Sexual Adjustment Inventory - Juvenile:
Juvenile Sex Offender Assessment

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Abstract

The Sexual Adjustment Inventory - Juvenile (SAI-Juvenile) was studied in a sample of 766 juvenile sex offenders. The SAI-Juvenile has thirteen scales for measuring juvenile offender risk of sexual adjustment, child molest, sexual violence, incest, exhibitionism, violence (lethality), substance (alcohol and drugs) abuse, antisocial behaviors, distress and judgment problems. Reliability analyses showed that all SAI-Juvenile scales had alpha reliability coefficients of between .82 and .93. Offenders with 2 or more arrests scored significantly higher than offenders who had 1 or no arrest on SAI-Juvenile scales which demonstrates that SAI-Juvenile scales are valid. SAI-Juvenile scales correctly identified juvenile offenders' sex-related problems. SAI-Juvenile classification of offender risk was shown to be within 3% of predicted risk range percentile scores for all SAI-Juvenile scales.

Sexual Adjustment Inventory - Juvenile: Juvenile Sex Offender Assessment

Juvenile sex offender assessment must utilize tests designed for juveniles. Juvenile sex offenders are unique and should not be handled in the same way as adults. Juvenile sexual behavior can vary from sexual experimentation to sexual deviance. Accurate assessment is needed to differentiate between normal sexual urges and sexual deviance. Juvenile sexual aggression is another matter of concern. Early identification of sexual deviance, and sexual aggression, and treatment can reverse negative patterns of troubled behavior and reduce recidivism. Few tests exist for juvenile sex offender assessment. The Sexual Adjustment Inventory-Juvenile is designed specifically for juvenile sexual offender assessment.

The Sexual Adjustment Inventory-Juvenile (SAI-Juvenile) is a multidimensional test that was developed for judicial court screening and assessment. SAI-Juvenile scales measure sexual adjustment, sexual deviance, violence (lethality) tendencies, antisocial behaviors, alcohol as well as drug abuse severity and emotional or mental health problems. In addition, there are two truthfulness scales to measure juvenile offender truthfulness, denial and minimization while completing sex-related and non-sex related test items. Truthfulness scales are essential for accurate sex offender assessment because it is well known that sex offenders minimize their problems. The SAI-Juvenile was designed specifically for juvenile sex offender assessment.

<u>Subjects</u>

There were 766 juvenile sex offenders tested with the SAI-Juvenile. Data for this study was provided by court service providers, probation departments and professional community service agencies that use the SAI-Juvenile. Test data were collected during the year 2001. There were 737 males (96.2%)

and 29 females (3.8%). The ages of the participants primarily ranged from 13 through 17 as follows: 12 & Under (8.6%); 13 (11.1%); 14 (18.3%); 15 (23.5%); 16 (21.7%), 17 (11.6%) and 18 & Over (5.3%). The average age of males was 15.0 (SD 12.49) and the average age of females was 16.7 (SD 8.23).

The demographic composition of participants was as follows. Race/Ethnicity: Caucasian (70.7%); Black (21.3%), Hispanic (4.3%) and Other (2.4%). Education: Sixth grade or less (13.1%); 7th grade (16.1%); 8th grade (19.8%), 9th grade (24.4%), 10th grade (15.6%), 11th grade (7.3%), High School graduate (2.7%) and Some college (1.0%).

Participants' criminal histories were obtained from their SAI-Juvenile answer sheets. Participants reported this information and staff were to verify the information provided. Over 55 percent of the participants or 471 juveniles reported having one or no arrest. Of these 471 offenders 449 were males (or 55.0% of the males) and 22 were females (or 68.2% of the females). These offenders were designated as **Group 1**. 17.7 percent of the juveniles had been arrested two times, 9.1 percent had three arrests and 17.8 percent had four or more arrests. The offenders with two or more arrests (multiple offenders) were designated as **Group 2**. There were 295 offenders or 44.6 percent of the participants in Group 2. In Group 2, 288 of the participants were male and 7 were female.

Just over seven percent of the juveniles had one or more alcohol arrests. Over 12 percent of the juveniles had one or more drug arrests. Just over 63 percent of the juveniles had been placed on probation one or more times. Fifty-three percent had been placed in juvenile confinement.

Procedure

Participants completed the SAI-Juvenile as part of the normal intake assessment procedure for juvenile sex offender evaluations in both court service and community service programs. Probation departments used the SAI-Juvenile to determine appropriate levels of supervision and treatment as warranted.

The SAI-Juvenile contains thirteen measures or scales. Five scales have an obvious sexual relationship, six scales are non-sex related and two scales measure respondent truthfulness. The truthfulness scales are briefly described as follows. The Test-Item Truthfulness Scale measures the respondent's truthfulness or problem minimization for non-sex-related test items. The Sex-Item Truthfulness scale measures the respondent's truthfulness for test items that have an obvious sex-related content. When evaluating sexual attitudes and behaviors, all interviews and tests are subject to the dangers of deliberate falsification. Juveniles accused of sex-related offenses can be expected to under-report their sexual problems and concerns.

The sex-related scales are described as follows. The Sexual Adjustment Scale measures the youth's satisfaction or dissatisfaction with their sex life. The Child (Pedophile) Molest Scale assesses juvenile interest and sexual urges or fantasies involving sexual activity with a prepubescent child. A juvenile's rape or other sexual assault proneness is measured by the Sexual (Rape) Assault Scale. The Exhibitionism Scale measures the youth's exhibitionist tendencies and related problems. The Incest Scale assesses juvenile incestuous behavior.

The non-sex related scales are described as follows. The Alcohol Scale measures the severity of alcohol use or abuse, whereas the Drugs Scale measures the severity of illicit drug use or abuse. The Violence (Lethality) Scale assesses juvenile violence potential and dangerousness. The Antisocial Scale identifies a juvenile offender's antisocial tendencies. The Distress Scale assesses anxiety and depression. The Judgment Scale measures juvenile understanding and comprehension. The SAI-Juvenile is appropriate for juveniles who can read at the fifth or sixth grade level.

Test Statistics

SAI-Juvenile scale scores were compared between Group 1 (0 or 1 sex-related arrest) and

Group 2 (2 or more sex-related arrests). It was hypothesized that multiple offenders (Group 2) would score significantly higher than first offenders (Group 1). Multiple offenders were expected to score higher than first offenders because having a second arrest is indicative of a definite pattern of problem behavior.

These results are presented in Table 1. The comparisons of SAI-Juvenile scale scores between Group 2 and Group 1 offenders show that, as expected, **Group 2** scored significantly higher than Group 1 on nearly all SAI-Juvenile scales. Child Molest, Incest and Judgment Scale scores showed no significant difference between Groups 1 and 2. Higher scores on SAI-Juvenile scales are associated with more severe problems. Child Molest scores were nearly identical for the two groups. This finding means that either child molest behavior is equally evident in both groups or that the groups did not interpret what constitutes child molest in the same way. Multiple offenders may have a more specific definition of child molest, whereas first offenders have yet to come to understand child molest. The Incest Scale scores were low for both offender groups, which suggests that few offenders engaged in incestuous behaviors.

The Test-item and Sex-item Truthfulness Scales show that Group 1 scored significantly higher than Group 2. These results suggest that Group 1 offenders attempted to minimize their problems or fake good when tested more than multiple offenders. Multiple offenders may be aware of the availability of their records and have largely stopped attempting to minimize their problems.

These results demonstrate that SAI-Juvenile scales are valid. The offenders who were believed to have more severe problems (multiple offenders) scored significantly higher on these scales than offenders with one or no arrest. Distress Scale results indicate that offenders who have multiple arrests demonstrate more emotional and mental health problems than do offenders with one or no arrest.

SAI-J Scale	Group 1			Group 2			T-value
	Mean	SD	Max	Mean	SD	Max	
Test-item Truthfulness	5.59	4.49	21	4.41	4.27	21	t = 3.61*
Sex-item Truthfulness	9.48	4.36	19	7.76	4.57	19	t = 5.22*
Sexual Adjustment	19.97	15.49	51	23.31	14.29	52	t = 2.99*
Child Molest	6.84	6.48	34	6.74	7.03	34	n.s.
Rape	5.93	6.47	33	8.37	8.64	34	t = 4.18*
Incest	1.01	1.97	7	1.09	2.0	7	n.s.
Exhibitionism	1.43	2.32	18	2.04	2.83	18	t = 3.11*
Alcohol^	4.41	9.36	38	25.07	7.72	38	t = 8.21*
Drugs^	6.06	10.39	34	23.27	8.23	33	t = 8.96*
Violence	12.26	11.23	33	19.00	9.03	33	t = 8.70*
Antisocial	6.70	5.22	18	10.25	6.01	18	t = 8.37*
Distress	10.66	10.39	29	11.97	6.98	29	t = 1.91***
Judgment	5.00	8.58	17	4.44	2.58	16	n.s.

Table 1. Comparisons between Group 1 (1 or no arrest) and Group 2 (2 or more arrests).

* Significant at the p < .001 level. ** Significant at p < .01. *** Significant at p < .05.
^ Offender status based on alcohol-related arrests for the Alcohol Scale and drug-related arrests for Drugs Scale.

In another validation method the accuracy at which the SAI-Juvenile identified problem prone offenders, problem drinkers and drug abusers was examined. In the SAI-Juvenile, offenders'

responses to some test items represent an admission of their problems. Offenders who admitted to having problems would be expected to score in the problem range. For the Sexual Adjustment, Child (Pedophile) Molest, Sexual (Rape) Assault, Incest and Exhibitionism scales the direct admissions include: "My sexual adjustment is a serious problem," "I have been arrested for child molestation," "I have forcibly had sex with a person who did not want to have sex with me," "I have had sex with a relative or a member of my family," "I am an exhibitionist because I have shown my sex organs to a stranger." For the Violence, Antisocial, Alcohol, Drugs, Distress and Judgment scales the direct admissions included: "I have been arrested for assault or a violent crime," "Two or more of the following apply to me, a) sudden mood changes, b) boastful and demanding, c) lack of affection or gratitude, d) irritable, cranky or bad temper, e) poor or failing grades, or dropped out of school," "My drinking is a serious problem," "I have a drug problem," "I am in counseling or treatment for anxiety or depression," "I clearly understand the difference between 'right' and 'wrong.'"

For these analyses, juvenile offenders were separated into two groups: those who admitted to problems and those who did not admit to problems. Then, offender scores on the relevant SAI-Juvenile scales were compared. It was predicted that offenders who admitted problems would score in the problem risk range (70th percentile and above) on the SAI-Juvenile scales. Non-problem was defined in terms of low scores (39th percentile and below). The percentage of offenders who admitted problems and also scored in the 70th percentile range and above was considered a correct identification. Scales are considered valid when a high percentage, say 90 percent or higher, of the offenders who admit to problems score in the problem risk range. The scales included in this analysis were Sexual Adjustment, Child (Pedophile) Molest, Sexual (Rape) Assault, Incest, Exhibitionism, Alcohol, Drugs, Violence (Lethality), Antisocial, Distress and Judgment.

These results were as follows. The Sexual Adjustment Scale **correctly identified 97.4 percent** or 75 of the 77 offenders who admitted they had serious sexual adjustment problems. The Child Molest Scale **correctly identified 100 percent** of the 175 offenders who had been arrested for child molestation. The Sexual (Rape) Assault Scale **identified 100 percent** of the 131 offenders who had forced someone to have sexual. The Incest Scale **correctly identified 100 percent** of the 155 participants who admitted to having sex with a family member. The Exhibitionism Scale **correctly identified 100 percent** of the 150 offenders who were arrested for exhibitionism. These results demonstrate that SAI-Juvenile sex-related scales are valid.

The predictive validity results for the non-sex related scales were as follows. The Violence Scale **correctly identified 98.4 percent** or 123 of the 125 participants who admitted being violent. The Antisocial Scale **correctly identified 93 percent** or 119 of the 128 offenders who admitted to antisocial thinking and behavior. The Alcohol Scale **correctly identified 100%** of the 59 offenders who admitted to having a drinking problem. The Drugs Scale **correctly identified 100%** of the 130 offenders who admitted having a drug problem. The Distress Scale **correctly identified 92.5 percent** or 136 of the 147 participants who stated they were in counseling or treatment for anxiety or depression. The Judgment Scale **correctly identified 89.7 percent** or 61 of the 68 offenders who admitted that they did not know right from wrong. These results demonstrate that SAI-Juvenile non sex-related scales are valid.

The inter-item reliability (alpha) coefficients for the thirteen SAI-Juvenile scales are presented in Table 2. All of the alpha reliability coefficients for all SAI-Juvenile scales were at or above 0.82. These results demonstrate that the SAI-Juvenile is a reliable test for juvenile sex offender assessment.

Table 2. Reliability of the SAI-Juvenile

SAI-Juvenile Scale	Coefficient Alpha	SAI-Juvenile Scale	Coefficient Alpha
Test-item Truthfulness Scale	.86	Alcohol Scale	.92
Sex-item Truthfulness Scale	.85	Drugs Scale	.92
Sex Adjustment Scale	.83	Violence Scale	.86
Child Molest Scale	.82	Antisocial Scale	.82
Sexual Assault (Rape) Scale	.86	Distress Scale	.83
Incest Scale	.82	Judgment Scale	.82
Exhibitionism Scale	.89		

For ease in interpreting sex offender risk, SAI-Juvenile scale scores were divided into four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of offenders scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify offenders as having problems.

The above validity results support these particular percentages. The 70th percentile cut off for problem identification correctly classified 90 percent or more of problem offenders. The 39th percentile cut off for low risk had only three percent of participants who even admitted to problems. The low risk level of 39 percent avoids erroneously putting a large percentage of offenders into a "moderate" range.

Analysis of the SAI-Juvenile risk range percentile scores, presented in Table 3, involved comparing the offender's obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 3. The actual percentage of offenders falling in each of the four risk ranges, based on their attained risk range percentile scores, was compared to these predicted percentages. The differences between predicted and obtained are shown in parentheses.

Table 3. Accuracy of SAI-Juvenile Risk Range Percentile Scores

SAI-Juvenile Scales	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Test-item Truthfulness	36.8	(2.2)	29.3	(0.7)	22.3	(2.3)	11.6	(0.6)
Sex-item Truthfulness	39.8	(0.3)	30.5	(0.5)	20.0	(0.0)	10.8	(0.2)
Sexual Adjustment	38.7	(0.3)	30.5	(0.5)	20.0	(0.0)	10.8	(0.2)
Child Molest Scale	38.3	(0.7)	28.8	(1.2)	21.6	(1.6)	11.3	(0.3)
Rape Scale	39.3	(0.3)	30.2	(0.2)	19.8	(0.2)	10.7	(0.3)
Incest Scale	41.4	(2.4)	28.6	(1.4)	17.4	(2.6)	12.6	(1.6)
Exhibitionism Scale	40.5	(1.5)	29.6	(0.4)	18.9	(1.1)	11.0	(0.0)
Alcohol Scale	37.5	(1.5)	31.6	(1.6)	19.3	(0.7)	11.6	(0.6)
Drugs Scale	37.1	(1.9)	32.7	(2.7)	19.8	(0.2)	10.4	(0.6)
Violence Scale	39.0	(0.0)	30.0	(0.0)	20.4	(0.4)	10.6	(0.4)
Antisocial Scale	38.9	(0.1)	28.6	(1.4)	21.9	(1.9)	10.6	(0.4)
Distress Scale	38.1	(0.9)	31.5	(1.5)	20.1	(0.1)	10.3	(0.7)
Judgment Scale	38.5	(0.5)	29.8	(0.2)	20.0	(0.0)	11.7	(0.7)

Objectively offender-attained percentages of participants falling in each risk range were very close to the expected percentages for each risk category. Low Risk range percentages were all within 2.4 percentage points of the expected 39%. Medium Risk range percentages were within 2.7 percent of the expected 30%. Problem Risk range percentages were within 2.6 percent of the expected 20%. And Severe Problem risk range percentages were within 1.6 percent of the expected 11%. Many (35 of 52 possible) comparisons were within one percentage point. It is reasonable to conclude that SAI-Juvenile scales are 98% accurate. These results demonstrate that risk range percentile scores are very accurate.

Conclusion

This study demonstrated that the SAI-Juvenile is a reliable and valid assessment test for juvenile sex offenders. Reliability results show that all thirteen SAI-Juvenile scales were highly reliable. Validity analyses demonstrate that SAI-Juvenile scales identify juvenile sex offenders with problems. Furthermore, SAI-Juvenile scales risk range percentages are 98% accurate.

The SAI-Juvenile is an objective test that determines juvenile sex offender risk in several sex-related and non sex-related areas of inquiry. The results of this study show that the SAI-Juvenile is appropriate for the juvenile sex offender and is statistically sound. Sex-related measures differentiate sexual experimentation from sexual deviance. Non sex-related measures provide insight into juvenile behaviors that may act as catalysts for juvenile sexual deviance and sexual aggression. Juveniles who exhibit violence and sexual deviance tendencies are at risk for serious sexual aggression problems. Juvenile substance abuse can lead to further sexual deviance problems. The next level of research is development of a predictor equation for juvenile sex offender recidivism. Many offender risk (criminal history) and needs (SAI-Juvenile scale scores) predictor variables are contained in the SAI-Juvenile.

Donald D. Davignon, Ph.D.

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