ranges & Associated Re-offense Rates**(Pre-Adolescent Boys)*

	Low	Moderate	High	χ^2	Spearman <i>r</i>	Eta
N	47	44	51	37.05****	.50	.51
Scale Range	0 – 9	10 – 15	16 – 23			
% Sexually Reoffend	6.4%	18.6%	60%			

**** $p < .001$ **Table 11A***JSOAP Dynamic Score (Scales 3+4), 3 Risk Ranges & Associated Re-offense Rates**(Adolescent Boys)*

	Low	Moderate	High	χ^2	Spearman <i>r</i>	Eta
N	24	25	27	6.82*	.28	.30
Scale Range	1 – 9	10 – 15	16 – 23			
% Sexually Reoffend	12.5%	16%	40.7%			

* $p < .05$

Table 12

Cox Regression^a (Boys, N=626)

Variable	Parameter Estimate	S.E.	χ^2	Hazard Ratio	95% H.R. Confidence Limits
J-SOAP Scale 1	2.06	0.28	55.45*****	7.86	4.57 – 13.53
J-SOAP Scale 2	0.37	0.19	3.75*	1.44	1.00 – 2.09
J-SOAP Scale 3	1.21	0.34	12.61*****	3.36	1.72 – 6.56
J-SOAP Scale 4	1.52	0.25	36.33*****	4.58	2.79 – 7.51
J-SOAP Total Score	2.03	0.44	21.69*****	7.62	3.24 – 17.91

^a DV: time; IDV: J-SOAP

* $p < .05$; ***** $p < .001$

Table 12A*Cox Regression^a (Pre-Adolescent Boys, N=331)*

Variable	Parameter Estimate	S.E.	χ^2	Hazard Ratio	95% H.R. Confidence Limits
J-SOAP Scale 1	1.85	0.25	27.16****	6.34	3.16 – 12.69
J-SOAP Scale 2	0.30	0.23	1.80	1.35	0.87 – 2.11
J-SOAP Scale 3	1.51	0.45	11.26****	4.53	1.87 – 10.94
J-SOAP Scale 4	1.47	0.30	23.26****	4.35	2.39 – 7.91
J-SOAP Total Score	2.30	0.61	14.40****	9.97	3.04 – 32.67

^a DV: time; IDV: J-SOAP**** $p < .001$ **Table 12B***Cox Regression^a (Adolescent Boys, N=220)*

Variable	Parameter Estimate	S.E.	χ^2	Hazard Ratio	95% H.R. Confidence Limits
J-SOAP Scale 1	2.57	0.61	17.75****	13.07	3.95 - 43.20
J-SOAP Scale 2	1.23	0.49	6.28**	3.43	1.31 – 8.99
J-SOAP Scale 3	0.62	0.59	1.09	1.86	0.58 – 5.95
J-SOAP Scale 4	1.74	0.54	10.30****	5.70	1.97 – 16.50
J-SOAP Total Score	1.75	0.77	5.22*	5.76	1.28 – 25.83

^a DV: time; IDV: J-SOAP* $p < .05$; ** $p < .01$; **** $p < .001$

Table 13*Test of $H_0: (\beta = 0)$*

Variable	χ^2 (LR)	χ^2 (Wald)
All Boys		
J-SOAP Scale 1	85.24****	55.45****
J-SOAP Scale 2	3.81*	3.75*
J-SOAP Scale 3	15.16****	12.61****
J-SOAP Scale 4	47.93****	36.33****
J-SOAP Total Score	33.75****	21.69****
Pre-Adolescent Boys		
J-SOAP Scale 1	41.72****	27.16****
J-SOAP Scale 2	1.79	1.79
J-SOAP Scale 3	14.77****	11.26****
J-SOAP Scale 4	30.56****	23.26****
J-SOAP Total Score	25.47****	14.40****
Adolescent Boys		
J-SOAP Scale 1	31.49****	17.75****
J-SOAP Scale 2	7.97***	6.28**
J-SOAP Scale 3	1.17	1.09
J-SOAP Scale 4	14.56****	10.30****
J-SOAP Total Score	7.44**	5.22*

* $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$

Table 14*Logistic Regression (Boys, N=626)*

Parameter	Estimate	S.E.	χ^2 (Wald)	χ^2 (LR)^a
J-SOAP Scale 1	0.466	.05	84.93****	109.95****
Intercept	-3.995	.33		
J-SOAP Scale 2	0.083	.04	5.54*	5.73*
Intercept	-2.334	.38		
J-SOAP Scale 3	0.206	.05	19.24****	23.70****
Intercept	-2.866	.47		
J-SOAP Scale 4	0.468	.06	70.70****	91.32****
Intercept	-3.970	.36		
J-SOAP Total Score	0.151	.03	29.17****	42.56****
Intercept	-5.861	.95		

^a H₀: $\beta = 0$ * $p < .05$, **** $p < .001$

Table 14A*Logistic Regression (Pre-Adolescent Boys, N=331)*

Parameter	Estimate	S.E.	χ^2 (Wald)	χ^2 (LR)^a
J-SOAP Scale 1	0.442	.07	44.29****	56.48****
Intercept	-3.699	.44		
J-SOAP Scale 2	0.063	.05	1.84	1.88
Intercept	-1.796	.49		
J-SOAP Scale 3	0.272	.07	17.12****	23.29****
Intercept	-3.196	.64		
J-SOAP Scale 4	0.411	.07	39.29****	48.75****
Intercept	-3.376	.41		
J-SOAP Total Score	0.176	.04	19.82****	31.20****
Intercept	-6.482	1.34		

^a H₀: $\beta = 0$ **** $p < .001$

Table 14B*Logistic Regression (Adolescent Boys, N=220)*

Parameter	Estimate	S.E.	χ^2 (Wald)	χ^2 (LR)^a
J-SOAP Scale 1	0.482	.09	26.29****	32.44****
Intercept	-4.385	.60		
J-SOAP Scale 2	0.201	.07	7.32**	8.66***
Intercept	-4.136	.90		
J-SOAP Scale 3	0.127	.08	2.59	2.89
Intercept	-2.510	.80		
J-SOAP Scale 4	0.595	.12	23.16****	33.42****
Intercept	-5.097	.82		
J-SOAP Total Score	0.133	.05	8.25***	11.39****
Intercept	-5.595	1.62		

^a $H_0: \beta = 0$ ** $p < .01$; *** $p < .005$; **** $p < .001$

Table 15*Association of Predicted Probabilities and Observed Outcomes - ROC Analysis**(Boys, N=626)*

Parameter	Concordant (%)	C ^a	Optimum Probability Level for Classification ^b		
			p level	Sensitivity	Specificity
J-SOAP Scale 1	76.7	.807	.16	72.4	73.3
			.18	72.4	73.3
			.20	72.4	73.3
			.22	72.4	73.3
J-SOAP Scale 2	52.3	.571	-	-	-
J-SOAP Scale 3	69.1	.723	-	-	-
J-SOAP Scale 4	72.8	.772	.18	70.9	70.1
			.20	70.9	70.1
			.22	70.9	70.1
J-SOAP Total Score	79.7	.809	.24	83.7	73.3
			.26	83.7	73.3
			.28	75.5	75.3
			.30	71.4	80.0
			.32	71.4	80.0

^a estimated area under the curve^b $\geq .70$ for sensitivity and specificity

Table 16*Association of Predicted Probabilities and Observed Outcomes - ROC Analysis**(Pre-Adolescent Boys, N=331)*

Parameter	Concordant (%)	C ^a	Optimum Probability Level for Classification ^b		
			p level	Sensitivity	Specificity
J-SOAP Scale 1	72.8	.775	-	-	-
J-SOAP Scale 2	50.4	.553	-	-	-
J-SOAP Scale 3	74.0	.771	.28 .30	70.6 70.6	70.1 70.1
J-SOAP Scale 4	70.5	.751	-	-	-
J-SOAP Total Score	81.2	.824	.28 .30 .32	84.8 75.8 75.8	73.8 76.2 76.2

^a estimated area under curve^b $\geq .70$ for sensitivity and specificity

Table 17*Association of Predicted Probabilities and Observed Outcomes - ROC Analysis**(Adolescent Boys, N=220)*

Parameter	Concordant (%)	C ^a	Optimum Probability Level for Classification ^b		
			p level	Sensitivity	Specificity
J-SOAP Scale 1	79.1	.830	.14	72.4	79.1
			.16	72.4	79.1
J-SOAP Scale 2	62.4	.671	-	-	-
J-SOAP Scale 3	60.9	.643	-	-	-
J-SOAP Scale 4	77.8	.816	.12	77.8	70.2
			.14	77.8	70.2
			.16	77.8	70.2
			.18	70.4	70.2
			.20	70.4	84.5
			.22	70.4	84.5
			.24	70.4	84.5
J-SOAP Total Score	79.4	.803	.22	78.6	70.4
			.24	78.6	77.8
			.26	71.4	77.8

^a estimated area under curve^b $\geq .70$ for sensitivity and specificity

APPENDIX

B

Figures 1 - 5

Figure 1

Product-Limit Survival Function Estimates (Boys & Girls)

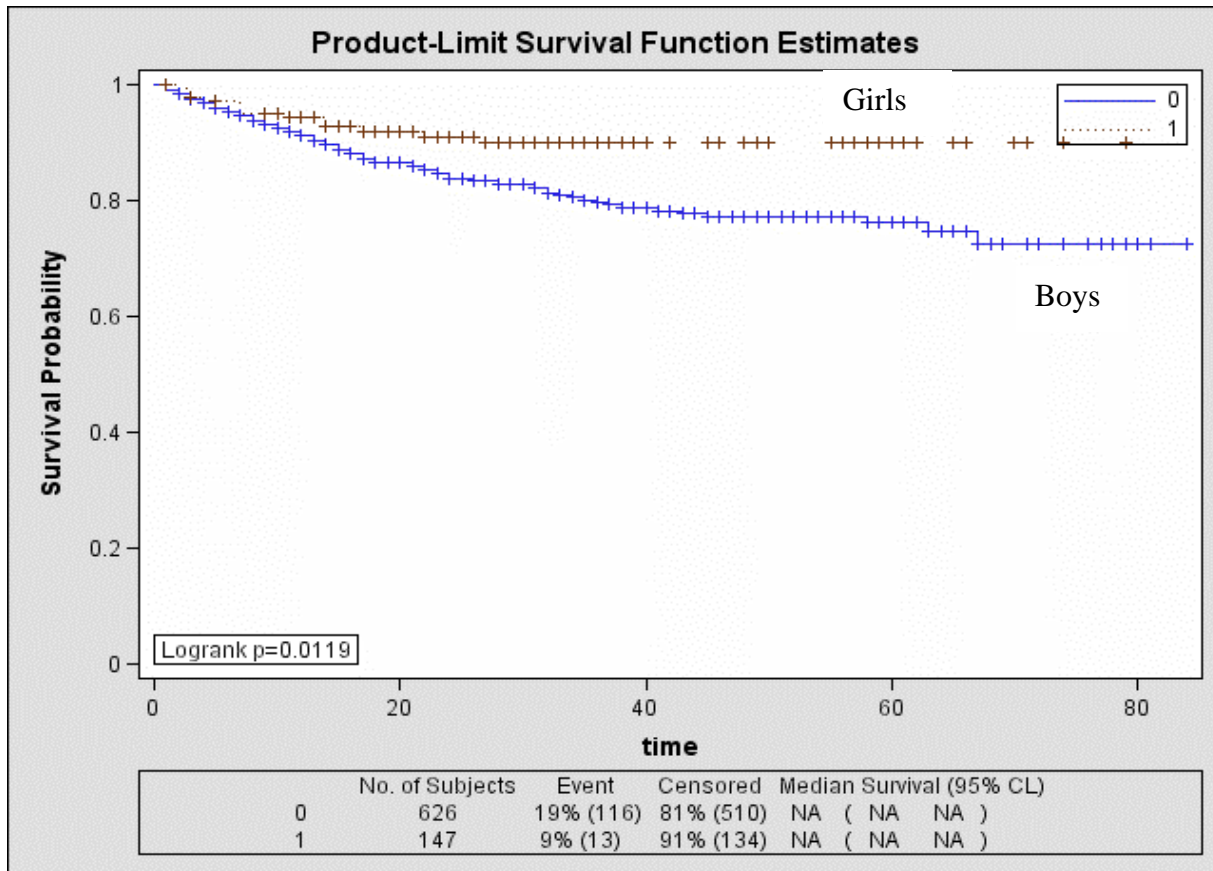


Figure 2

Product-Limit Survival Function Estimates (Pre-Adolescent & Adolescent Boys)

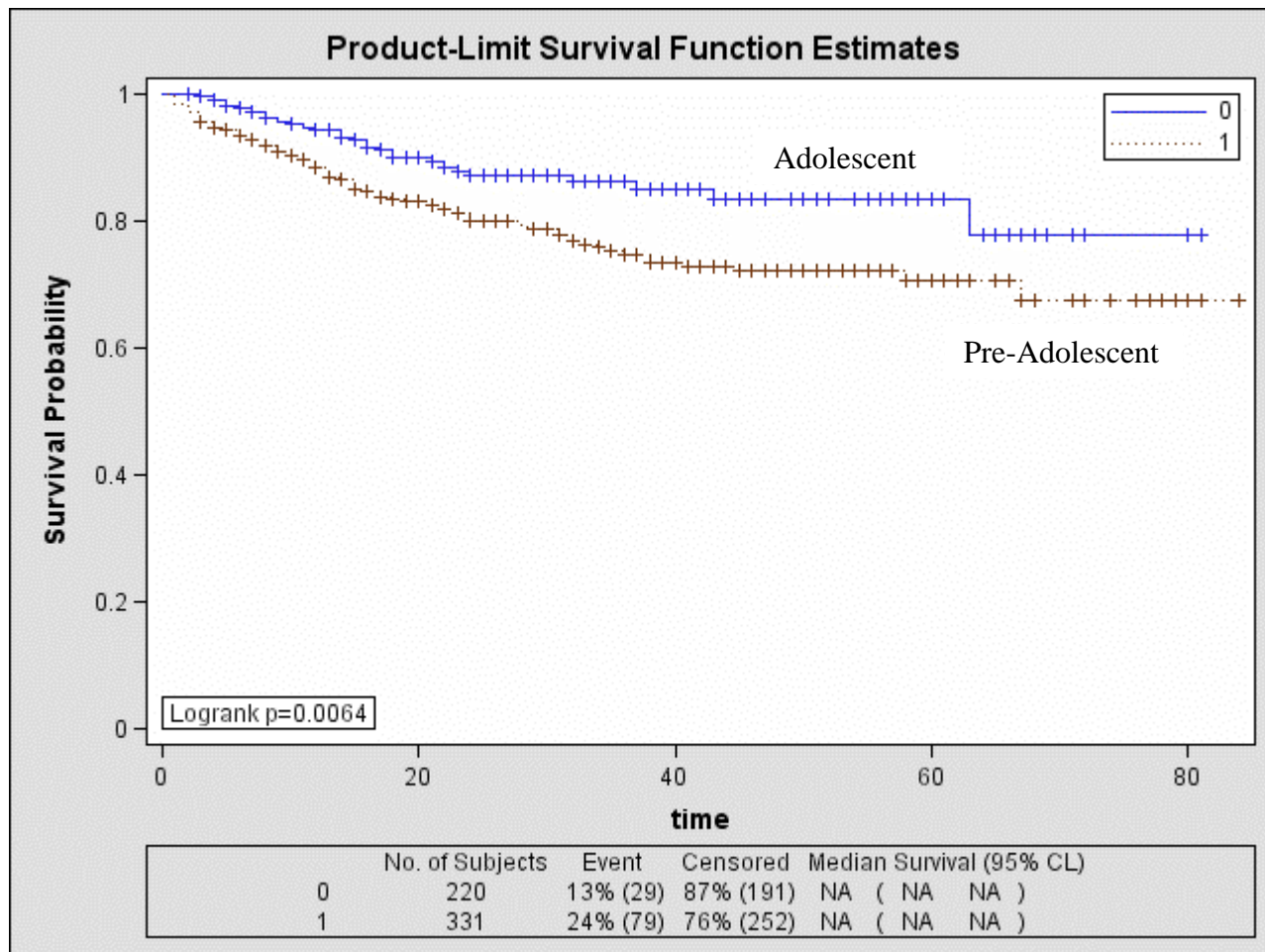


Figure 3

J-SOAP Total Score ROC Analysis - Boys

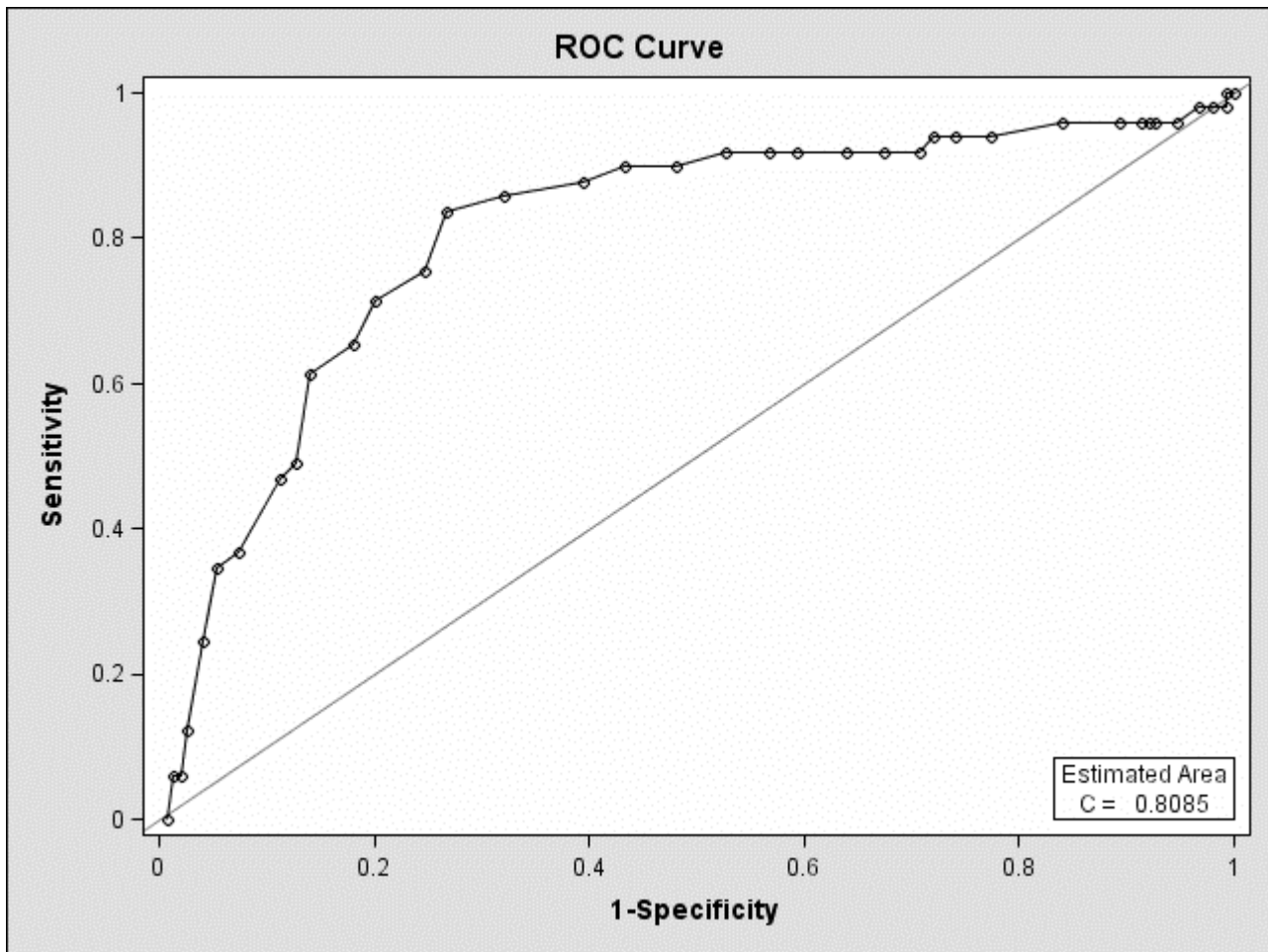


Figure 4

J-SOAP Total Score ROC Analysis – Pre-Adolescent Boys

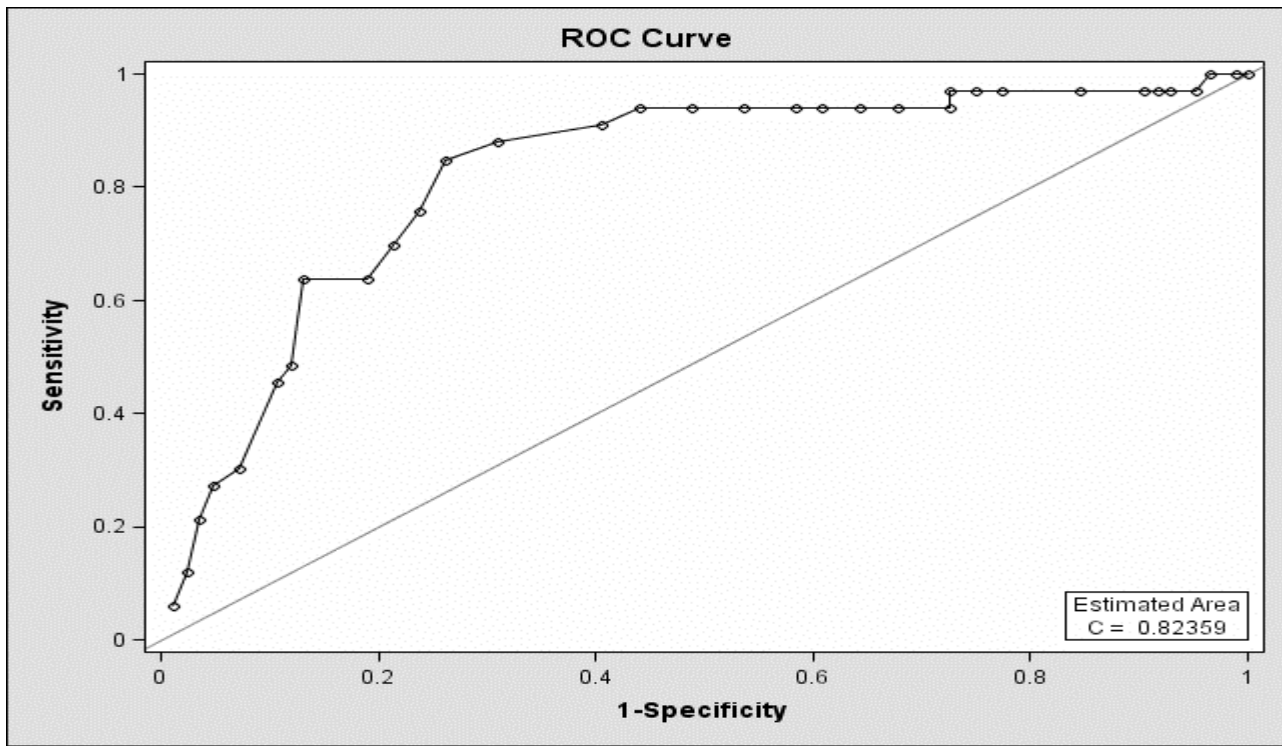
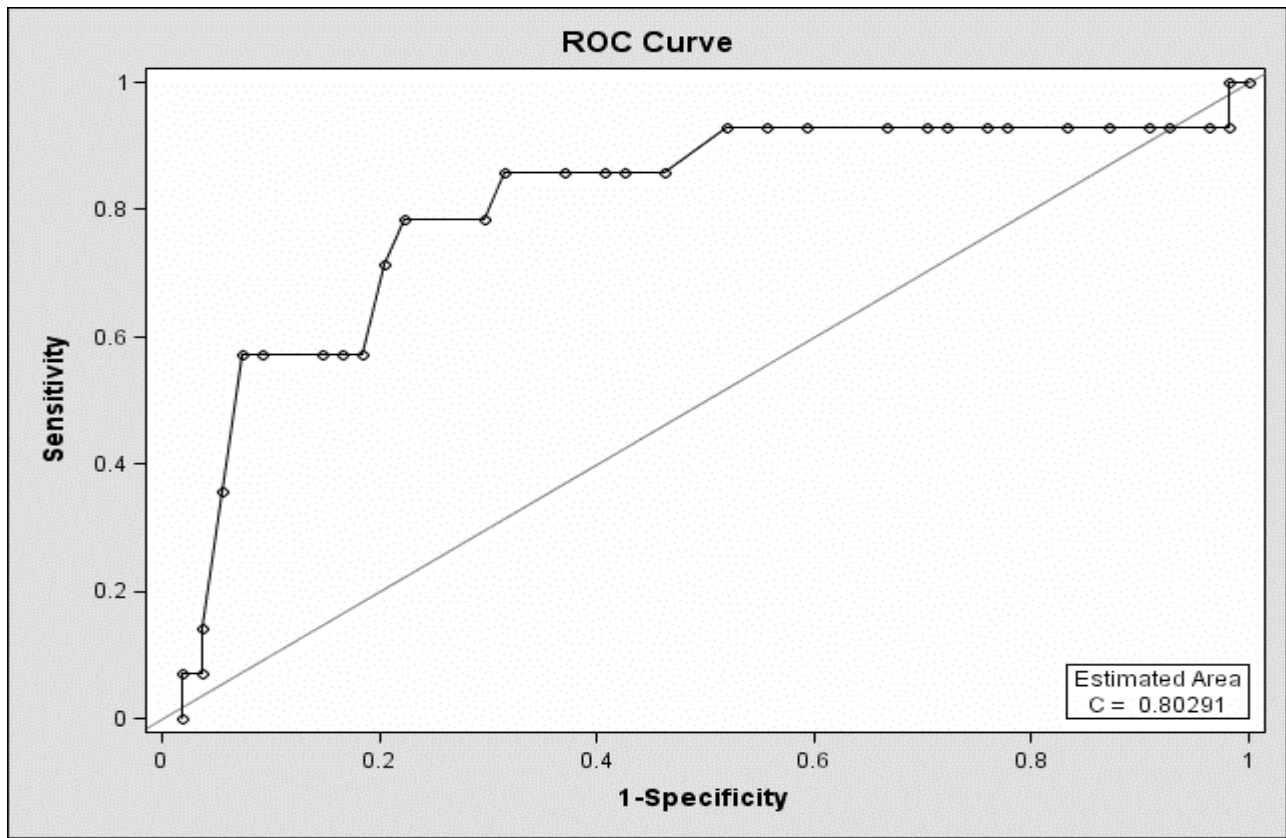


Figure 5

J-SOAP Total Score ROC Analysis – Adolescent Boys



APPENDIX

C

Inter-rater Reliability Table

Inter-rater Reliability – Follow-Up	% Agreement N=120
Group	100
SORB	100
CHINS – Post ASAP	100
Reoffense	100
Work Stability	100
Alcohol Abuse	100
Severity of Alcohol Abuse	100
Involved in Prostitution	100
Sexually Abusive Behavior Involving Penetration	100
Adult Penal Institution	100
Age at Time of Adult Penal Institution	100
Date of Reoffense	100
Work Stability at Time of Reoffense	100
DSS Involved at Time of Reoffense	100
Psychotropic Medications at Time of Reoffense	100
Pornographic Material – Frequent Use	100
Mental Health Treatment at Time of Reoffense	100
Drug Abuse at Time of Reoffense	100
Alcohol Abuse at Time of Reoffense	100
Evidence of Poorly Controlled Managed Anger at Time of Reoffense	100
Grooming Behaviors	99
Sexual Remarks/Gestures	99
Drug Abuse	99
Severity of Drug Abuse	99
Juvenile Penal Institution	99
Age at Time of Juvenile Penal Institution	99
Living Situation at Time of Reoffense	99
Evidence of Change in Quality of Peer Relations at Time of Reoffense	99
Evidence of Loss at Time of Reoffense	99
Evidence of Poorly Controlled /Managed Sexual Behavior at Time of Reoffense	99
Continued Sexually Inappropriate Behavior	98
Escalation of Sexual Behavior	98
Exposing	98
Sexually Abusive Behavior – Non-penetrative	98
Total Number of Victims (Hands-on)	98
Degree of Force	98
Sexual Promiscuity	98
Time Between ASAP and Reoffense (months)	98
School Stability at Time of Reoffense	98
Psychiatric Admission	97
Evidence of Change in Living Situation at Time of Reoffense	97

Peeping	97
Total Number of Psychiatric Admissions	96
Sex Offender Specific Treatment	96
Frottage	96
Reason for Psychiatric Admissions	95
Total Number Foster Home Placements	94
Total Number of Separate Incidents	94
Global Adjustment Index	94
Management of Sexual Urges and Desires	93
Total Time in Community	92
Total Number Different Caretakers	91
Sexual Drive and Preoccupation	91
Empathy	91
Total Number Residential Placements	89
Accepts Responsibility	89
Cognitive Distortions	88
Remorse/Guilt	87
School Stability	86
Understands Risk Factors	86
Internal Motivation for Change	84
Total Time in Residential Placements	83
Total Number Different Living Situations	82
Management of Anger	82
Evidence of Positive Support System	80
Quality of Peer Relationships	79

APPENDIX

D

Coding Dictionary

FOLLOW-UP CODING DICTIONARY

A. Demographic Data

Date Follow-up Data Coded: DFC:

A six-digit variable used to identify the date that the follow-up data was coded (Month/Day/Year – e.g. 05/22/04)

Subject Identification{xe "Subject Identification"}: ID:{xe "ID"}

The subject identification variable is the numbers on each information file. It simply identifies the subject.

Group Identification: GROUP:

- 1 – DSS Sexual Reoffend
- 2 – CJ Sexual Reoffend
- 3 – Reoffend Non-Sexual
- 4 – NO Sexual Reoffend

Data Gathered for Follow-up from Following Sources: SOURCE: (Check all that apply)

- Original Abstract
- Current Social Worker _____
- Previous Social Worker _____
- DYS Case Manger
- SORB: Hit / No Hit
- CORI/NCIC: Hit (Sexual Non-Sexual Both) / No Hit
- Other

Date of ASAP: DASAP:

A six-digit variable used to identify the date that the original data was coded (Month/Day/Year – e.g. 9/19/03)

Most Recent Document Date(s): MRDD:

Original Abstract _____ Follow-up material _____

Date of Birth{xe "Date of Birth"}: DOB:{xe "DOB"}

Actual date xx/xx/xx

Gender{xe "Gender"}: SEX:{xe "SEX"}

- 0 - male
- 1 - female

Race: RACE:

- 1 - unclear
- 0 - Caucasian
- 1 - African-American
- 2 - Hispanic
- 3 - Asian
- 4 – other (Portuguese, Cape Verdian, Mixed)

Reoffense: REO:

- 1 – unclear
- 0 – no – **ONLY CODE SECTIONS B – D**
- 1 – yes, only reported in DSS record – **CODE SECTIONS B - E**
- 2 – yes, only reported by CJ agency – **CODE SECTIONS B – F & CODE SECTION E, if possible**
- 3 – yes, reported in DSS record AND corroborated with CJ information – **CODE SECTION B - F**

Sections B – D are to be coded based on overall general information that occurred Post ASAP.

B. Stable Dynamic Risk Factors – POST ASAP

Work Stability: WORKST:

- 2 – N/A - unknown
- 1 – unclear
- 0 – never worked
- 1 – sporadic (multiple jobs in less than 1 year)
- 2 – stable short-term (one job lasting longer than 6 months)
- 3 – stable long-term (jobs lasting longer than 1 year)

Stability in School: SCHST:

- 2 – N/A - unknown
- 1 – unclear
- 0 - stable/Minimal (no more than a single incident)
- 1 - unstable (with no more than 2-3 incidents)
- 2 - highly unstable (with 4 or more incidents)

I. Psychiatric Issues – Post ASAP

Any Psychiatric Care/Treatment Post ASAP{xe "Juvenile Psychiatric"}: PSY:{xe "JPSY"}

- 2 – N/A - unknown
- 1 - unclear
- 0 - no
- 1 - yes

Specifies whether subject ever spent time in a mental hospital or other inpatient psychiatric facility since the ASAP: includes a psychiatric unit within a medical hospital, also includes referrals for inpatient observation, or commitment. Do not include inpatient substance abuse treatment facilities/units, residential treatment centers, or day hospital programs.

Total Number of Psychiatric Commitments POST ASAP{xe "Juvenile Psychiatric Total Time"}: TNPSY:{xe "JPST"}

- 2 - N/A - no psychiatric commitment since ASAP
- 1 - unclear
- x - write in “at least” number

Specifies **total number** of psychiatric commitments for any reason.

Reasons for Psychiatric Commitment: RPSYC:

- 2 - N/A - no child / juvenile psychiatric commitment
- 1 - unclear
- 0 - suicidal / self-injurious
- 1 - extreme management problem
- 2 - psychosis
- 3 – sex offense
- 4 – multiple reasons (noted above – list all reasons on coding sheet)
- 5 – other (not noted above – list additional reasons on coding sheet)

Medication(s): MEDPA:

- 2 – N/A - unknown
- 1 – unclear
- 0 – none
- 1 – yes

II. Substance Abuse Issues – Post ASAP

Substance Abuse Issues **include** variables to describe any substance abuse/use history subject may have had **POST ASAP**

Drug Abuse{xe "Non-script Drug Use History"}: DAPA{xe "NSDH"}:

- 2 – N/A - unknown
- 1 - unclear
- 0 - no
- 1 - yes

Indicates whether or not subject has any history over his/her lifetime of illicit use of drugs. Code “1” for use of drugs whose possession and use are “illegal” (e.g., marijuana, cocaine, other “street” drugs). Code “1” for any prescription drug abuse. Also code “1” for sniffing/huffing, (e.g., sniffing glue or huffing aerosol cans). If there is no mention in record of any history of drug use, Code “0”. **If it is clear that subject only experimented briefly (one or two times), and never continued using drugs, Code “0”.**

Severity of Drug Abuse{xe "Nonscript Drug Abuse Over Lifetime"}: SDAPA{xe "NSDU"}:

- 2 - N/A - no drug use history
- 1 - unclear
- 0 - no problems associated
- 1 – some - major problems associated

Code for any drug use and abuse. Code “-2” if variable DAPA above is “0”. Indicates characterization of subject’s drug abuse history in terms of problems the abuse has caused in subject’s life (degree of interference with subject’s life). Code “-1” if there is a strong indication that subject has used drugs but no direct evidence of such problems. Code “0” if subject has a history of non-problematic illicit drug use (use may be frequent at one short time in life or infrequent over long period of time). **Amount or extent of use should not be the only consideration. If there is no indication of any problems in subject’s life associated with his drug use, it would be safe to Code “0”.** Do not assume problems solely based on use. Code “1” if there is indication in the record of some to major problems associated with subject’s drug use (e.g. episodes of drug use involving, fighting, driving while under the influence, blackout) OR more serious problems such as repeated nonattendance at school or under the influence, disruption of significant relationships, legal difficulties, etc.

Alcohol Abuse{xe "Alcohol History"}: AAPA:{xe "AH"}:

- 1 - unclear
- 0 - no
- 1 - yes

Code “1” if evidence that alcohol is interfering in significant areas of subjects life (i.e., not waking up going to school, not showing up for work, behavior changes, etc.)

Severity of Alcohol Abuse{xe "Alcohol Abuse Over Lifetime"}: SAAPA:{xe "AU"}:

- 2 - N/A - no alcohol use history
- 1 - unclear
- 0 - occasional but no problems associated
- 1 – some - major problems associated

Code “-2” if variable AAPA above is “0”. Indicates a characterization of subject’s alcohol abuse history in terms of problems the abuse has caused in subject’s life (degree of interference with subject’s life). Code “-1” if there is a strong indication that subject has used alcohol but no direct evidence of such. Code “0” if there is alcohol history regardless of extent or frequency of that consumption (e.g., social drinking as well as getting frequently drunk can both be coded “0”) as long as there were no problems associated. **Amount or extent of use should not be the only consideration. If there is no indication of any problems in subject’s life associated with his alcohol use, it would be safe to Code “0”.** Do not assume problems solely based on use. Code “1” if there is indication in the record of some problems associated with subject’s drinking (e.g., problematic drinking involving, fighting, driving while intoxicated, blackout, etc.) OR serious and/or frequent problems

associated with subject's drinking such as repeated nonattendance at school or under the influence, disruption of significant relationships, legal difficulties, etc.

III. Caregivers and Living Situations – Post ASAP

Total Number of Foster Placements SINCE ASAP{xe "Number of Foster Placements": TNFPPA:{xe "NFP"}}

- 2 - N/A - never a foster child
- 1 - unclear
- 0 - no new foster home placements
- x - write in "at least" number

Enter total number of different foster placements. Treat this number as "at least". If there is no indication of how many foster placements, code "-1".

Total Number of Residential / Group Placements SINCE ASAP: TNRPA:

- 1 - unclear
- 0 - never in a residential setting or group home
- x - write in "at least" number

- a. If in residential, how long _____ months (total time of all post ASAP residential placements)
- b. If out of residential, how long has subject been back in community _____ months

Total Number of Different Caretakers SINCE ASAP{xe "Total Number of Other Male Caretakers in Home": TND CPA}{xe "OMC"}:

- 1 - unclear
- x - write in the **total number** of individuals identified as caretakers lasting 6 months or longer.

Total Number of Different Living Situations SINCE ASAP: TNDLSPA:

- 1 - unclear
- x - write in total number

Write in total number of different living situations, which refers to the number of places the child actually lived.

IV. Social Skills – Post ASAP

Quality of Peer Relationships: QPR:

- 2 - N/A - unknown
- 1 - unclear
- 0 - socially active, peer-oriented and rarely alone: often with friends in structured and unstructured social and/or sports activities; friends are non-delinquent.
- 1 - a few casual (non-delinquent) friends, some involvement in structured or unstructured activities or a mix of social activity with delinquent as well as non-delinquent peers.
- 2 - withdrawn from peer contact and socially isolated, or no friendships, just "acquaintances," or most peers are delinquent.

This item assesses the nature and quality of the juvenile's peer relationships, the extent to which his time is occupied by non-delinquent social activity, and the extent to which his peer associations are age-appropriate and non-delinquent.

Evidence of Positive Support Systems: EPSYS:

- 2 - N/A - unknown
- 1 - unclear
- 0 - considerable support systems (3 or more of the above apply)
- 1 - some support systems (1 or 2 of the above applies)
- 2 - no known support systems or only negative supports

This item considers the relative presence or absence of support systems that the youth has available to him in the community and that he uses for positive support. Support systems may include (1) apparently supportive family members, extended families, foster families, (2) friends, or (3) significant others, such as therapists, juvenile probation officers and social service

caseworkers. Positive supports also may be indicated by participation in (4) organized after-school sports and activities and (5) involvement in organized religious activities.

Management of Anger: MNGA:

-2 – N/A – unknown

-1 – unclear

0 - no evidence of inappropriate anger. Anger consistently is expressed in appropriate ways.

1 - anger managed appropriately most of the time, with no more than 4 instances of inappropriate anger

2 - anger poorly and inappropriately managed, with 5 or more instances of inappropriate anger.

This item assesses the appropriateness of one's expression of angry feelings. Appropriate expressions are defined here as verbal, nonabusive, and nonviolent expressions of anger. This item does not assess the "pervasiveness" of one's anger (as in item #10). Rate how well the individual manages and expresses feelings of anger in his relationships, at work, and with his friends and acquaintances.

V. Management of Sexual Behaviors – Post ASAP

Prostitution: PROST

-1 - unclear

0 - no reported involvement in prostitution

1 – yes, some level of involvement related to prostitution

Frequent Use of Pornographic Material: EXPORN:

-1 - unclear

0 - no evidence

1 – yes

Peeping: PEEPPA:

-1 - unclear

0 – no evidence

1 - yes

Exposing: EXPOPA:

-1 - unclear

0 - no evidence

1 - yes

Frottage: FROTPA:

-1 - unclear

0 - no evidence

1 - yes

2 – simulated sexual intercourse with objects (humping)

3 – both frottage and humping

Frottage is defined as rubbing or touching others with sexual motivations. Code "2" if subject humps objects such as pillows, animals, etc. Code "3" if subject exhibits both sexual behaviors.

Non-Penetrative Sexual Acts: SANP:

- 1 - unclear
- 0 - no evidence
- 1 - yes

Penetrative Sexual Acts: SAP:

- 1 - unclear
- 0 - no evidence
- 1 - yes

Degree of Force: DOFPA:

- 1 – unclear
- 0 – no evidence of force
- 1 – only manipulated, tricked or bribed victim
- 2 – only verbal force
- 3 - instrumental physical force (holding, pushing, slapping, punching)
- 4 - expressive aggression (gratuitous violence)

Code for most severe incident. Code "0" if no physical force was used. In instances where there is no apparent verbal or physical force, Code "0". Code "1" if only verbal force (explicit order or threats) were used to gain compliance. Code "1" as physical force being defined as instrumental only and no more than was necessary to gain victim compliance. Code "2" as exceeding what is necessary to gain victim compliance.

Total Number of New (POST ASAP) Sexual Abuse Victims: TNVICPA:

- 1 - unclear
- x - write in the total number or **at least** number of known victims

This number does **not** require corroboration by DSS or adjudication by the criminal justice system.

Total Number of New (POST ASAP) Separate Incidents: TNSIPA:

- 1 – unclear
- x – write in total number of incidents or **at least** number

This is **not** a victim count. Will include only sexual behaviors (i.e., exposing, peeping, sexualized obscene telephone calls, and hands on sexual acts), does **not** include sexual comments. An incident is a specific time period when the sexual behavior occurred. For example, it could include one incident with one victim, or it could include one incident with several victims, or several incidents with the same victim(s). Only counting the number of incidents **NOT** victims.

Sexual Promiscuity: SEXPROM:

- 1 - unclear
- 0 - no evidence
- 1 – yes, somewhat
- 2 – yes, very clear evidence

Management of Sexual Urges and Desire: MNGSUD:

- 2 – N/A – unknown
- 1 – unclear
- 0 - well managed expression of sexual urges and desires: all sexual intimate relationships are age appropriate and noncoercive: no evidence of unwanted, sexualized touching or hostile/ demeaning sexualized remarks.
- 1 - sexual urges and desires are managed appropriately most of the time, with no more than 2 instances of inappropriate sexual behavior.

2 - sexual urges and desires are poorly managed. Juvenile engages in inappropriate sexual behavior, frequently gratifying sexual urges in deviant or paraphilic ways. This behavior has been noted on 3 or more occasions. Examples might include chronic masturbation or compulsive use of pornography. Score 2 for sexual promiscuity (numerous sexual partners out of the context of a relationship). Any instance of coercive sexual behavior is automatically scored 2 unless it is the governing or index offense.

This item assesses the extent to which the juvenile manages his sexual urges and desires in socially appropriate and healthy ways. This item does not assess strength of sexual drive (as in item #7). This item assesses the appropriateness of the individual's sexual behavior. Consider all credible and reliable evidence, self-reported as well as documented in the records. If the governing or index offense occurred within the six month window that applies to all Scale 4 items, do not include it when scoring this item.

Sexual Drive and Preoccupation: SDP:

-2 – N/A – unknown

-1 – unclear

0 – normative / minimal. One or two instances of sexualized behavior.

1 - moderate. Sexualized behaviors have been observed and noted on 3 to 5 separate occasions.

2 - high. Sexualized behaviors have been observed and noted on 6 or more separate occasions.

This item measures “hypersexuality,” (i.e., the strength of the sexual drive and preoccupation). This is a behaviorally-anchored item that focuses on evidence of an excessive amount of sexual activity (exceeding what might be considered normative for youths of that age) or excessive preoccupation with sexual urges or gratifying sexual needs. Evidence includes, but is not limited to, paraphilias (exposing, peeping, cross-dressing, fetishes, etc.), compulsive masturbation, chronic and compulsive use of pornography, frequent highly sexualized language and gestures, and indiscriminant sexual activity with different partners out of the context of any relationship. Consider all credible and reliable evidence, self-reported as well as documented in the records.

Continue on to next section

C. Response to Treatment - POST ASAP

(According Primarily to Treatment Notes)

Was there any Information regarding Treatment Progress: TREAT:

- 0 – no
- 1 – yes

If coded “0” (no) the following items should be coded as –2. If coded “1” (yes) answer the following items with evidence supported from treatment notes/documents.

Accepting Responsibility for Offense/s: ACCEPT:

- 2 – N/A – unknown
- 1 – unclear
- 0 - Accepts full responsibility for sexual and nonsexual offenses without any evidence of minimizing.
- 1 - Accepts some (but not total) responsibility. Although occasional minimizing may be present, individual does not deny offending.
- 2 - Accepts no responsibility or there is full denial. Option 2 also is scored when there is partial denial and/or significant or frequent minimizing.

Accepting full responsibility for one’s offense/s means no redirecting or assigning some or all of the responsibility for the offenses to others (i.e., the individual does not attribute some of the responsibility to the victim, to friends or other kids, to society, the police, the courts, or others). Any statements suggesting other than full responsibility should be scored as 1 or 2.

Internal Motivation for Change: IMC:

- 2 – N/A – unknown
- 1 – unclear
- 0 - appears distressed by his offenses and appears to have a genuine desire to change.
- 1 - there is some degree of internal conflict and distress, mixed with a clear desire to avoid the "consequences" of reoffending.
- 2 - no internal motivation for change. The juvenile does not perceive a need to change. He may feel hopeless and resigned about life in general, or may deny ever committing offenses and therefore maintains he does not need to change and/or does not need treatment. Also score 2 if motivation for change is solely external (e.g., to avoid arrest, incarceration or residential placement).

The focus of this item is the extent to which the individual truly experiences offending as out of character and appears to have a genuine desire to change his behaviors to avoid any recurrences.

Understands Risk Factors and Applies Risk Management Strategies: URF:

- 2 – N/A – unknown
- 1 – unclear
- 0 - good understanding and demonstration of knowledge of risk factors and risk management strategies. Knows triggers, cognitive distortions (thinking errors), and high-risk situations. Knows and uses risk management strategies.
- 1 - incomplete or partial understanding of risk factors and risk management strategies. Demonstration of knowledge may be present but inconsistent.
- 2 - poor or inadequate understanding of risk factors and risk management strategies. Cannot adequately identify triggers, cognitive distortions (thinking errors) and offense-justifying attitudes, high risk situations, or risk management strategies.

This item concerns the individual’s knowledge and understanding of factors and situations associated with his offending and the individual’s awareness of risk management strategies and utilization of such strategies.

Empathy: EMPY:

- 2 – N/A – unknown
- 1 – unclear
- 0 - appears to have a genuine capacity for feeling empathy for his sexual abuse victims and can generalize to others in a

variety of situations.

- 1 - there is some degree of expressed empathy, however these statements appear to be internalized at a strictly intellectual level, or are intended primarily to “look good” or respond in a socially acceptable way.
- 2 - there is little or no evidence of empathy and evidence of callous disregard for the welfare of others.

This item assesses the youth’s capacity for empathy in multiple situations. An attempt should be made to distinguish between statements that appear to reflect genuine feelings and those statements that are primarily cognitive and reflect attitudes (e.g., socially desirable responses or genuinely held but strictly intellectual statements).

Remorse and Guilt: RG:

-2 – N/A – unknown

-1 – unclear

- 0 - appears to have genuine remorse for his victims and can generalize to other victims. Importantly, remorse appears to be internalized at an affective (emotional) level and is expressed or demonstrated without prompting.
- 1 - there is some degree of remorse or guilt: however, there are possible egocentric motives (e.g., shame or embarrassment, to avoid incarceration). Score 1 when the remorse appears to be internalized at a strictly cognitive (thinking) level.
- 2 - there is little or no evidence of remorse for victims.

This item assesses the extent to which the juvenile expresses thoughts, feelings, and sentiments that reflect remorse for offending and offense related behavior. This item attempts to assess feelings of regret, guilt, or self-reproach. An attempt should be made to distinguish between statements that appear to reflect genuine feelings and statements that are primarily cognitive and reflect attitudes (e.g., socially desirable responses or genuinely held but strictly intellectual statements about “feeling bad”).

Cognitive Distortions: CD:

-2 – N/A – unknown

-1 – unclear

- 0 - Expresses no distorted thoughts, attitudes, or statements about sexual offending and delinquent behaviors.
- 1 - Occasional comments, attitudes or statements reflecting cognitive distortions.
- 2 - Frequent comments, attitudes or statements reflecting cognitive distortions.

This item assesses distorted ideas, beliefs, or attitudes that justify sexual offending and delinquent behavior. Examples include, “She looked older than she was,” “He started it,” and “I didn’t hurt anyone.” Rate this item only for the presence of distorted attitudes. This item should not be influenced by ratings of item #19 (accepting responsibility) and #23 (remorse or guilt).

Continue on to next section

D. Penal Institutional History - POST ASAP

- **Code following items for ANY penal placement regardless of reason.**

Juvenile Penal{xe "Juvenile Penal"}: JPPA{xe "JP"}:

- 1 - unclear
- 0 - no
- 1 - yes

Specifies whether subject was committed to or placed in a penal setting prior to his 18th birthday.

Juvenile Penal Age{xe "Juvenile Penal Age at First"}: JPA{xe "JPF"}:

- 2 - N/A - no juvenile penal commitment
- 1 - unclear
- x - write in age

Code “-2” if variable JP above is “0”. Refers to the age (at last birthday) when subject was **first** institutionalized for reasons of delinquency/crime as a juvenile.

Adult Penal{xe "Juvenile Penal"}: AP{xe "JP"}: [age 18 or over]

- 1 - unclear
- 0 - no
- 1 - yes

Specifies whether subject was committed to or placed in a penal setting after 18th birthday.

Adult Penal Age{xe "Juvenile Penal Age at First"}: APA{xe "JPF"}:

- 2 - N/A - no adult penal commitment
- 1 - unclear
- x - write in age

Code “-2” if variable AP above is “0”.

CONTINUE CODING ONLY IF YOU HAVE ENOUGH INFORMATION TO RELIABLY CODE SECTIONS E (ACUTE DYNAMIC RISK FACTORS AT TIME OF REOFFENSE) OR F (CJ INFORMATION)

E. Acute Dynamic Risk Factors at Time of Re-Offense

- **ONLY code the following items if there was a SEXUAL (Hands-on) Re-Offense.**
- **Code dynamic risk factors items at time of re-offense OR just prior to (approx. 2 months).**
- **If more than one re-offense code for 1st OR more severe. For instance, if 1st offense is exposing and 2nd offense is a hands-on victim involved, code the acute dynamic factors for the hands-on victim involved offense.**

Date of 1st Known Sexual Victim Involved Reoffense: DOR:

- 1 – unclear
- x – write in actual date or month and year

Time between ASAP and Reoffense: TBAR:

- 1 – unclear
- x – write in months

Living Situation at time of Reoffense: LSR:{xe "CRP" }

-1 – unclear	10 - Intensive Independent Living
0 - biological family	11 - Time Out (Hospital Diversion Program) (ART)
1 - biological relatives	12 - Secure Treatment (DYS facilities) (Long-term)
2 - friends or friends of family	13 - Psychiatric Hospital
3 - streets /shelter (No formal address)	14 - Detention Facility (Short-term)
4 - adoptive home	15 - Out of state placement (sex offense specific)
5 - foster home	16 - Out of state placement (non-sex offense specific)
6 - specialized foster home	17 - Alone, independent
7 – Non766/Group Home	18 - Married, living with spouse
8 - 766 School (School Emotionally Disturbed, School Multi-Handicap, School Mental Retardation)	19 - Military
9 – Residential Setting	20 – Adult Prison/Jail

Problems in School at time of Reoffense: SCH:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no
- 1 – yes, recently in trouble at school, truancy, fighting, expelled, etc.

Problems at Work at time of Reoffense: WORK:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no current employment
- 1 – yes, recently in trouble at work, tardy, drugs, reprimanded by boss/supervisor, terminated, fighting, etc.

DSS Involvement at time of Reoffense: DSS:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no
- 1 – yes

Psychiatric Medication at time of Reoffense: PSYM:

- 2 – N/A – unknown
- 1 – unclear

0 – no
1 – yes

Mental Health Treatment at time of Reoffense: MHTX:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes

Drug Abuse at time of Reoffense: DRUG:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes

Alcohol Abuse at time of Reoffense: ALCH:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes

Evidence of **Change** in living situation *OR* caregiver at time of Reoffense: ECLS:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes

Evidence of **Change** in Quality of Peer Relationships at time of Reoffense: ECQPR:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes

Evidence of any Loss at time of Reoffense: LOSS:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes, one noteworthy loss
2 – yes, multiple losses around time of reoffense

Evidence of loss is defined as a recent loss (around the time, approximately 2 months prior to) reoffense, which includes a death of parent or parental figure, loss of relationship (girl/boy friend, best friend, etc.), loss of a job, housing, school, etc.

Evidence of Poorly Controlled or Poorly Managed Anger at time of Reoffense: EPCMA:

-2 – N/A – unknown
-1 – unclear
0 – no
1 – yes

Poorly controlled or poorly managed anger is reflected by verbal or physical assaults, fighting, aggressive behavior, etc.

Evidence of Poorly Controlled or Poorly Managed Sexual Behavior(s) at time of Reoffense: EPCMSB:

-2 – N/A – unknown

-1 – unclear

0 – no

1 – yes

Poorly controlled or poorly managed sexual behaviors is reflected by use of pornography, promiscuity, paraphilic behaviors, frequent masturbation, etc.

STOP HERE IF SUBJECT DOES NOT HAVE ANY SUPPORTING CJ INFORMATION

F. Behavior(s) that Resulted in a Criminal Sanction(s)

- Code this section based on information obtained by CJ Agencies (CORI or SORB).

****For items that include dates, if no specific date is given, use the month / year, if it can be reliably determined ****

I. Non-Sexual “Hands-On” Offense

Date(s) of Non-Sexual “Hands-on” Offense(s): DNSHO:

- 2 – N/A - unknown
- 1 – unclear
- xx/xx/xx – write in date (if date is unknown write in 99/99/99)

Age at Time of Non-Sexual “Hands-on” Offense: ANSHO:

- 2 – N/A - unknown
- 1 – age unclear
- xx – write in age

Degree of Physical Violence/Damage in Non-Sexual “Hands-on” Offense: VNSHO:

- 2 – N/A - unknown
- 1 – unclear
- 0 – no or minimal level of violence (manipulated, tricked or bribed victim)
- 1 – moderate level of violence (instrumental physical force)
- 2 – extreme level of violence (gratuitous violence)

Consequence for Non-Sexual “Hands-on” Offense: CNSHO:

- 2 – N/A - unknown
- 1 – unclear
- 0 – probation, remained in community
- 1 – probation, placed in residential treatment program
- 2 – probation, detained in correctional facility pending investigation
- 3 – charged/arrested, remained in community
- 4 – charged/arrested, placed in residential treatment program
- 5 – charged/arrested, detained in correctional facility pending investigation
- 6 – adjudicated convicted, sentence pending
- 7 – adjudicated convicted, incarcerated
- 8 – adjudicated convicted, no probation or incarceration, sentence such as community service or fine
- 9 – dismissed
- 10 – not guilty
- 11 – continued

OFFENSE	Date of Non-Sexual “Hands-on” Offense	Subject’s Age @ Time of Non-Sexual “Hands-on” Offense	Degree of Physical Violence/Damage in Non-Sexual “Hands-on” Offense	Consequence for Non-Sexual “Hands-on” Offense
1				
2				
3				
4				
5				

6				
7				
8				
9				
10				

II. Non-Sexual “Hands-Off” Offense

Date(s) of Non-Sexual “Hands-off” Offense(s): DNSHOFF:

- 2 – N/A - unknown
- 1 – unclear
- xx/xx/xx – write in date (if date is unknown write in 99/99/99)

Age at Time of Non-Sexual “Hands-off” Offense: ANSHOFF:

- 2 – N/A - unknown
- 1 – age unclear
- xx – write in age

Consequence for Non-Sexual “Hands-off” Offense: CNSHOFF:

- 2 – N/A - unknown
- 1 – unclear
- 0 – probation, remained in community
- 1 – probation, placed in residential treatment program
- 2 – probation, detained in correctional facility pending investigation
- 3 – charged/arrested, remained in community
- 4 – charged/arrested, placed in residential treatment program
- 5 – charged/arrested, detained in correctional facility pending investigation
- 6 – adjudicated convicted, sentence pending
- 7 – adjudicated convicted, incarcerated
- 8 – adjudicated convicted, no probation or incarceration, sentence such as community service or fine
- 9 – dismissed
- 10 – not guilty
- 11 – continued

OFFENSE	Date of Non-Sexual “Hands-off” Offense	Subject’s Age @ Time of Non-Sexual “Hands-off” Offense	Consequence for Non-Sexual “Hands-off” Offense
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

III. Sexual “Hands-On” Offense

Date(s) of Sexual “Hands-on” Offense(s): DSHO:

- 2 – N/A - unknown
- 1 – unclear
- xx/xx/xx – write in date (if date is unknown write in 99/99/99)

Age at Time of Sexual “Hands-on” Offense: ASHO:

- 2 – N/A - unknown
- 1 – age unclear
- xx – write in age

Location of Sexual “Hands-on” Offense: LSHO:

- 2 – N/A - unknown
- 1 – unclear
- 0 – charged offense occurred while subject was in community
- 1 – charged offense occurred while subject was in residential treatment center
- 2 – charged offense occurred while subject was in a correctional institution (DYS, DOC)

Degree of Physical Violence/Damage in Sexual “Hands-on” Offense: VSHO:

- 2 – N/A - unknown
- 1 – unclear
- 0 – no or minimal level of violence (manipulated, tricked or bribed victim)
- 1 – moderate level of violence (instrumental physical force)
- 2 – extreme level of violence (gratuitous violence)

Consequence for Sexual “Hands-on” Offense: CSHO:

- 2 – N/A - unknown
- 1 – unclear
- 0 – probation, remained in community
- 1 – probation, placed in residential treatment program
- 2 – probation, detained in correctional facility pending investigation
- 3 – charged/arrested, remained in community
- 4 – charged/arrested, placed in residential treatment program
- 5 – charged/arrested, detained in correctional facility pending investigation
- 6 – adjudicated convicted, sentence pending
- 7 – adjudicated convicted, incarcerated
- 8 – adjudicated convicted, no probation or incarceration, sentence such as community service or fine
- 9 – dismissed
- 10 – not guilty
- 11 – continued

OFFENSE	Date of Sexual “Hands-on” Offense	Subject’s Age @ Time of Sexual “Hands-on” Offense	Location of Sexual “Hands-on” Offense	Degree of Physical Violence/Damage in Sexual “Hands-on” Offense	Consequence for Sexual “Hands-on” Offense
1					
2					

3					
4					
5					
6					
7					
8					

IV. Sexual “Hands-off” Offense

Date(s) of Sexual “Hands-off” Offense(s): DSHOFF:

- 2 – N/A - unknown
- 1 – unclear
- xx/xx/xx – write in date (if date is unknown write in 99/99/99)

Age at Time of Sexual “Hands-off” Offense: ASHOFF:

- 2 – N/A - unknown
- 1 – age unclear
- xx – write in age

Consequence for Sexual “Hands-off” Offense: CSHOFF:

- 2 – N/A - unknown
- 1 – unclear
- 0 – probation, remained in community
- 1 – probation, placed in residential treatment program
- 2 – probation, detained in correctional facility pending investigation
- 3 – charged/arrested, remained in community
- 4 – charged/arrested, placed in residential treatment program
- 5 – charged/arrested, detained in correctional facility pending investigation
- 6 – adjudicated convicted, sentence pending
- 7 – adjudicated convicted, incarcerated
- 8 – adjudicated convicted, no probation or incarceration, sentence such as community service or fine
- 9 – dismissed
- 10 – not guilty
- 11 – continued

OFFENSE	Date of Sexual “Hands-off” Offense	Subject’s Age @ Time of Sexual “Hands-off” Offense	Consequence for Sexual “Hands-off” Offense
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Additional POST- ASAP Items -

Propositioning, grooming, or manipulating staff or peers for sexual purposes: GROOM:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no
- 1 – yes

Sexualized remarks or gestures (non-threatening): REMARKS:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no
- 1 – yes

Threats to harm: THREATS:

- 2 – N/A – unknown
- 1 – unclear
- 0 – none
- 1 – yes, only non-sexualized threats
- 2 – yes, only sexualized threats
- 3 – yes, both sexual and non-sexual threats

Threats are statements that are intended to frighten or scare. To code this item, you do not need an intended target only that the threat was verbalized. For instance, non-sexualized threats would be if subject makes the statement that they “want to kill someone.” For sexualized threats the subject indicates they “want to rape and sodomize someone.”

Continued Sexually Inappropriate Behavior(s): CSIB:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no
- 1 – yes

Sexually inappropriate behaviors consist of ***hands-off*** behaviors. For example, exposing self to peers or staff, masturbating in front of others, sexualized nonverbal behaviors, including sexualized gestures or communications (i.e., letters, notes, pictures, drawings, etc.) Overall, sexually acting out in a manner that is inappropriate without actually having an identified victim involved.

Continued Sexually Inappropriate Behaviors with **Physical Contact**: CSIBPC:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no
- 1 – yes

This item assess if subject continued to act out with sexually inappropriate behaviors that would be considered a sexual boundary violation. Consider inappropriate and unwanted sexualized behaviors that do not appear to have the intent of a sexual assault. For example, goosing, unwanted kissing, grabbing and pulling clothing, groping, any unwanted sexualized touching. When coding this item take into consideration age appropriateness and that the physical contact was **not** focused on erogenous zones (i.e., breasts, genitals or anus).

Evidence of Escalation in Sexualized Behavior(s): ESCAL:

- 2 – N/A – unknown
- 1 – unclear
- 0 – no evidence
- 1 – yes

There needs to be an increase in severity or frequency from what was noted in the original ASAP reason. For instance, if the initial ASAP reason was for pulling down a sibling's pants and then a later document indicated another incident where subject inserted a digit into a peer's anus, you would code this as "1" yes because the behavior has escalated.

Consistency of Sexualized Behaviors: CONST:

- 2 – N/A – unknown
- 1 – unclear
- 0 – stopped completely after ASAP
- 1 – continued up to 12 months after ASAP
- 2 – continued longer than 12 months

By the end of the follow-up information, what was the consistency of behaviors? We are looking at whether or not the behaviors stopped after a period of time or continued as of the most recent document date.

Global Adjustment Index: GAI:

- 1 - Unclear [inadequate information to rate]
- 0 - Excellent Adjustment – No problems noted and notable positive successes or achievements in 3 or 4 areas
- 1 - Good Adjustment - No problems noted and notable positive successes or achievements in 1 or 2 areas

- 2 - Adequate Adjustment – seems to be holding himself together without serious problems but very little progress is noted or achievements noted
- 3 - Poor Adjustment in any 2 or 3 of the areas
- 4 - Very Poor Adjustment in all areas, remains at considerable risk to harm self or others

To assess this item consider the youth's age-appropriate adjustment in the following areas:

(a) general self-regulation (behavior is not impulsive, reasonably well controlled), (b) school behavior (no classroom disturbances, truancy, suspensions), (c) interpersonal behavior (no bullying or fighting, appears to have friends, relationships not abusive), (d) sexual self-regulation (appropriately managed sexual behavior). Code this item as of the most current information available. We are asking you to make a general impression of the subject's current level of functioning.

APPENDIX

E

J-SOAP-II Manual

**JUVENILE SEX OFFENDER ASSESSMENT PROTOCOL-II
(J-SOAP-II)**

MANUAL

Robert Prentky, Ph.D & Sue Righthand, Ph.D.

Contact Information

The J-SOAP-II is an experimental scale and is the subject of ongoing research to improve reliability and further enhance predictive validity. We appreciate feedback from users about areas of ambiguity and ways to increase clarity. We are available to answer questions concerning the use of the J-SOAP, updates on validity studies, and training opportunities.

**Robert Prentky, Ph.D.
P.O. Box 162
Accord, MA 02018-0162
Office: (508) 697-2744
Email: rprentky@attbi.com**

**Sue Righthand, Ph.D.
P.O. Box 1047
Rockland, Maine 04841
VM: (207) 594-0105
Email: Rtnds@aol.com**

Table of Contents

Introduction	i
Development and Validation of J-SOAP	1
Frequently Asked Questions	13
Scoring Guidelines	17
Scoring Instructions:	
Scale I [Sexual Drive / Preoccupation]	19
Scale II [Impulsive / Antisocial Behavior]	27
Scale III [Intervention]	36
Scale IV [Community Stability / Adjustment]	44
J-SOAP-II Scoring & Summary Forms	50

Introduction

The Juvenile Sex Offender Assessment Protocol-II (J-SOAP-II) is a checklist whose purpose is to aid in the systematic review of risk factors that have been identified in the professional literature as being associated with sexual and criminal offending. It is designed to be used with boys in the age range of 12 to 18 who have been adjudicated for sexual offenses, as well as nonadjudicated youths with a history of sexually coercive behavior.

Decisions about reoffense risk should not be based exclusively on the results from J-SOAP-II. J-SOAP-II should always be used as part of a comprehensive risk assessment. Like any scale that is intended to assess risk, J-SOAP-II requires ongoing validation and possible revision, as we learn more about how J-SOAP-II works and about how best to assess the risk of youths who have sexually offended. Because the revised J-SOAP is a new scale, and we are just beginning to collect predictive validity data on it, we cannot provide users with cut-off scores for categories of risk at this point; this is all the more reason why scores from J-SOAP-II should not be used in isolation when assessing risk.

Caveat

When assessing risk with sex offenders in general, and with juveniles in particular, the stakes are often very high. In assessing the risk posed by a juvenile, we have an enormous burden of responsibility. Decisions based on our evaluations can have a profound impact; on the one hand, protecting society from genuinely high risk youths, while on the other hand, possibly resulting in severe, life altering consequences for low risk youths.

It is imperative that clinicians who assess the risk of adolescent offending be very knowledgeable of the challenges involved in assessing this population. Unlike adults, adolescents are still very much “in flux.” No aspect of their

development, including their cognitive development, is fixed or stable. In addition, their life circumstances often are very unstable. In a very real sense, we are trying to assess the risk of “moving targets.” Since risk status may change, sometimes dramatically, in a brief period of time, we strongly recommend that youths be re-assessed for risk at a minimum of every six months. At the very least, Scales III and IV should be re-scored every six months. Re-assessments should be done even more frequently if the examiner is aware of risk- relevant changes that have occurred in the youth’s life.

Prior to using J-SOAP II, users should have training and experience in assessing juveniles who commit sexual offenses and risk assessment in general, particularly as it pertains to juvenile sex offending. In addition, prior to using J-SOAP II, users should read the manual and be familiar with its contents. Before using the scale in any professional capacity, users should complete several practice cases and compare their scores with others who have scored the same case to identify and resolve any scoring difficulties. It is also recommended that J-SOAP-II users periodically consult with each other about their scoring and stay current with the evolving literature relevant for assessing with juveniles who sexually offend.

Development and Validation of J-SOAP-II

Development.

The original version of this risk assessment scale for juvenile sex offenders was developed at Joseph J. Peters Institute (JJPI) in Philadelphia in 1994 (Prentky, Harris, Frizzell, & Righthand, 2000). The risk assessment variables were developed after reviews of the literature that covered five areas: (1) clinical studies of juvenile sex offenders, (2) risk assessment/ outcome studies of juvenile sex offenders, (3) risk assessment/ outcome studies of adult sex offenders, (4) risk assessment/outcome studies from the general

juvenile delinquency literature, and (5) risk assessment studies on mixed populations of adult offenders.

In all, 23 items representing four subscales were developed. These scales were intended to capture the two major historical [static] domains that are of importance for risk assessment with this population (Scale I: Sexual Drive/Sexual Preoccupation and Scale II: Impulsive, Antisocial Behavior), and the two major dynamic areas that could potentially reflect behavior change (Scale III: Clinical/Treatment and Scale IV: Community Adjustment). The latter two subscales were of particular importance, because the original risk assessment protocol was developed to assess not only risk at discharge but change as a function of treatment.

No a priori item weighting was used. All items were trichotomized and assumed, for lack of empirical data to suggest otherwise, to be of equal importance. Trichotomization was intended to be a compromise, adding some increase in sensitivity over a simple rating of present/absent, while at the same time preserving acceptable interrater reliability. The coding for each item provided, to whatever extent possible, behavioral anchors to increase clarity and reliability.

Validation.

The construction/validation sample consisted of 96 juvenile sexual offenders, ranging in age from 9 to 20 (average age was 14), who were referred to JJPI for assessment and treatment. The risk assessment protocol was completed on all 96 juvenile sex offenders as part of a comprehensive intake battery at JJPI. The protocol was completed again at time of discharge, on average twenty-four months later. The protocol was coded independently by two clinicians entirely from archival documents and data obtained from the intake battery. After the ratings were completed, the

clinicians discussed disagreements, and the agreed upon ratings were used to examine outcome.

Twelve month follow-up data were obtained on 75 of the 96 youths in the study. The short-term [12 month] recidivism rate of 11% included three youths that committed another sexual offense, four youths that committed a nonsexual victim-involved offense, and one youth who committed a nonsexual, victimless offense.

The inter-rater reliability (IRR) for all items, except for Caregiver Instability, was good to excellent, ranging from .75 to .91, with an average IRR of .83. The reliability for Caregiver Instability was poor (.59), and that item has since been revised. Three of the subscales had moderate internal consistency, with alphas ranging from .68 to .73. The Clinical/Treatment scale had a high degree of internal consistency (.85). Three of the four subscales were comprised of items with high item-total correlations ($r \geq .30$). Seven of the 9 items in Scale II, 4 of the 5 items in Scale III, and all items in Scale IV, exceeded this benchmark. The exception was Scale I. The only Scale I item with a reasonably high item-total correlation was Prior Charged Sex Offenses.

Overall, there was an average total scale score of 21 for those juveniles who did not reoffend and an average scale score of 30 for those 3 juveniles that committed another sexual offense. These results were based on a very small sample of 8 recidivists, only 3 of whom were sexual recidivists. For that reason we applied no inferential statistics, and observed group differences were not confirmed by statistical significance.

We looked at Treatment Outcome (assessed at time of discharge) in two ways, by correlating the total score for the six treatment outcome variables with the four follow-up variables and with the four subscales. The correlation between Treatment Outcome and the total scale score was .58. The

correlations between Treatment Outcome and the two dynamic subscales were .62 for Clinical/ Treatment and .43 for Community Adjustment. The correlations between Treatment Outcome and Follow-Up were .35 for the juveniles that re-offended and .55 for the juveniles that were removed from the community and placed.

This study was informative in pointing to areas that required revision and clarification. The scoring criteria for every item were carefully examined for ambiguity and behavioral examples and anchors were added. Two changes were made to Scale I. First, the Scale I item that included offense planning (*History of Predatory Behavior*) was replaced with a more clearly defined *Offense Planning* item. The new Offense Planning item was behaviorally anchored and easier to code from file data than the more inferential History of Predatory Behavior item that required difficult judgments about behaviors such as grooming and exploitation. Second, a fifth variable was added to Scale I that was intended to capture the degree to which the juvenile sexualized his victims (for example, use of pornography in the offense, filming the victim, engaging in unusual or ritualized sexual acts with the victim). Two changes were also made to Scale II. A Juvenile Antisocial Behavior item was added that was intended to assess general delinquency, and a History of Expressed Anger item was added that was designed to assess disruptions due to poorly controlled and poorly managed anger.

The revised scale, completed in 1998 and referred to as J-SOAP, was examined with a sample of 153 juveniles in Maine (Righthand, Prentky, Hecker, Carpenter, & Nangle, 2000). The juvenile sexual offenders in this sample had an average age of 16, and had been adjudicated for a sex offense or had been adjudicated for another offense, but had a documented sex offense in their records. The victims ranged in age from 1 year to 36 years,

with an average age of 8.6 years. Inter-rater reliabilities for the four subscales ranged from .80 to .91. Internal consistency continued to be quite high for Scale II (alpha = .88), Scale III (alpha = .95), and Scale IV (alpha = .80), with Scale I evidencing moderate internal consistency (alpha = .64).

We looked at the factor structure of the 26 items comprising the J-SOAP using principal component analysis (PCA) (Righthand et al., 2000). The four factor solution provided strong empirical support for the four J-SOAP scales. The first factor, accounting for slightly over 20% of the variance, was the equivalent of Scale II (Impulsive, Antisocial Behavior) on J-SOAP. The first factor mapped Scale II precisely, with all items on Scale II falling on it. The loadings for these eleven items ranged from .44 to .77. The second factor, also accounting for 20% of the variance, was the equivalent of Scale III (Clinical Intervention) on J-SOAP. All five Scale III items loaded on this factor along with one item (Quality of Peer Relations) that was from Scale IV of J-SOAP. The loadings for the five Scale III items ranged from .83 to .88. The third factor accounting for about 9% of the variance was the precise equivalent of Scale I (Sexual Drive & Preoccupation) on the J-SOAP. All five Scale I items loaded on this factor with item loadings ranging from .51 to .72. The fourth factor, accounting for about 8.5% of the variance, was the equivalent of Scale IV (Community Adjustment) on the J-SOAP. Four of the five Scale II items loaded on this component, with item loadings ranging from .46 to .78.

The concurrent validity of the J-SOAP was explored by examining how well it correlated with the Youth Level of Service/Case Management Inventory (LSI/CMI) (Righthand et al., 2000). In addition, we examined the relationship between the J-SOAP static scales (Scales I & II) and criminal history variables coded from the juvenile's files. The coded variables were: (1)

Total Offenses, the total number of offenses of any type committed by the youths; (2) Sexual Offenses, the total number of sexual offenses committed by the youths; (3) Sex Offense Victims, the number of victims of contact sexual offenses; and (4) Sexual Aggression, the degree of aggression displayed by the youths during any and all sexual activities throughout his life.

The LSI/CMI was highly correlated with the total J-SOAP score [r = .91], as well as the individual scales: Scale I [r = .37]; Scale II [r = .81]; Scale III [r = .88]; Scale IV [r = .91]. Scale I was uncorrelated with Total Offenses [r = .08] but significantly correlated with Number of Sex Offenses [r = .36], Number of Sex Offense Victims [r = .64], and Degree of Sexual Aggression [r = .27]. Scale II was uncorrelated with Number of Sex Offenses (r = .03) but significantly correlated with Total Offenses [r = .30], Number of Sex Offense Victims [r = .27], and Degree of Sexual Aggression [r = .29].

Of the original sample of 153 youths, 134 could be reliably coded as to placement, either residential (a treatment or correctional facility) or in the community. The validity of the J-SOAP was also examined by comparing 45 residential and 89 community juveniles on J-SOAP scales (Righthand, Carpenter, & Prentky, 2001). Since Scale IV is not scored for youths who have been in secure care for six months or longer, Scale IV was not examined. The other three J-SOAP scales discriminated between the two groups, with the residential juveniles being significantly higher in risk than the community juveniles on all three scales.

In one of two recent predictive validity studies, Hecker, Scoular, Righthand, & Nangle (2002) examined juvenile and adult arrest and conviction data for a period spanning 10 to 12 years on a sample of 54 male adolescent sex offenders. Twenty of the juveniles committed a nonsexual offense (37%) and 6 of the juveniles committed a sexual offense (11%) during

the follow-up period. Although the total J-SOAP score was not correlated with sexual recidivism, Scale 1 alone significantly improved the prediction of sexual recidivism above chance (ROC, AUC = .79). A serious caveat, however, is that there were only 6 sexual recidivists. The very low rate of sexual recidivism has been a methodological impediment that has hindered our ability to examine in greater depth the predictive validity of J-SOAP.

Waite, Pinkerton, Wieckowski, McGarvey, & Brown (2002) reported on a nine year follow-up study of 253 very high risk juvenile sex offenders. Although the detected rate of sexual recidivism was, once again, very low (4.3%, 11 youths were arrested for a new sexual offense), roughly 60% of the sample was arrested for other offenses. Using a modified Scale 2 from the J-SOAP (8 of the 11 items were coded), the juveniles were split into two groups: Low Impulsive/Antisocial (n = 118) and High Impulsive/Antisocial (n=135). The proportion of the Low and High groups arrested for *any* new offense was 52.6% and 74.8%, respectively ($p < .001$). Although the numbers were very small, it is noteworthy that the High Scale 2 juveniles were three times more likely to be re-arrested for a new sexual offense (9.8%, compared with 2.9% for the Low Scale II juveniles).

Righthand, Knight, and Prentky (2002) tested four theoretical models using structural equation modeling. This study explored (a) the relationship of antecedent adverse life experiences to J-SOAP Scales I, II, and III, and (b) the relationship of J-SOAP to sex offense outcome variables. The six key findings from this study were: (1) there was a strong relationship between a history of sexual abuse and J-SOAP Scale 1, (2) the severity of the sexual abuse was the most important facet of sexual abuse for predicting outcome, (3) family violence/trauma and caregiver instability were both related to J-SOAP Scale 2, (4) J-SOAP Scale 1 was strongly related to the number of

victims [the higher the score, the greater the number of victims] and victim gender [higher Scale 1 scores were associated with male victims], (5) J-SOAP Scale 2 was related to victim age [higher Scale 2 scores were associated with older victims (teenage or older)], and (6) J-SOAP Scales 1 and 2 both were associated with the amount of force used in the sexual offenses.

J-SOAP-II

The J-SOAP was revised again based on the results of the studies just described. In addition, an attempt was made to better anchor items in clear, behavioral terms. In this section we will highlight the most important changes that have been made to J-SOAP. Only substantial changes, such as item additions and deletions, are described here. Because numerous, more subtle, changes were made to item wording and scoring criteria, it is important to read over the revised scale carefully.

Scale 1. Six substantial changes were made. These changes include the addition of four new items, the deletion of one item and an extensive revision of another. The decision to add several items was based on weaknesses in Scale I and recent research suggesting the potential importance of these items in assessing the risk of sexual reoffending. The four New items are: (1) *Number of Sexual Abuse Victims*, which measures the number of victims the juvenile has ever sexually abused, (2) *Male Child Victim*, which assesses the juvenile's history of sexually abusing a substantially younger male child, (3) *Sexualized Aggression*, which assesses the presence of gratuitous or expressive aggression that goes beyond what was required to complete the sexual offense, and (4) *Sexual Victimization History*, which assesses the juvenile's own history of sexual victimization and the complexity and severity of the abuse.

The **deleted** item is: *High Degree of Sexualizing the Victim*. This item had a very low frequency of occurrence and appeared of limited utility. One item,

Evidence of Sexual Preoccupation/Obsessions, was replaced with a more clearly defined *Sexual Drive and Preoccupation* item. The new *Sexual Drive and Preoccupation* item was behaviorally anchored with a range of examples making it easier to code from file data. Scale 1 in the J-SOAP–II now has a total of 8 items.

Scale 2. Six substantial changes were made. (1) Two items, *History of Substance Abuse* and *History of Parental Substance Abuse*, were eliminated. Several studies consistently indicated that these were weak items and were not contributing to the predictive ability of Scale 2. (2) The item *School Suspensions or Expulsions* was combined with the item *School Behavior Problems* to reduce the obvious overlap between those two items, (3) The item *Impulsivity* was dropped. As a risk predictor, lifestyle impulsivity appears to be more effective with adults than juveniles. The J-SOAP item, *Juvenile Antisocial Behavior*, provides a much better assessment of impulsivity in adolescence, (4) An item, *Physical Assault History / Exposure to Violence*, was added based on the empirical literature as well as our recent path analysis looking at the developmental antecedents of J-SOAP scales, (5) The item *Caregiver Consistency* was revised. In order to provide a more sensitive assessment of caregiver changes that might impact adversely affect the development of attachments and relationships, the item was changed to assess caregivers prior to age 10 rather than 16. J-SOAP- II Scale 2 now has a total of 10 items.

Scale 3. Because J-SOAP-II may be useful for assessing nonsexual recidivism as well as sexual recidivism, relevant Scale 3 Intervention items were revised to include changes in attitudes and behaviors related to nonsexual offending as well as sexual offending. In addition, because empathy and remorse are really distinct attitudes and feelings, J-SOAP item *Evidence of Empathy, Remorse, and Guilt* was separated into two items, one simply entitled

Empathy, and the other entitled *Remorse and Guilt*. Finally, based upon Principal Components Analyses findings, the item *Quality of Peer Relationships* was moved from Scale IV to Scale III where it appears to fit conceptually as an important target of treatment interventions. These changes result in J-SOAP–II Scale 3, the Intervention Scale, having a total of 7 items.

Two substantial changes were made to Scale 4. One new item, *Management of Sexual Urges and Desire* was added to assess the extent to which the juvenile manages his sexual urges and desires in socially appropriate and healthy ways. Also, as noted above, the item *Quality of Peer Relationships* was moved from Scale 4 to Scale 3. These changes resulted in Scale 4 having a total of 5 items.

In all, the revised scale has 28 items, 2 more than the original J-SOAP. J-SOAP –II replaces all previous versions of the J-SOAP.

References

Harris, G. T., Rice, M. E., & Quinsey, V. L. (1994). Psychopathy as a taxon: Evidence that psychopaths are a discrete class. *Journal of Consulting and Clinical Psychology, 62*, 387-397.

Hecker, J., Scoular, J., Righthand, S., & Nangle, D. (2002, October). *Predictive validity of the J-SOAP over 10-plus years: Implications for risk assessment*. Paper presented at the Annual Meeting of the Association for Treatment of Sexual Abusers, Montreal, Quebec, Canada.

Hoge, R. D., & Andrews, D. A. (1994). *The Youth Level of Service/Case Management Inventory and Manual*. Ottawa, Canada: Carleton University, Department of Psychology.

Prentky, R. A., Harris, B., Frizzell, K., & Righthand, S. (2000). An actuarial procedure for assessing risk with juvenile sex offenders. *Sexual Abuse: A Journal of research and Treatment, 12*(2), 71-93.

Righthand, S., Carpenter, E. M., Prentky, R. A. (2001, November). *Risk assessment in a sample of juveniles who have sexually offended: A comparative analysis*. Poster presented at the Annual Conference of the Association for the Treatment of Sexual Abusers, San Antonio, Texas.

Righthand, S., Knight, R., & Prentky, R. (2002, October). *A path analytic investigation of proximal antecedents of J-SOAP risk domains*. Paper presented at the Annual Meeting of the Association for Treatment of Sexual Abusers, Montreal, Quebec, Canada.

Righthand, S., Prentky, R., Hecker, J. E., Carpenter, E., & Nangle, D. (2000, November). *JJPI-Maine Juvenile Sex Offender Risk Assessment Schedule (J-SOAP)*. Poster session presented at the Association for the

Treatment of Sexual Abusers 19th Annual Research and Treatment Conference in San Diego, CA.

Righthand, S., Prentky, R. A., Knight, R. A., Carpenter, E., Hecker, J. E., & Nangle, D. (Manuscript in preparation). *Factor structure and validation of the Juvenile Sex Offender Assessment Protocol (J-SOAP).*

Waite, D., Pinkerton, R., Wieckowski, E., McGarvey, E., & Brown, G. L. (2002, October). *Tracking treatment outcome among juvenile sexual offenders: A nine year follow-up study.* Paper presented at the Annual Meeting of the Association for Treatment of Sexual Abusers, Montreal, Quebec, Canada.

Frequently Asked Questions

1. What is Actuarial risk assessment?

Actuarial refers to the work done by actuaries. Actuaries are individuals who are trained to calculate risks using statistics, usually for insurance companies. Actuarial scales are developed using statistical analyses of groups of individuals with known outcomes (such as men who have been convicted of a new sex offense and men who apparently have not re-offended sexually). These analyses tell us which items ("predictor variables") do the best job of differentiating between those who re-offended and those who did not reoffend. Since some items inevitably do a better job than others, these analyses can also tell us how much each item should be weighted. The items are combined to form a scale. The scales are then used on other samples to see how well they work (to test their validity).

2. Is the J-SOAP an Actuarial scale?

Although our goal is to provide the user with probabilistic estimates of risk for sexual recidivism, we still do not have adequate data on a sufficiently large number of juvenile sexual re-offenders to provide such estimates. Thus, at the present time, J-SOAP-II is not an actuarial scale. J-SOAP is an empirically-informed guide for the systematic review and assessment of a uniform set of items that may reflect increased risk to reoffend.

3. How come there are no cut-off scores?

Cut-off scores are determined after many subjects have been scored and a large and diverse database is available. Most importantly, this database must include excellent follow-up information on sexual recidivism (those who have re-offended and those who have not). Rather than assigning cut-off scores based on insufficient information, we decided that the most prudent and responsible

approach was to recommend the use of ratios. The score of each scale can be divided by the total possible score for that scale. The total J-SOAP-II score can also be reported as a ratio. These ratios or proportions reflect the observed “amount” of risk rated as present for each scale and for the total score. When the data that are being gathered clearly point to reliable cut-off scores with diverse samples of juveniles, we will recommend those cut-offs to users.

4. What about item weighting?

Actuarial scales may work better when items are properly weighted. Item weighting takes into consideration that some items simply are more important than others when it comes to predicting outcome. Proper item weighting is done with a statistical procedure called multiple linear regression. The result is a "weighted linear prediction." Item weighting, however, is not required. Some argue that simple unit item weighting (the way the J-SOAP works) is just as effective.

This is, of course, an empirical question. In order to do proper item weighting, large samples of offenders are needed to determine the item weights, and we have not as yet gathered enough outcome data to examine the potential increase in accuracy using item weights.

At the present time, the J-SOAP is a simple unit weighted system. We add the scores for all of the items and divide by the total possible score to derive the proportion rated as present. Although this procedure may not be as effective as using item weights, it is superior to using clinically-derived weights (clinical notions about how the items should be weighted, unsupported by any data).

5. Can I "adjust" the J-SOAP score?

This question is most relevant for discussions of actuarial risk assessment instruments, and, as noted above, the J-SOAP-II is not an actuarial instrument. Users might adjust a J-SOAP score by changing the way they rated a particular item because the score was not consistent with their impression of the juvenile. They would, in effect, be changing the criteria for scoring that item, and that is NOT acceptable. The scores for individual items, as well as the overall scale scores, should never be changed or adjusted. "Adjustment" is perfectly legitimate when writing up conclusions about the juvenile's risk. In that context, you would be "adjusting" your conclusions, presumably based on risk-relevant information that the J-SOAP-II did not take into consideration, and not adjusting the J-SOAP-II scores. We might think of such risk-relevant information in the dynamic sense, as mitigating or aggravating factors that serve to increase or decrease risk. The clinician could report, for example, "Although the J-SOAP- II score is relatively low, there are clear aggravating factors in the individual's life that may increase his risk..."

6. What can I do to improve my scoring reliability?

The single most important factor contributing to unreliability is the lack of information or the ambiguity of information being used to score the item. How incomplete or how ambiguous the information is may vary enormously from one case to another, and there are no simple or easy methods for dealing with this problem. In general, multiple sources of information are ideal. Not only is there a greater likelihood of finding needed information, but multiple sources provide a cross-check of the information.

To enhance reliability, we strongly recommend that examiners use as many sources of information as possible when scoring J-SOAP-II. In addition, although it is often not feasible, we also recommend that the J-SOAP-II be scored by two independent clinicians who then compare and discuss their scores. The agreed upon scores should be used. When the available information is very limited, unclear, or incomplete, items should be scored “conservatively” (that is, in the direction of lower risk), and it should be noted that the resulting score may underestimate the risk.

Clinicians should, of course, study the Manual before using J-SOAP-II. Lastly, it is strongly recommended that users of J-SOAP-II complete several training cases before using the J-SOAP on a real case. The importance of adequate training on practice cases cannot be overstated.

7. J-SOAP Scores and Treatment Planning

As noted previously, the purpose of the J-SOAP-II is to facilitate risk assessment and risk management. J-SOAP-II may be particularly useful for informing and guiding treatment and risk management decisions. For example, if a youth has a relatively high score on Scale 1, but a relatively low score on Scale 2, the youth may require more sex offense-specific treatment interventions and less of a focus on delinquency interventions. In fact, mixing such a youth with more “hard-core” delinquents may do more harm than good.

In contrast, a youth who has a relatively high score on Scale 2 but a relatively low score on Scale 1 may have sexually offended as part of a more general pattern of antisocial behavior. In cases such as this, the sexual offense may not reflect serious issues involving management of sexually deviant or

sexually coercive behavior. This type of youth may require delinquency-focused treatment interventions, perhaps with some limited psychoeducational interventions that address appropriate sexual boundaries, nonabusive sexual behavior, impulse control, and healthy masculinity.

Juveniles that have high scores on Scale 1 and Scale 2 may well require more intensive supervision, perhaps in a secure residential placement, and need sex offense specific treatment as well as delinquency focused interventions. Low scores on Scales 1 and 2, on the other hand, may suggest that the offending behavior was more situational and requires only limited interventions, such as psychoeducational approaches that address human sexuality, appropriate sexual behavior, social skills training and dating skills. Specific interventions, of course, depend upon the overall picture of risk and needs.

Scoring Guidelines

The J-SOAP- II items are scored using a 0 to 2 scale, with 0 always associated with the apparent absence of the item and 2 always associated with the clear presence of the item. Thus, “0” implies the apparent absence of the risk factor described by the item, and “2” implies the clear presence of the risk factor as described by the item. A score of “1” implies the presence of some information that suggests the presence of the item, but the information is insufficient, unclear, or too sketchy to justify a score of “2.”

As noted in FAQ #6, to enhance accuracy and reliability, assessments should be based on multiple sources of information whenever possible. Unless otherwise noted in the item description, scores should be based on all available evidence, including self-report, and documentation in the records. If available information is limited, incomplete or unclear, items should be scored in the

direction of lower risk (favoring the absence rather than the presence of the item), and it should be noted that the resulting scores may be underestimates. As previously noted, J-SOAP -II is not an exhaustive list of risk variables and does not substitute for assessing other potentially risk-relevant variables on a case-by-case basis. Scores are obtained by summing the items on each of the 4 scales and then adding the 4 scale scores to derive the overall J-SOAP- II score. Each scale score is then divided by the total possible score for that scale to determine the relative “proportion of risk” rated as present for each of the 4 scales. For example, if the total for all eight items on Scale 2 was 8, the Scale 2 score would be reported on the Summary Form as 50% [8/16]. Similarly, the overall J-SOAP -II score is divided by the total possible score [i.e., 28 items x 2 points each = 56].

SECTION I
STATIC RISK ASSESSMENT

Scale 1

Sexual Drive / Preoccupation Items

Item 1: Prior Legally Charged Sex Offenses

Description:

This item is simply the total number of prior charged sexual offenses that involved physical contact. Conviction is not necessary. Do not count the current, governing, or index sexual offense(s).

Scoring:

- 0 = None
- 1 = 1 Offense
- 2 = More than 1 Offense

Item 2: Number of Sexual Abuse Victims

Description:

This item looks at the number of victims the juvenile is known to have ever sexually abused. In making this judgment use any reliable source. A legal charge/conviction is not required. "Victim" is defined as anyone that has been sexually abused in a manner involving physical contact.

Scoring:

- 0 = Only 1 known victim
- 1 = 2 known victims
- 2 = 3 or more known victims

Item 3: Male Child Victim

Description:

This item assesses the juvenile's history of sexually abusing a male child. A "child" victim is defined here as someone who is 10 years old or younger and is at least 4 years younger than the juvenile. If the juvenile was age 14 or older at the time of the offense, the victim was 10 or younger. If the juvenile was 13, the victim was 9 or younger. If the juvenile was 12, the victim was 8 or younger. If the

child victim was older than ten this item may still be scored IF there was clear evidence of physical force or violence.

Scoring:

- 0 = No known male child victims
- 1 = 1 male victim (only 1 known)
- 2 = 2 or more known male victims

Item 4: Duration of Sex Offense History

Description:

This item looks at the total amount of time the juvenile has been known to commit sexual contact offenses [i.e., from the first known sexual contact offense to the current (governing or index) sexual contact offense. In making this judgment, include all credible reports and self-report. Do not limit scoring to legally charged offenses.

Scoring:

- 0 = Only 1 known sexual offense and no other history of sexual aggression (i.e., the governing or index offense is the only known sexual offense).
- 1 = There are multiple sex offenses within a brief time period [6 months or less]. The multiple sex offenses may involve multiple assaults on the same victim or multiple victims.
- 2 = There are multiple sex offenses that extend over a period greater than 6 months involving one or more victims.

Item 5: Degree of Planning in Sexual Offense/s

Description:

This item looks at the degree of forethought, planning, and premeditation that took place prior to the sexual assaults. It concerns the individual's modus operandi (MO); everything the individual did to commit the offense. In general, the more detail and forethought involved in planning an offense, the more complex the MO. With highly impulsive, opportunistic offenses, the MO will be negligible. When there are multiple known sexual assaults, score for the assault that reflects the greatest degree of planning. This item should also be scored when a high degree of manipulation and deception has been used to gain access to the victim/s.

Scoring:

- 0 =** No planning. All known sexual offenses appear to have been impulsive, opportunistic, sudden, and without any apparent forethought prior to the encounter.
- 1 =** Mild degree of planning. Some clear evidence that the individual thought about or fantasized about the sexual offense before the encounter. Some degree grooming or "setting up" the victim may reflect mild planning.
- 2 =** Moderate-Detailed planning. There must be a clear modus operandi. The offenses may appear "scripted," with a particular victim and crime location targeted. Planning also may be evident when there is a high degree of manipulation and/or a significant amount of grooming to gain access to the victim. The major difference between Mild and Moderate-Detailed planning is the extent, degree, and time invested in planning. The distinction is quantitative rather than qualitative.

Item 6: Sexualized Aggression

Description:

This item captures the degree or level of gratuitous or expressive aggression in the sexual offenses. Gratuitous or expressive aggression is aggressive behavior that clearly goes beyond what was required to complete the sexual offense.

Scoring:

- 0 =** No gratuitous or expressive aggression. No evidence that the individual intentionally physically hurt the victim, or demeaned, or humiliated the victim; no evidence that the individual used force or aggression beyond what was required to complete the sexual offense.
- 1 =** Mild amount of expressive aggression. For example, as evidenced by swearing or cursing at the victim, threatening the victim, squeezing, slapping, pushing, or pinching the victim.
- 2 =** Moderate-High amount of expressive aggression. For example, as evidenced by punching, kicking, cutting, burning, or stabbing the victim, causing physical injuries that require medical attention, intentionally humiliating or degrading the victim.

Item 7: Sexual Drive and Preoccupation

Description:

This item measures "hypersexuality," (i.e., the strength of the sexual drive and preoccupation). This is a behaviorally-anchored item that focuses on evidence of an excessive amount of sexual activity (exceeding what might be considered normative for youths of that age) or excessive preoccupation with sexual urges or gratifying sexual needs. Evidence includes, but is not limited to, paraphilias

(exposing, peeping, cross-dressing, fetishes, etc.), compulsive masturbation, chronic and compulsive use of pornography, frequent highly sexualized language and gestures, and indiscriminant sexual activity with different partners out of the context of any relationship. Consider all credible and reliable evidence, self-reported as well as documented in the records.

Scoring:

- 0 = Normative/Minimal. One or two instances of sexualized behavior.
- 1 = Moderate. Sexualized behaviors have been observed and noted on 3 to 5 separate occasions.
- 2 = High. Sexualized behaviors have been observed and noted on 6 or more separate occasions.

Item 8: Sexual Victimization History

Description:

This item assesses the juvenile's own history of sexual victimization. In this context, excessive force refers to force that clearly exceeded what was necessary to gain compliance.

Scoring:

- 0 = None known.
- 1 = The juvenile was a victim of sexual abuse. There is no evidence of any form of sexual penetration or excessive force or physical injury to the juvenile.
- 2 = The juvenile was a victim of sexual abuse. Score 2 if there is evidence of sexual penetration or excessive force or physical injury.

Scale 2

Impulsive / Antisocial Behavior Items

Item 9: Caregiver Consistency

Description:

This item measures the consistency and stability of caregivers in the life of the juvenile before the age of 10. Multiple changes in caregivers or changes in living situations with different caregivers and the number of different caregivers are critical. A "change" must last for at least six months to be considered (for example, if the individual spends a month living with his aunt and uncle, it would not be considered a change of caregivers).

Scoring:

- 0 = Lived with biological parents until his current age or up until age 10.
- 1 = One or two changes in caregivers (e.g., from biological parents to step or foster parents).
- 2 = Three or more changes in caregivers before age 10.

Item 10: Pervasive Anger

Description:

This item includes (1) repeated instances of verbal aggression and angry outbursts, (2) threatening and intimidating behavior, and (3) nonsexual physical assaults directed at multiple targets across multiple settings – anger directed at parents, peers, police, teachers, animals and so forth. The essential point is that the behavior must reflect anger across persons and situations. Although destroying property may be an expression of anger, the destruction of property does not necessarily result from anger.

Scoring:

- 0 = No evidence.
- 1 = Mild. Occasional outbursts and inappropriate expressions of anger or a pattern of anger expressed at an apparently narrow range of targets, (e.g., anger only expressed at peers).
- 2 = Moderate – Strong. Long-standing pattern of repeated instances of poorly managed anger directed at multiple targets.

Item 11: School Behavior Problems

Description:

Score this item for kindergarten through eighth grade only. School behavior problems include school failure not due to cognitive difficulties. Examples may include chronic truancy, fighting with peers and/or teachers or other evidence of serious behavioral problems at school that require corrective intervention. Fighting should only be considered if there has been physical contact (e.g., punching, kicking, shoving), and not if there has only been yelling or arguing.

Scoring:

- 0 = None (no clear evidence of school behavior problems).
- 1 = Mild (A few apparently isolated instances).
- 2 = Moderate-Severe (Clear evidence of multiple instances of behavior problems that may include behaviors resulting in suspensions or expulsion from school).

Item 12: History of Conduct Disorder Before Age 10

Description:

Score this item for behavior before the age of 10. Score for a persistent pattern of behavioral disturbance characterized by (1) repeated failure to obey rules, (2) violating the basic rights of others, and (3) engaging in destructive and aggressive conduct at school, home, and/or in the community.

Scoring:

- 0 = No evidence.
- 1 = Mild-Moderate (1 or 2 different criteria present).
- 2 = Strong (All 3 criteria present).

Item 13: Juvenile Antisocial Behavior [Age 10-17]

Description:

Score this item for behavior between the ages of 10 and 17. Score for nonsexual delinquent behavior such as: (1) vandalism and destruction to property, (2) malicious mischief, disorderly conduct, vagrancy, habitual truant, (3) fighting and physical violence, (4) owning or carrying a weapon (other than for sport and hunting), (5) theft, robbery, burglary, and (6) motor vehicle-related (reckless driving, operating to endanger, operating under the influence). Scoring for this item is not limited to legally charged offenses. Consider all credible and reliable evidence, self-reported as well as documented in the records.

Scoring:

- 0 = None/Minimal. (No more than a single incident).
- 1 = Moderate (2 or 3 different criteria present. Moderate also may be scored if there is a single very serious episode or multiple incidents involving one type of behavior).
- 2 = Strong (4 or more different criteria present or multiple incidents involving two or three types of behavior).

Item 14: Ever Charged Or Arrested Before The Age of 16

Description:

Score current offenses as well as previous charges/arrests for sexual and non-sexual offenses occurring before age 16. The juvenile must have been charged and/or arrested; conviction is not necessary.

Scoring:

- 0 = No

- 1 = Once
2 = More than once

Item 15: Multiple Types of Offenses

Description:

Scoring for this item is limited to legally charged offenses. Check as many different types of offense categories as apply and score according to the total number of categories checked.

___ a. **Sexual Offenses** [such as rape, indecent assault, gross sexual assault, unlawful sexual contact, open and gross lewdness]

___ b. **Person Offenses – Non-sexual** [such as assault, assault and battery, assault causing bodily harm, robbery, kidnapping, attempted murder, manslaughter, murder, terrorizing]

___ c. **Property Offenses** [such as theft, burglary, possessing burglary tools, larceny, breaking and entering, criminal trespass, malicious destruction of property, arson, receiving/possessing stolen property, embezzlement, extortion of property]

___ d. **Fraudulent Offenses** [such as fraud, forgery, passing bad checks, using stolen credit cards, impersonation, identity fraud, counterfeiting]

___ e. **Drug Offenses** [drug trafficking and other clear drug-related crimes not scored elsewhere; score simple possession of drugs under Conduct Offenses]

___ f. **Serious Motor Vehicle Offenses** [such as operating to endanger, operating under the influence, reckless driving, chronic speeding, leaving the scene of an accident, vehicular homicide]

___ g. **Conduct Offenses** [such as disorderly conduct, running away, vagrancy, malicious mischief, possession of alcohol and/or drugs, resisting arrest, habitual truant, habitual offender]

___ h. **Other Rule Breaking Offenses** [there is no clear victim but the law has been broken, such as escape from legal custody, failure to appear, conspiracy, accessory before or after the fact, possession of a firearm without a permit, obstruction of justice, violation of conditions of probation or other release, violation of a protection/ restraining order, prostitution]

Scoring:

- 0 = 1 type

- 1 = 2 types
2 = 3 or more types

Item 16: Physical Assault History and/or Exposure to Family Violence

Description:

This item assesses the juvenile's own history of having been physically abused and/or exposed to violence within the home by a caregiver (biological, adoptive, foster, or stepfamily). Exposure to family violence includes visual or auditory exposure to physical assaults on family members. It is not necessary for both physical abuse and exposure to violence to be present to score this item.

Scoring:

- 0 = No/Unknown
- 1 = Yes. There is clear evidence that the juvenile was the victim of physical abuse by any caregiver. The documented history must indicate that the physical injuries did not warrant medical attention. Exposure to violence may include exposure to threats of violence and physical altercations involving pushing, shoving, and slapping, but no injuries requiring medical attention.
- 2 = Moderate / Severe. The physical abuse was frequent or very severe resulting in serious injuries ordinarily requiring medical attention, including black eyes, broken bones, and severe bruising. Score for exposure to violence if the exposure was frequent or if the violence was very severe resulting in serious injuries ordinarily requiring medical attention. The term "ordinarily" reflects the fact that the victims of violence may not receive medical attention but, in your estimation, the severity of the injury deserved such attention.

SECTION II

DYNAMIC RISK ASSESSMENT

Scale 3

Intervention Items

WHEN RATING THE ITEMS IN SCALE 3, TAKE INTO CONSIDERATION ALL DELINQUENT BEHAVIOR, NOT JUST SEX OFFENDING. IF THE JUVENILE HAS ONLY COMMITTED SEX OFFENSES, SIMPLY RATE ITEMS BASED ON THOSE SEX OFFENSES.

Item 17: Accepting Responsibility for Offense/s

Description:

Accepting full responsibility for one's offense/s means no redirecting or assigning some or all of the responsibility for the offenses to others (i.e., the individual does not attribute some of the responsibility to the victim, to friends or other kids, to society, the police, the courts, or others). Any statements suggesting other than full responsibility should be scored as 1 or 2.

Scoring:

- 0 = Accepts full responsibility for sexual and nonsexual offenses without any evidence of minimizing.
- 1 = Accepts some (but not total) responsibility. Although occasional minimizing may be present, individual does not deny offending.
- 2 = Accepts no responsibility or there is full denial. Option 2 also is scored when there is partial denial and/or significant or frequent minimizing.

Item 18: Internal Motivation for Change

Description:

The focus of this item is the extent to which the individual truly experiences offending as out of character and appears to have a genuine desire to change his behaviors to avoid any recurrences.

Scoring:

- 0 = Appears distressed by his offenses and appears to have a genuine desire to change.
- 1 = There is some degree of internal conflict and distress, mixed with a clear desire to avoid the "consequences" of re-offending.
- 2 = No internal motivation for change. The juvenile does not perceive a need to change. He may feel hopeless and resigned about life in general, or may deny ever committing offenses and therefore maintains he does not need to change and/or does not need treatment. Also score 2 if motivation for change is solely external (e.g., to avoid arrest, incarceration or residential placement).

Item 19: Understands Risk Factors and Applies Risk Management Strategies

Description:

This item concerns the individual's knowledge and understanding of factors and situations associated with his offending and the individual's awareness of risk management strategies and utilization of such strategies.

Scoring:

- 0 = Good understanding and demonstration of knowledge of risk factors and risk management strategies. Knows triggers, cognitive distortions (thinking errors), and high-risk situations. Knows and uses risk management strategies.
- 1 = Incomplete or partial understanding of risk factors and risk management strategies. Demonstration of knowledge may be present but inconsistent.
- 2 = Poor or inadequate understanding of risk factors and risk management strategies. Cannot adequately identify triggers, cognitive distortions (thinking errors) and offense-justifying attitudes, high risk situations, or risk management strategies.

Item 20: Empathy

Description:

This item assesses the youth's capacity for empathy in multiple situations. An attempt should be made to distinguish between statements that appear to reflect genuine feelings and those statements that are primarily cognitive and reflect attitudes (e.g., socially desirable responses or genuinely held but strictly intellectual statements).

Scoring:

- 0 = Appears to have a genuine capacity for feeling empathy for his sexual abuse victims and can generalize to others in a variety of situations.
- 1 = There is some degree of expressed empathy, however these statements appear to be internalized at a strictly intellectual level, or are intended primarily to "look good" or respond in a socially acceptable way.
- 2 = There is little or no evidence of empathy and clear evidence of callous disregard for the welfare of others.

Item 21: Remorse and Guilt

Description:

This item assesses the extent to which the juvenile expresses thoughts, feelings, and sentiments that reflect remorse for offending and offense related behavior. This item attempts to assess feelings of regret, guilt, or self-reproach. An attempt should be made to distinguish between statements that appear to reflect genuine feelings and statements that are primarily cognitive and reflect attitudes (e.g., socially desirable responses or genuinely held but strictly intellectual statements about “feeling bad”).

Scoring:

- 0 = Appears to have genuine remorse for his victims and can generalize to other victims. Importantly, remorse appears to be internalized at an affective (emotional) level and is expressed or demonstrated without prompting.
- 1 = There is some degree of remorse or guilt; however, there are possible egocentric motives (e.g., shame or embarrassment, to avoid incarceration). Score 1 when the remorse appears to be internalized at a strictly cognitive (thinking) level.
- 2 = There is little or no evidence of remorse for victims.

Item 22: Cognitive Distortions

Description:

This item assesses distorted ideas, beliefs, or attitudes that justify sexual offending and delinquent behavior. Examples include, “She looked older than she was,” “He started it,” and “I didn’t hurt anyone.” Rate this item only for the presence of distorted attitudes. This item should not be influenced by ratings of item #19 (accepting responsibility) and #23 (remorse or guilt).

Scoring:

- 0 = Expresses no distorted thoughts, attitudes, or statements about sexual offending and delinquent behaviors.
- 1 = Occasional comments, attitudes or statements reflecting cognitive distortions.
- 2 = Frequent comments, attitudes or statements reflecting cognitive distortions.

Item 23: Quality of Peer Relationships

Description:

This item assesses the nature and quality of the juvenile's peer relationships, the extent to which his time is occupied by non-delinquent social activity, and the extent to which his peer associations are age-appropriate and non-delinquent.

Scoring:

- 0 = Socially active, peer-oriented and rarely alone; often with friends in structured and unstructured social and/or sports activities; friends are non-delinquent.
- 1 = A few casual (non-delinquent) friends, some involvement in structured or unstructured activities or a mix of social activity with delinquent as well as non-delinquent peers.
- 2 = Withdrawn from peer contact and socially isolated, or no friendships, just "acquaintances," or most peers are delinquent.

Scale 4

Community Stability / Adjustment Items

**SCORE THE REMAINING FIVE ITEMS FOR THE PAST 6 MONTHS.
OMIT THIS SECTION IF THE JUVENILE IS INCARCERATED IN A
CORRECTIONAL FACILITY OR A SECURE RESIDENTIAL
TREATMENT PROGRAM.**

- If a juvenile has recently been discharged from a correctional facility or secure residential treatment program, where he has resided for more than 6 months, and is now being assessed in the community, he must have been in the community *for at least three months in order to score these 5 items.*
- If the juvenile has been incarcerated or has been placed in a secure residential treatment program, he must have been in the community *for at least two months prior to incarceration in order to score these 5 items.*

Item 24: Management of Sexual Urges and Desire

Description:

This item assesses the extent to which the juvenile manages his sexual urges and desires in socially appropriate and healthy ways. This item does not assess strength of sexual drive (as in item #7). This item assesses the appropriateness of the individual's sexual behavior. Consider all credible and reliable evidence, self-reported as well as documented in the records. If the governing or index offense occurred within the six month window that applies to all Scale 4 items, do not include it when scoring this item.

Scoring:

- 0 = Well managed expression of sexual urges and desires; all sexual intimate relationships are age appropriate and noncoercive; no evidence of unwanted, sexualized touching or hostile/ demeaning sexualized remarks.
- 1 = Sexual urges and desires are managed appropriately most of the time, with no more than 2 instances of inappropriate sexual behavior.
- 2 = Sexual urges and desires are poorly managed. Juvenile engages in inappropriate sexual behavior, frequently gratifying sexual urges in deviant or paraphilic ways. This behavior has been noted on 3 or more occasions. Examples might include chronic masturbation or compulsive use of pornography. Score 2 for sexual promiscuity (numerous sexual partners out of the context of a relationship). Any instance of coercive sexual behavior is automatically scored 2 unless it is the governing or index offense.

Item 25: Management of Anger

Description:

This item assesses the appropriateness of one's expression of angry feelings. **Appropriate** expressions are defined here as verbal, nonabusive, and nonviolent expressions of anger. This item does **not** assess the "pervasiveness" of one's anger (as in item #10). Rate how well the individual manages and expresses feelings of anger in his relationships, at work, and with his friends and acquaintances.

Scoring:

- 0 = No evidence of inappropriate anger. Anger consistently is expressed in appropriate ways.
- 1 = Anger managed appropriately most of the time, with no more than 4 instances of inappropriate anger

- 2 = Anger poorly and inappropriately managed, with 5 or more instances of inappropriate anger.

Item 26: Stability of Current Living Situation

Description:

This item assesses the stability (or instability) of the living situation where the youth is residing at the time of the assessment. If the juvenile is living with his family (birth, foster, or adoptive), this item assesses family stability and is based on the overall adequacy and consistency of the primary family environment. Consider such factors as size of family, number of relocations, and number of changes in the family due to separations, divorce, death, unemployment, and other losses, as well as additions of new members. Consider substance abuse, pornography use, child abuse and neglect, frequent changes in sexual partners, poor or loose boundaries around sexuality, serious illness, psychiatric difficulties, chronic fighting or angry outbursts, family violence and/or criminal behavior.

Instability may also be indicated by frequent changes in the juvenile's living situation, or when the juvenile is in a high-risk living situation (such as a shelter) or lives in a high-risk location (i.e., near a bar or a playground). Scoring should reflect the stressfulness of the living situation. Score this item, as appropriate, for youths living in group homes or nonsecure residential settings.

When scoring this item consider the number of different sources of instability and the frequency of the instability.

Scoring:

- 0 = Stable. No significant sources of disruption or instability.
- 1 = Moderate instability. Sources of instability are intermittent. Any very serious sources of instability, even if intermittent, should be scored a 2 (e.g., presence of sexual abuse perpetrated by others or violence in the living situation).
- 2 = Severe instability. Sources of instability are frequent and chronic occurring at least one or two times a week.

Item 27: Stability in School

Description:

This item assesses the stability (or instability) of the youth's behavior in school. For example, instability would be evidenced by truancy, repeatedly coming to school late, suspensions or expulsions, and use of alcohol or drugs at school. If the youth is not in school, score this item for the stability of his day, for example, the stability of the youth's behavior at work. For the most part, the exemplars of instability are consistent across settings. For example, in the work setting,

instability may be evident by failing to come to work, coming to work late, or being fired. If the juvenile is not in school or not in work, score 1.

Scoring:

- 0 = Stable/Minimal (no more than a single incident)
- 1 = Unstable (with no more than 2-3 incidents)
- 2 = Highly Unstable (with 4 or more incidents)

Item 28: Evidence of Positive Support Systems

Description:

This item considers the relative presence or absence of support systems that the youth has available to him in the community and that he uses for positive support. Support systems may include (1) apparently supportive family members, extended families, foster families, (2) friends, or (3) significant others, such as therapists, juvenile probation officers and social service caseworkers. Positive supports also may be indicated by participation in (4) organized after-school sports and activities and (5) involvement in organized religious activities.

Scoring:

- 0 = Considerable support systems (3 or more of the above apply)
- 1 = Some support systems (1 or 2 of the above applies)
- 2 = No known support systems or only negative supports

J-SOAP-II Scoring Form

I. Sexual Drive/Preoccupation Scale

1. Prior Legally Charged Sex Offenses	0	1	2
2. Number of Sexual Abuse Victims	0	1	2
3. Male Child Victim	0	1	2
4. Duration of Sex Offense History	0	1	2
5. Degree of Planning in Sexual Offense/s	0	1	2
6. Sexualized Aggression	0	1	2
7. Sexual Drive and Preoccupation	0	1	2
8. Sexual Victimization History	0	1	2

Sexual Drive Preoccupation Scale Total _____

II. Impulsive, Antisocial Behavior Scale

9. Caregiver Consistency	0	1	2
10. Pervasive Anger	0	1	2
11. School Behavior Problems	0	1	2
12. History of Conduct Disorder Before Age 10	0	1	2
13. Juvenile Antisocial Behavior [Age 10-17]	0	1	2
14. Ever Charged/Arrested Before Age 16	0	1	2
15. Multiple Types of Offenses	0	1	2
16. Physical Assault and/or Family Violence	0	1	2

Antisocial Behavior Scale Total _____

III. Intervention Scale

17. Accepting Responsibility for Offense/s	0	1	2
18. Internal Motivation for Change	0	1	2
19. Understands Risk Factors/Applies Strategies	0	1	2
20. Empathy	0	1	2
21. Remorse and Guilt	0	1	2
22. Cognitive Distortions	0	1	2
23. Quality of Peer Relationships	0	1	2

Intervention Scale Total

IV. Community Stability/Adjustment Scale

24. Management of Sexual Urges and Desire	0	1	2
25. Management of Anger	0	1	2
26. Stability of Current Living Situation	0	1	2
27. Stability in School	0	1	2
28. Evidence of Support Systems	0	1	2

Community Stability Scale Total

Juvenile Sex Offender Assessment Protocol - II

Summary Form

STATIC / HISTORICAL SCALES

- 1. Sexual Drive/Preoccupation Scale Score:** _____/16 = _____
[Add Items 1-8 (range: 0-16)]
- 2. Impulsive-Antisocial Behavior Scale Score:** _____/16 = _____
[Add Items 9-16 (range: 0-16)]

DYNAMIC SCALES

- 3. Intervention Scale Score:** _____/14 = _____
[Add Items 17 - 23 (range 0-14)]
- 4. Community Stability Scale Score:** _____/10 = _____
[Add Items 24 – 28 (range: 0-10)]

STATIC SCORE [Add items 1-16] _____/32 = _____

DYNAMIC SCORE [Add items 17-28] _____/24 = _____

TOTAL J-SOAP SCORE [Add items 1-28] _____/56 = _____

APPENDIX

F

JRI STAFF

**Justice Resource Institute
Research Department
STAFF**

- Robert Prentky, Ph.D. Principal Investigator
- Gary Dube, Ph.D. Consultant
- Susan Righthand, Ph.D. Consultant
- Barbara Schwartz, Ph.D. Research Specialist
- Austin Lee, Ph.D. Senior Statistical Analyst
- Ann Pimental, MSCJ/MHC Project Director
- Deborah Cavanaugh, MA
Coordinator Data Analyst/Project
- Primary Coders
 - Anita Weng
 - Elle Costa
 - Lisa Dandurand-Fitzpatrick
 - Ralph Hunnewell