

Civic Research Institute

Chapter 22, Sex Offender Assessment

Sexual Adjustment Inventory.

**Schwartz, B.A. (Ed), Handbook of Sex Offender Treatment,
Chapter 22 (pp. 22-1 – 22-36). e**

Herman H. Lindeman, Ph.D.

For additional information
Email info@bds ltd.com

**Copyright © Protected.
All Rights Reserved**

Sex Offender Assessment:

Sexual Adjustment Inventory

Arguments regarding sex offender assessment and sentencing are often heated. Debates about sex offender evaluation, offenses, sentences, management and treatment as well as recidivism tend to be particularly factious. Understanding people's different opinions on these topics interests test developers (psychometrists) because the assessment of sex offenders influences all aspects of sex offender sentencing and treatment. Indeed, inaccurate sex offender evaluation negatively impacts offenders, victims, families, communities and society.

Sex offender tests vary widely. Some sex offender tests adhere to professional standards of reliability, validity and accuracy, whereas others do not. There is some confusion regarding interviews and types of tests. Sex offender tests also vary in terms of their purpose, intent or application. For example, some sex offender tests focus on court adjudication, whereas others emphasize problem identification or treatment recommendations, and many are recidivism centered. It is postulated that a meaningful sex offender test should meet the needs of these assessment applications: court, supervision, intervention, treatment and recidivism research.

It was this need for an accurate, meaningful and helpful sex offender test that led to the development of the Sexual Adjustment Inventory (SAI). This chapter is organized around the Sexual Adjustment Inventory. After the SAI is introduced an example SAI report is presented. This give reader's an opportunity to actually see a computer scored and generated (printed) 5 page SAI report. This is the kind of report evaluators would have within 3 minutes of completing their sex offender evaluation. This chapter concludes with an SAI research study involving 4,854 adult sex offenders. SAI reliability, validity and accuracy are empirically demonstrated. The SAI was designed to be a meaningful adult sex offender assessment instrument or test in the sense that it provides accurate and helpful sex offender information in courts, supervisory milieus, treatment settings and recidivism research.

Historical Perspective

The Interview

To date there have been several approaches to sex offender assessment. From early on, the interview was the mainstay of clinical assessment. Despite its paradoxical lack of reliability, validity and predictive accuracy, the interview is still widely used in sex offender evaluations.

It has been observed that clinicians often come to different conclusions after interviewing the same person (Menzie, Webster, McMain, Staley, & Scaglione, R., 1994). Several researchers have observed that interview-based clinical judgment and assessments are lacking (Quinsey, Harris, Rice, & Cormier, 1998; Hanson & Bussière, 1998; Bonta, 2002; John Howard Society of Alberta, 2008). In other words, when used by themselves the interview and clinical judgment have not proven to be good predictors.

Actuarial Assessment

Another approach to sex offender assessment involves actuarial (statistical, as opposed to intuitive or clinical) methods. Paul Meehl (Meehl, 1954; Corsini, 1999) raised the issue of whether diagnostic decisions and predictions derived from statistical rules were superior to decisions made by human judgment.

Static factors (unchangeable factors like sex or ethnicity) are the focus of numerous sex offender tests. Examples are many and include tests like the Sex Offender Risk Appraisal Guide (Quinsey, Harris, Rice & Cormier (1998), the Rapid Risk Assessment for Sex Offender Recidivism (Hanson, 1997), Static-99 (Hanson & Thornton, 2000), Static-2000 (Hanson &

Thornton, 2003), and the Risk Matrix 2000 (Thornton, Mann, Webster, Blud, Travers, Friendship, Erickson, 2003). Actuarial tests predict sex offender recidivism with moderate levels of accuracy (Hanson, Morton & Harris, 2003) and continue to be used in many routine decisions in the Criminal Justice System (Hanson & Morton-Bourgon, 2004).

Although actuarial tests have greater accuracy than interviews and clinical assessment procedures (Grove & Meehl, 1996; Quincey, et al, 1998), they have also been subject to criticism. One of these concerns is generalizability of test results. For example, the SORAG, RRASOR and Static-99 are mostly Canadian-based tests (Craig, Brown & Stringer, 2003). Långström, (2004) demonstrated ethnicity issues among African American and Asian offenders. Another issue involves dissimilar sexual offender recidivism base rates. Base rates vary considerably across populations and settings (Doren, 2004; Harris & Hanson, 2004). This may contribute to error when estimating recidivism (Mossman, 2006). Other concerns involve generalizing from a sample or group to an individual (Kemshall, 2001). It is arguably unethical to rely solely upon actuarial tests without consideration of client idiosyncrasies (Sreenivasan, Kirkish, Garrick, Wineberger, & Phenixa, 2000). The point being made is, even though actuarial risk assessment appears to be more accurate than interview-based clinical judgment, it is not foolproof. Factors unique to individual offenders must be explored (Glancy & Regehr, 2002) for comprehensive assessment.

Another criticism of many actuarial tests is that they only take static (unchangeable) factors into account. These tests do not consider dynamic factors (changeable factors such as antisocial attitudes, violence potential, distress, impulsivity, substance abuse (alcohol and other drugs) etc. that have been shown to be linked to sex offender behavior and are called criminogenic needs. In sex offender treatment when criminogenic needs are problematic they are often incorporated into an offender's treatment plan.

Considerable research indicates that effective sex offender treatment is linked to reductions in recidivism (Hanson, Gordon, Harris, Marques, Murphy, Quinsey, & Seto, 2002; Olver, Wong, Nicholaichuk & Gordon, 2007). Numerous studies have shown that sex offenders who successfully complete treatment are significantly less likely to reoffend than untreated or treatment dropout offenders (Marshall & Pithers, 1994; Hall, 1995; Alexander, 1999; Nicholaichuk, Gordon, Gu & Wong, 2000; Scalora & Garbin, 2003). Boer (2008) showed treated sex offenders recidivate at half the rate of untreated offenders.

Andrews & Bonta (1998) demonstrated that reducing criminogenic needs reduces offender recidivism. Several studies have shown that including criminogenic needs (dynamic factors) in treatment lowers recidivism beyond that achieved by treating static factors alone (Beech, Friendship, Erickson, & Hanson, 2002; Thornton, 2002; Allan, Grace, Rutherford, & Hudson, 2007).

Dynamic Factors (Criminogenic Needs)

Dynamic sex offender risk variables have been measured with psychometric test batteries. As part of the England Sex Offender Treatment Evaluation Project (STEP), Beech (1998) administered a nine-test battery to child molesters. A later study (Beech, Friendship, Erickson, & Hanson, (2002) showed this classification methodology predicted sexual re-offending better than the Static-99.

Another approach using a psychometric test battery is Thornton's Structured Risk Assessment (SRA, 2002). This test battery includes nine scales. The SRA model incorporates static risk factors, an Initial Deviance Assessment (IDA) that classifies sex offenders as High, Medium and Low Deviance, and risk management. Thornton (2002) indicated that these domains (distorted attitudes, socio-affective functioning, and self-management) distinguished between first and repeat sex offenders.

Allan, et al. (2007) developed risk assessment methodology that resembles that of Beech (1998) and Thornton (2002). However, a large sample of child molesters that answered to twelve measures were factor analyzed and four risk factors (social inadequacy, sexual interests, anger/hostility and a pro-offending attitude) were identified as dynamic child molest risk factors.

Actuarial tests support the inclusion of dynamic risk factors in sexual offender evaluations. However, most of these actuarial tests focus exclusively on recidivism. Consequently, most static and dynamic risk factor research has limited clinical use because of its failure to explain “risky behaviors” (Grubin & Wingate, 1996). These risk behaviors or clinical factors need to be better understood from a treatment and risk management perspective (Kemshall, 2001).

Some actuarial tests do include criminogenic needs, but usually as a means of calculating recidivism (e.g., SRA and IDA). These recidivism ratings are not focused on needs identification, nor matching problem severity with treatment intensity or even treatment alternatives. The Level of Service Inventory-Revised (Andrews & Bonta, 1995) exemplifies sex offender tests that measure recidivism and provide offender needs information. It consists of 54 items and measures mostly dynamic risk factors along with some static risk factors. The LSI-R uses information obtained from “extensive offender file reviews” and semi-structured “interviews.” The LSI-R has been called one of the best sex offender recidivism measures (Bonta, 2002; Hanson, 2005). However, the LSI-R was not designed for sex offender assessment; rather it was developed for the general criminal population.

A study of 30 sex offenders (Gentry, Dulmus & Theriot, 2005) demonstrated that the LSI-R was significantly less conservative in its risk categories than the Static-99. The authors pointed out that both of these instruments were designed to predict general offender recidivism – not sex offender recidivism. They concluded that if the LSI-R or Static-99 are to be used they should be used together.

The Violence Risk Scale-Sexual Offender Version (Wong, Olver, Nicholaichuk & Gordon, n.d.) was designed to measure recidivism and criminogenic needs in sex offenders. The VRS-SO evaluates sex offender recidivism, identifies treatment goals and evaluates treatment risk. The VRS-SO uses information obtained from records and file reviews as well as semi-structured interviews. Change scores are calculated in a modified version of the transtheoretical model of change (Prochaska, DiClemente & Norcross, 1992). A 2007 study (Olver, Wong, Nicholaichuk & Gordon, 2007) showed that the VRS-SO predicted sex offender recidivism better than the Static-99.

The major VRS-SO concern is the complex and time consuming nature of its data gathering procedures. The VRS-SO is overly complicated (Simourd, 2004; Gentry, Dulmus & Theriot, 2005). It is important that sex offender tests be easy to score and understand (Gentry, Dulmus & Theriot, 2005). The VRS-SO was to be used by scientists and clinical practitioners (Wong, Olver, Nicholaichuk & Gordon, 2003) as much of the VRS-SO information is obtained from lengthy clinical interviews. Similar concerns apply to numerous sex offender tests, many of which require staff to be trained in order to reduce inter-rater reliability problems (Lowenkamp, Latessa & Holsinjer, 2004). Some tests have even more stringent administrative constraints. For example, the SORAG requires administrators to be trained in both phallometric measurement and the Psychopathy Checklist-Revised (PCL-R).

Integration of Sex Offender Tests Historical Perspective

The Sexual Adjustment Inventory (SAI) evolved from a review of the historical perspective of sex offender tests. Examples are many and include the interview’s adjunctive role, actuarial methodology involving some static factors (e.g., gender, ethnicity, age at first conviction) and many dynamic factors (e.g., SAI scale scores, court and treatment history) or

criminogenic needs. The newly revised 2009 edition of the SAI embodies the strengths of the original SAI and replaced the Judgment Scale with the Impulsiveness Scale for improved treatment relevance and research vigor. Test batteries are analogous to the SAI's thirteen (13) scales (measures): 6 sex-related scales and 7 non-sex-related scales. To date, SAI research has focused upon accurate (reliability, validity and accuracy) sex offender identification and treatment. Now the SAI is also available for sex offender recidivism research.

SAI design criteria included: readability (low 6th grade), timeliness (45 minutes to an hour to administer, 3 minutes to computer score and print reports), a sound research base (impressive reliability, validity and accuracy), easy administration (self-report in English and Spanish), readily available (on computer diskettes or flash drives [www.bdsltd.com]), and over the internet [www.online-testing.com]), and very affordable.

Sexual Adjustment Inventory

The Sexual Adjustment Inventory (SAI) incorporates some actuarial or static factors such as gender (sex), and ethnicity. In addition, the SAI includes many dynamic factors (criminogenic needs) like its 13 scales (measures) along with relevant court and treatment history. This information is provided by offenders self-report. The SAI identifies sexual problems and treatment needs. Concurrently, recidivism research will be pursued in the future.

The SAI is a 225-item self-report test that takes 45 minutes to an hour to complete. The SAI is an automated (computer scored) test that can be given in paper-pencil test booklet format, on a computer screen or over the internet. From answer sheet data input, computer scoring, interpretation and printing of reports takes 3 minutes. SAI tests can be administered individually or in group testing settings.

The SAI identifies sexual deviance and paraphilias in people accused or convicted of sex offenses. The SAI has 13 scales (measures):

Sexual Adjustment Inventory

13 SAI SCALES (MEASURES)

Sex-Related Scales

Sex Item Truthfulness Scale
Sexual Adjustment Scale
Child Molest Scale
Sexual Assault Scale
Incest Classification
Exhibitionism Scale

Non-Sex-Related Scales

Test Item Truthfulness Scale
Violence (Lethality) Scale
Antisocial Scale
Impulsiveness Scale
Alcohol Scale
Drugs Scale
Distress Scale

The SAI has been standardized on thousands of sex offenders and has proven reliability, validity and accuracy. The SAI can be administered in three ways: Paper-pencil test booklet scoring (www.bdsltd.com), on the computer screen (monitor), and over the internet (www.online-testing.com).

Two Truthfulness Scales

Many sex offenders attempt to deny or minimize their problems or “fake good” when being evaluated. This defensiveness or guardedness is the norm or usual response pattern exhibited by sex offenders when evaluated. This denial emphasizes the importance of the SAI's two truthfulness scales, while underscoring the value of truth-corrected scores.

In sex offender assessment it is important to know if the offender was truthful or untruthful while being evaluated. To make this truthfulness determination, the Sexual Adjustment Inventory (SAI) has two truthfulness scales. The **Sex Item Truthfulness Scale** determines if the offender was truthful when answering unconcealed and recognizable sex-related test items (questions). The following SAI scales contain sex-related items: Sex Item Truthfulness Scale, Sexual Adjustment Scale, Child Molest (Pedophile) Scale, Sexual Assault (Rape) Scale, Incest Classification and the Exhibitionism Scale. In contrast, the **Test Item Truthfulness Scale** determines if the offender was truthful while answering non-sex-related test items. The following SAI scales contain non-sex-related items: Test Item Truthfulness Scale, Violence (Lethality) Scale, Antisocial Scale, Alcohol Scale, Drugs Scale, Distress Scale, and the Impulsiveness Scale.

The inclusion of two truthfulness scales in the same test is rare, and it is even more uncommon in a sex offender test. Incorporating these two (sex-item and non-sex item) truthfulness scales in the same sex offender test has many advantages. The two Truthfulness Scales instill confidence in the test data, and also enable comparison of sex-related and non-sex-related responding. Invalid tests can now provide considerable insight into an offender’s motivation. These truthfulness scales identify self-protective, recalcitrant and guarded offenders that minimize their problems and attempt to “fake good” or in some cases lie.

SAI Scale Interpretation

There are several levels of Sexual Adjustment Inventory (SAI) scale interpretation ranging from viewing the SAI as a self-report to interpreting scale elevations and scale inter-relationships. The following table is a starting point for understanding and interpreting SAI scale scores.

SAI Scale Risk Ranges

Risk Category	Risk Range Percentile	Total Percentile
Low Risk	0 - 39%	39%
Medium Risk	40 - 69%	30%
Problem Risk	70 - 89%	20%
Severe Problem	90 -100%	11%

Each SAI scale score falls within one of the four risk ranges cited above: low risk (0 to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). A problem is not identified until a scale score is at the 70th percentile or higher. Problem risk scorers represent 20 percent of the offenders tested. Severe problem scorers correspond to 11 percent of the sex offenders tested. Elevated (or problematic) problem and severe problem scores represent 31 percent of the sex offenders tested. The SAI has been standardized on thousands of sex offenders.

Sex-Related SAI Scales Introduction

The Sexual Adjustment Inventory (SAI) identifies sexually deviate and paraphiliac behavior in people accused or convicted of sexual offenses. The Sex Item Truthfulness Scale determines if the client was open and honest while answering sex-related questions. These sex-

related scales include the Sex Item Truthfulness Scale, Sexual Adjustment Scale, Child Molest Scale, Sexual Assault Scale, Incest Classification, and the Exhibitionism Scale. Each of these sex-related scales is examined more thoroughly in the following discussion.

Sex Item Truthfulness Scale

When evaluating sex offenders, questions often arise regarding the truthfulness of the offender's self-report information. Experienced sex offender evaluators are all too aware of sex offender denial, problem minimization and attempts to "fake good" or lie. Several researchers (Dutton & Starzonski, 1994; Henning & Holdford, 2006) have studied offender deception and explore ways of dealing with it. Tierney & McCabe (2001) noted that sex offender assessment is particularly vulnerable to offenders' untruthful answers to transparent sex items. More recently, Tan & Grace (2008, p.75) emphasized the importance of identifying and controlling for this bias.

To meet this need, the Sexual Adjustment Inventory (SAI) contains a 22-item Sex Item Truthfulness Scale that measures offender truthfulness while they are completing SAI sex-item scales. All SAI sex-related items are direct with no attempt to deceive or trick respondents. Consequently these sex items are easily recognized.

SAI sex-related scales represent common sex offender paraphilias such as sexual adjustment (unsatisfying sex life), child molest (pedophile), sexual assault (rape), exhibitionism (exposure of one's genitals to strangers), and incest (sex with a close family member). Sex offenders can manifest more than one paraphilia at a time.

The Sex Item Truthfulness Scale identifies respondents that do not answer sex-related items truthfully. This scale detects and measures the severity of untruthfulness. **Sex Item Truthfulness Scale scores at or below the 89th percentile mean that all sex-related scales are accurate and valid.** Elevated (70th percentile) scores represent the problematic threshold. Sex-Item-Truthfulness Scale scores in the problem range (70 to 89th percentile) signify early stage defensiveness. The offender exhibits some denial and problem minimization, but not enough to invalidate the sex-item scales. Sex Item Truthfulness scale scores in the 70 to 89th percentile range indicate that all sex-related scales have been "truth-corrected" and are accurate. Sex Item Truthfulness Scale scoring methodology is reminiscent of the Minnesota Multiphasic Personality Inventory (MMPI) L, F and K-scale truth correction procedure. Truth-corrected scores are more accurate than raw scores. Sex Item Truthfulness Scale scores at or below the 69th percentile indicate that all sex-related scales are accurate and valid. **Sex Item Truthfulness Scale scores at or above the 90th percentile mean all sex-related scale scores are inaccurate or invalid.** Sex Item Truthfulness Scale scores at or above the 90th percentile do not occur by chance. These elevated scale scores require a definite pattern of deviant (untruthful) answers in order for them to occur.

One of the first things to check when reviewing an SAI report is the Sex Item Truthfulness Scale score. This truthfulness scale takes precedence over all other sex-related scales because it determines whether or not the respondent was truthful when answering sex-related items.

Sexual Adjustment Scale

The Sexual Adjustment Scale measures the offender's self-reported sexual satisfaction. In the final analysis it has been the sex offender's opinions, with all of their biases, that have been verbalized to those who listen. These offender opinions can influence assessment and treatment personnel decisions. This was often the case prior to truthfulness scales being included in sex offender tests.

The Sexual Adjustment Scale consists of 22 true-false and multiple choice items. Offender truthfulness while completing the Sexual Adjustment Scale is established by the Sex

Item Truthfulness Scale, and when untruthfulness exists its severity is measured. Sex offender evaluators can now review Sexual Adjustment Scale results with confidence.

The following research facilitates a better understanding of sex offenders. Seidman, Marshall, Hudson, & Robertson, (1994) showed sex offenders had higher levels of loneliness and “intimacy deficiency” than non-violent sex offenders. High risk sex offenders are more likely to feel frustrated and deprived than low risk sex offenders (Hanson & Harris, 2000). In a study of adult sex offenders, 45 percent of the child molesters, 29 percent of the rapists and 32 percent of the total sample reported they had engaged in compulsive masturbation as juveniles (Longo & Groth 1983). In interview many of these masturbation questions might not occur due to staff and offender embarrassment, or the offender might just lie.

Sexual Adjustment Scale scores are distributed over four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile). Low risk scorers have few, if any, sexual adjustment problems or concerns. Medium risk scorers have some sexual adjustment concerns, but they are not focal issues. The Sexual Adjustment Scales problem threshold is the 70th percentile. Elevated (70th percentile or higher) scale scores do not occur by chance. A definite pattern of deviant answers to the scale items must occur for a score to reach the 70th percentile or higher. Scorers in the 70 to 89th percentile range have problematic sexual adjustment and warrant low to medium intensity intervention and/or treatment. Sexual Adjustment Scale scores in the 90 to 100th percentile range reflect severe adjustment problems that warrant intense intervention and/or treatment.

The Sexual Adjustment Scale score provides a background from which other SAI scale scores can be better understood. For example, is the person that is manifesting a high Child Molest Scale score satisfied or not satisfied with their sexual adjustment? Similar insight could apply to all other SAI sex-related (paraphilia) scale scores.

Evaluators (assessors and staff) should review all other SAI scales scores’ to identify stressors and co-determinants. An offender could have an elevated Sexual Adjustment Scale score along with other elevated non-sex-related scale scores. These other elevated (70th percentile or higher) SAI scale scores could exacerbate, heighten and further intensify existing sexual adjustment problems and concerns.

A concurrently elevated Sexual Adjustment Scale and Alcohol (or Drugs) Scale score would impact all aspects of the offender’s adjustment, including their sexual adjustment. A simultaneously elevated Violence Scale, Antisocial Scale or Impulsiveness Scale can be indicative of rape, domestic violence or some other equally harmful acting out. A co-existing and elevated Sexual Adjustment Scale score and a Distress Scale score signifies serious emotional problems that are likely affecting (or reflecting) the offender’s sexual adjustment. The higher the concurrently elevated scale scores, the more impact these problems would have on the offender’s sexual adjustment. The Sexual Adjustment Scale score can be interpreted independently or in combination with other SAI scale scores.

Child Molest Scale

The SAI Child Molest Scale consists of a 21-item true-false and multiple choice measure (scale). The Child Molest Scale measures sexual interests, urges and fantasies involving prepubescent children. Pedophilia refers to a pathological sexual interest in children. Isolated sexual acts with a child do not necessarily warrant the pedophile classification. And many child molesters are often unable to understand or comprehend the reason for their actions.

Among sex offender misdeeds, child molestation is the most frequently reported sexual offense (Davis & Leitenberg, 1987). One-third of sexual assaults against children under the age of 12 are committed by offenders under the age of 18 (Synder & Sickmund, 1999). Self-reported

sexual interest in children was found to be a significant risk factor for sex offense recidivism (Worling & Curwin, 2000).

Child molesters often have distorted perceptions, awareness and understanding which supports their deviant behavior (Finkelhor, 1984), and these cognitive distortions should be targeted and challenged in treatment (Beckett, 1994). When compared to rapists, child molesters exhibited higher social desirability scores and more attempts to “fake good” or lie (Tierney & McCabe, 2002). In comparison to non-offenders, child molesters were significantly lower in self-esteem and deficient in victim empathy (Fisher, Beech & Browne, 1999). High levels of sexual arousal toward children has been related to child molest recidivism (Quinsey, Rice & Harris, 1995). High scores on the SAI Child Molest Scale identify people with abnormal sexual interests in children.

Sex offender evaluations and more specifically, child molester assessments have important consequences that vary according to the evaluations purpose. For example, pedophile classification, diagnosis, treatment, probation versus incarceration, level of supervision, risk management and public safety are all representative of child molest evaluation purposes.

In the Sexual Adjustment Inventory (SAI), Child Molest Scale scores are distributed among four risk range classifications: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile). Low risk scorers are not child molesters. Medium risk scorers may be attracted to children, but not necessarily in an abnormal way. The 70th percentile is the Child Molest Scale’s problem threshold. Elevated (70th percentile and higher) scale scores do not occur by chance. Problem risk scorers have a greater than average interest in prepubescent children. The frequency and magnitude of the offender’s interest in children should be worked through in a counseling or treatment environment. Severe problem scorers have an abnormal interest in prepubescent children. These offenders have a high probability of engaging in child molest or pedophilic behavior. When possible, their court, police and treatment histories should be reviewed.

The Child Molest Scale score can be interpreted as a self-report and viewed as an independent score, or it can be interpreted in conjunction with other SAI scales in terms of their scale elevations and scale inter-relationships. It is not uncommon for sex offenders to have more than one paraphilia. Consequently, all sex-item (paraphilia) scales should be reviewed for elevated (70th percentile and higher) scores. Any examination of an elevated Child Molest Scale score should begin with the Sex Item Truthfulness Scale. Was the offender truthful when answering sex-related scale items?

With regard to the Child Molest Scale, all non-sex-related scales (Violence, Antisocial, Alcohol, Drugs, Impulsiveness and Distress) could, when elevated (70th percentile and higher), magnify child molest risk. As an example, a sex offender’s Child Molest Scale score might be at the 87th percentile or in the problem risk range. However, if this same offender had an Alcohol Scale or Drugs Scale score in the 90th percentile or higher range, substance abuse could exacerbate or increase the offender’s child molest risk dramatically. The greater number of elevated scale scores, the greater their impact on child molest risk. Similar examples could apply to each of the non-sex-related scales. Concurrently elevated Child Molest Scale and Distress Scale scores would greatly increase the complexity of the clinical picture. Here again, scale elevations and scale inter-relationships would enable evaluators to better understand sex offenders. Other elevated sex-related scales in conjunction with an elevated Child Molest Scale score would identify important sexual areas for further investigation. Similarly, elevated non-sex-related scales would help identify psychological stressors impacting the child molester. The Child Molest Scale can be interpreted independently or in combination with other SAI scales.

Sexual (Rape) Assault Scale

The Sexual Assault Scale (Rape) measures an offender's proneness to use force or the threat of force in their sexual relationships. Rape refers to sexual assault or sexual intercourse against the will and over the objections of the victim. The SAI incorporates a 21-item true-false and multiple choice Sexual (Rape) Assault scale.

Sexual offenses involving sexual assault or rape are unique in that their motivation is more than purely sexual (Beech, Ward & Fisher, 2006). High levels of injury are often found in rape attacks (Myhill & Allen, 2002), indicating that extremely violent forces are involved. Anger, hostility and sexual as well as sadistic motives have been identified as motivations contributing to sexual assaults (Knight & Prentky, 1990; Malamuth & Brown, 1994).

The psychological profiles of rapists are similar to those of nonsexual violent offenders (Beech, Oliver, Fisher & Beckett, 2006). In their (2004) analysis of predictors of sexual recidivism, Hanson & Morton-Bourgon found the degree of force used predicted (sexual and non-sexual) violence recidivism. Rapists have been found to be more psychopathic than child molesters and incest offenders (Firestone, Bradford, Greenberg & Serran, 2000). Barbaree and Marshal (1988) found that sex offenses accompanied by violence were among the strongest predictors of sexual recidivism.

Sexual Assault Scale (Rape) scores are distributed among four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile). Low risk scorers do not commit rape. Medium risk scorers may fantasize about sexual assaults or have engaged in some rough role playing, but a rape history is unlikely. The 70th percentile is the Sexual Assault problem threshold. Problem risk scorers (70 to 89th percentile) are capable of sexual assault. Elevated (70th percentile and higher) Sexual Assault Scale scores do not occur by chance. A definite pattern of deviant responses is required to obtain an elevated score. Other elevated (70th percentile and higher) non-sex-related SAI scale scores are important when interpreting elevated Sexual (Rape) Assault Scale scores. Non-sex-related SAI scales include the Violence Scale, Antisocial Scale, Impulsiveness Scale, Alcohol Scale, Drugs Scale and the Distress Scale. When elevated, these scales can magnify sexual assault (rape) probabilities. Severe problem (90 to 100th percentile) scorers have an even higher probability of committing sexual assaults. Court, police and treatment records should be checked when a person scores in the severe problem range on the Sexual Assault Scale.

The role of non-sex-related SAI scales becomes apparent in sexual assault evaluations. An elevated Sexual Assault Scale score in conjunction with almost any other elevated non-sex-related scale (Violence, Antisocial, Alcohol, Drugs, Impulsiveness and Distress) score influences subsequent inquiry, sexual behavior, assessment outcomes, supervision levels, decision making and treatment. Substance abuse (alcohol and other drugs), impulsiveness and distress are common assault rationalizations (i.e., "I didn't know what I was doing because . . ."). Concurrently elevated Sexual Assault Scale and Violence Scale scores describe a person that is violent in life as well as in sexual relationships. When other non-sex-related scales and the Sexual Assault Scale are elevated, all that is needed for sexual violence to occur is a triggering mechanism like frustration, resistance, rejection or a quick temper. Any elevated non-sex-related scale impairs a person's judgment and emotionality, which can result in a sexual assault. The Sexual Assault Scale can be interpreted independently. However, when other SAI scale scores are also elevated most evaluators would interpret the Sexual Assault Scale in combination with the other elevated scales. Highly elevated scale scores are usually more problematic.

Incest Classification

Incest Classification identifies respondent involvement in incestuous behavior. Incest refers to having sexual relations with a close family member (grandparent, mother, father, sister or brother). In other words, incest refers to coitus between people related by blood, e.g., grandparents, parents, siblings or children. Of the seven non-sex-related scales the Alcohol Scale and the Drugs Scale are often involved in incestuous relationships. However, incest has many character disorder features. Incest is a complex term often involving moral, social and religious attitudes. Incest Classification can be interpreted independently of other SAI scales. Non-coitus forms of sexual intercourse do not constitute incest. Hartley (2001, p. 461) noted that incest is not a static event, i.e., it evolves over time. Yet, once somebody is involved in incest, they rarely forget it. Incest is most common between brother and sister, and the next most common form is between father and daughter. Incest is a criminal act.

An earlier version of the SAI incorporated a multi-item Incest Scale. Feedback from test users, staff, offenders, patients and respondents was critical of Incest Scale content. Many felt the series of incest questions were redundant and unnecessary. Others found the Incest Scale offensive. The purpose of the Incest Scale was to establish whether or not the offender had been involved in incest. If the answer was “yes” it was so noted in the SAI report. Similarly, if the answer was “no” this was noted in the SAI report.

To accommodate user feedback and to prevent loss of important assessment information, a three-item incest classification methodology was developed. These incest items consist of one court history item, one true-false item and one multiple choice item. When a respondent admits to one, two or three incest items it is so noted in the SAI report for evaluator and treatment staff awareness.

Questions regarding incest item credibility were approached as follows. Did the respondent admit to one, two or three of the Incest Scale items? Three separate incest admissions are more convincing than two admissions, which are more convincing than one admission. Yet, one admission warrants further inquiry. And a Sex Item Truthfulness Scale score at or below the 89th percentile would further support the truthfulness of the offender’s answers to the incest items. Incest Classification has been incorporated into the revised SAI test booklet to establish whether or not the offender was ever involved in an incestuous relationship.

The admission versus non-admission nature of the incest items means that it is a classification methodology and can be interpreted independently. The shortness of the Incest Classification procedure is in marked contrast to the other SAI scales which vary in length from 19 to 23 items.

Exhibitionism Scale

The Exhibitionism Scale measures an individual’s need to expose their sex organs to unsuspecting strangers. Exhibitionists are characterized by recurrent, intense sexual urges and sexually arousing fantasies involving exposure of their genitals (sex organs) to unsuspecting strangers.

It has been suggested that exhibitionism is the most common sexual offense (Firestone, Kingston, Wexler & Bradford, 2006), and that exhibitionists are among the most likely sex offenders to recidivate (Doren, 2002). In their national sample of adolescent sex offenders Zolondek, Abel, Northey, & Jordan (2001) found the frequency of exhibitionism was similar to a comparison group of adult sex offenders. In a study of adult sex offenders, the following statistics were reported: 35 percent of child molesters, 18 of percent rapists, and 24 percent of the total sample reported they had engaged in exhibitionism as juveniles (Longo & Groth, 1983). In another study, half of the adult exhibitionists reported the onset of exhibitionism before the age of 18 (Abel & Ronleau, 1990).

The SAI includes a 19 item true-false and multiple choice Exhibitionism Scale to measure a person's predisposition and involvement in exhibitionism. Exhibitionism Scale scores are distributed in four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile). Low risk scorers do not engage in exhibitionism. Medium risk scorers may have experienced some exhibitionistic fantasies, but it is unlikely they would engage in exhibitionism. The Exhibitionism Scale problem threshold is the 70th percentile. In other words, an exhibitionist problem is not identified until the offender's score is at or above the 70th percentile. People scoring in the 70 to 89th percentile have problematic exhibitionistic tendencies (thoughts, feelings and urges) and may engage in exhibitionism. Offenders scoring in the 90 to 100th percentile range have intense and severe exhibitionistic feelings and urges. These offenders likely engage in exhibitionism. The higher the Exhibitionism Scale score, the more frequent and severe the exhibitionist urges. Exhibitionism Scale scores at or above the 90th percentile do not occur by chance.

Whether or not a person acts on their paraphilic urges is in part determined by various personality traits (e.g., antisocial personality), the severity of psychosocial stressors (e.g., impulsiveness, distress) and the presence of a substance abuse (alcohol and other drugs) disorder (DSM-IV, 1994). Each of these causative factors are included in the SAI as scales. The severity of these non-sex-related scales can be important when assessing exhibitionism.

Sex-Related Scales Summary

The Sexual Adjustment Inventory (SAI) consists of thirteen (13) scales (measures): six sex-related scale and seven non-sex-related scales. The six (6) sex-related scales were discussed in the following order **1.** Test Item Truthfulness Scale, **2.** Sexual Adjustment Scale, **3.** Child Molest Scale (Pedophile), **4.** Sexual Assault Scale (Rape) and **5.** Incest Classification, and **6.** Exhibitionism Scale.

Sex-related items are written in a frank or straightforward manner with no attempt to mask or conceal their sexual content. The Sex Item Truthfulness Scale was developed to determine whether or not the client/offender answered sex-related items honestly.

In addition to the sex-related scales, the SAI incorporates seven (7) non-sex-related scales which will be discussed in the following order: Test Item Truthfulness Scale, Violence (Lethality) Scale, Antisocial Scale, Impulsiveness Scale, Alcohol Scale, Drugs Scale, and Distress Scale.

Non-Sex-Related Scales Introduction

Non-Sex-Related SAI Scales

The Sexual Adjustment Inventory (SAI) is designed for paraphilia and sex offender assessment. Yet, it also contains scales (measures) that explore non-sex-related areas of inquiry that are important for understanding sex offenders. In addition to the six sex-related scales, the SAI has seven (7) non-sex-related scales that include: **1.** Test Item Truthfulness Scale, **2.** Violence (Lethality) Scale, **3.** Antisocial Scale, **4.** Impulsiveness Scale, **5.** Alcohol Scale, **6.** Drugs Scale, and **7.** Distress Scale.

Test Item Truthfulness Scale

Some sex offenders have non-sex-related problems like substance abuse (alcohol and other drugs), violent tendencies or distress that they want to cloak, cover-up or conceal. The

Test Item Truthfulness Scale identifies offenders that deny, minimize, cover up or attempt to “fake good” when answering non-sex-related items on the Violence Scale, Antisocial Scale, Distress Scale, Impulsiveness Scale, Alcohol Scale and Drugs Scale. Clients with reading impairments may also score in the low or medium Test Item Truthfulness Scale range. A few questions about the client’s education and reading abilities usually clarifies the presence of a reading impairment. If the client can read the newspaper, he/she can read the SAI.

The SAI incorporates a 19-item Test Item Truthfulness Scale to determine how truthful the sex offender was while answering non-sex-related questions. The offender’s scale scores are then truth-corrected in a procedure comparable to the MMPI truthfulness scale score correction. In other words, the SAI Test Item Truthfulness Scale identifies, measures and truth-corrects non-sex-related scale scores.

Test Item Truthfulness Scale scores at or above the 90th percentile invalidate all non-sex-related scales (Violence Scale, Antisocial Scale, Distress Scale, Impulsiveness Scale, Alcohol Scale and Drugs Scale). Some sex offenders deny or lie on sex-related items and answer non-sex-related items truthfully (or vice versa). Some sex offender’s answer all SAI items truthfully, whereas others deny or attempt to “fake good” to both sex-related and non-sex-related items. Including two truthfulness scales in the SAI is unrivaled among sex offender tests. **Test Item Truthfulness Scale scores at or below the 89th percentile substantiate that all non-sex-related scale scores are accurate and valid.** Test Item Truthfulness Scale scores in the 70 to 89th percentile range confirm that all non-sex-related scales have been truth-corrected and as a result of truth-correction are accurate or truthful. The truth-correction procedure is reminiscent of the MMPI’s L, F, and K-scale corrections methodology. Test Item Truthfulness Scale scores at or below the 69th percentile mean all non-sex-related scales are accurate and truthful.

Denial and problem minimization have been shown to be significantly related to a sex offender’s motivation for treatment (Marshall & Eccles, 1991; Looman, Dickie & Abracen, 2005). Denial has also been related to a greater likelihood of treatment dropout (Murphy & Baxter, 1997; Daly & Pelowsky, 2000; Geer, Becker, Gray & Krauss, 2001), and higher risk of reoffending (Grann & Wedin, 2002; Kropp, Hart, Webster & Eaves, 1995). Refusal to take responsibility for answering test questions honestly may simply reflect a lack of motivation for change (Scott & Wolfe, 2003).

Two of the first things to check when reviewing an SAI report are the offender’s Sex Item Truthfulness Scale and their Test Item Truthfulness Scale scores. The Test Item Truthfulness Scale score takes precedence over all non-sex-related scales because it determines whether or not the offender completed non-sex-related scales honestly.

Comparison of the Sex Item Truthfulness Scale and the Test Item Truthfulness Scale can provide considerable sex offender understanding – even with an invalid test. The higher of these two Truthfulness Scale (sex-item and non-sex item) scores represents the sex offender’s greatest area of concern.

Violence (Lethality) Scale

The Violence (Lethality) Scale measures the offender’s use of force to injure, damage or destroy. The Violence Scale identifies people that are dangerous to themselves and others. An ever present concern when evaluating sex offenders is their violence potential.

Past violence is a good predictor of re-abuse (Harrell & Smith, 1996) and is the most commonly used risk factor in the courts (Roehl & Guertin, 1998). Other researchers acknowledge prior violence as a predictive factor, but also include other factors (criminogenic needs) such as violence potential, substance abuse (alcohol and other drugs), etc. in their violence predicting models (Girard & Worsmith, 2004; Hilton, Harris, Rice, Houghton, & Eke, 2008).

The 30-item Violence (Lethality) Scale measures sex offender violence potential, predisposition and proneness. This scale incorporates both generic violence and sex offender violence. Violence Scale risk ranges are: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile). Low risk scorers are not violent people. Similarly, violence is not a focal issue for medium risk scorers. The 70th percentile is the violence threshold. Violence Scale scores in the 70 to 89th percentile range are indicative of emerging violent behavior, although in the early stages of a violence syndrome these offenders can be overly sensitive and reactive. Violence Scale scores in the 90 to 100th percentile range are descriptive of very dire, menacing and dangerous individuals. Violence can be compounded and magnified by other SAI elevated scores (e.g., substance abuse) or can exacerbate and intensify other SAI scale scores when its score is elevated. Indeed, problematic (elevated) Violence Scale scores identify situations in which violence interacts with elevated sex-related and other non-sex-related scale content.

When evaluating sex offenders, particularly Child Molest and Sexual Assault offenders, it is important to determine the offender's violence predisposition or proneness. Is the child molester prone to causing injury, harm, cruel savagery or severe violence? How violent or dangerous is the rapist? People with elevated (70th percentile and higher) Violence Scale scores have violence problems and concerns. The higher the Violence Scale score, the more dangerous the offender.

Elevated Violence Scale scores or violent tendencies can be exacerbated or intensified by elevated or problematic distress, antisocial thinking and substance abuse (alcohol and other drugs). In summary, violence can directly or indirectly aggravate or heighten all other SAI scale scores. Problematic violence as reflected in elevated Violence Scale scores can be heightened or magnified by the effects of other elevated SAI scales, beyond the Violence Scale's attained score.

Antisocial Scale

Corsini (1999) defines antisocial people as "opposed to society or to existing social organization and moral codes." Continuing, antisocial behavior is described as "aggressive, impulsive and sometimes violent acts that flout social and ethical codes such as laws and regulations relating to personal and property rights." Antisocial reactions are "responses marked by a lack of responsibility, poor judgment, absence of moral values, inability to learn from experience, or unwillingness to postpone gratification."

The Diagnostic and Statistical Manual of Mental disorders (DSM-IV) describes antisocial traits as including: failure to conform, deceitfulness, impulsivity, aggressiveness, recklessness, irresponsibility and lack of remorse or regret. Antisocial traits have been linked with sexual offending (Seto & Barbaree, 1997; Mills, Anderson & Kroner, 2004), and are key contributors to criminality in general (Andrews & Bonta, 1998). Bonta (2002) concluded that knowledge of antisocial personalities helps in understanding criminal behavior. "Antisocial orientation" was demonstrated to be a major predictor of sexual recidivism and criminal recidivism in general (Hanson & Morton-Bourgon, 2004).

The Antisocial Scale consists of 23 true-false and multiple choice items. It measures the attitudes and behaviors of selfish, ungrateful, callous and egocentric offenders that seem to be devoid of a sense of responsibility and fail to learn from experience. Extreme cases were called "psychopaths" in the past.

The Antisocial Scale classifies offenders into four risk ranges: low (zero to 39th percentile), medium (40 to 69th percentile), problem (70 to 89th percentile) and severe problem (90 to 100th percentile). A problem is not identified until the offender's SAI scale score is at or above the 70th percentile of standardized sex offender scores. Antisocial Scale scores in the low

risk range are not problematic. Low risk scorers manifest few, if any, antisocial characteristics. Antisocial Scale scores in the medium risk range are common. Medium risk scorers have some critical or negativistic traits (e.g., selfishness, ungratefulness, indifference, etc.) but they are not focal issues or concerns. Problem risk scorers are in an early antisocial stage of development. These people often present as selfish, ungrateful or hostile with little regret or remorse. People that score in the severe problem range have severe or extreme antisocial attitudes. Severe problem scorers are sometimes called “sociopaths.”

Antisocial thinking can intensify the interpretation of other SAI scale scores. Elevated Antisocial Scale scores are particularly noteworthy when reviewing SAI sexually deviate and paraphiliac behavior. Here we are referring to pedophiles, rapists, exhibitionists, incest and the offender’s sexual adjustment. Elevated (70th percentile and higher) Antisocial Scale scores indicate that antisocial thinking could influence or even intensify the traits or characteristics of other attained SAI scale scores. In other words, other attained SAI scale scores can reflect increased antisocial opinions and beliefs beyond what their attained score represents.

Elevated Antisocial Scale and Violence Scale scores represent a potentially dangerous combination in which the offender focuses their violence externally against society, its institutions and representatives. The higher the scores the more dangerous the individual.

An elevated Antisocial Scale score in combination with an elevated Distress Scale score can be problematic, particularly when scores are in the severe problem range. These scale scores often identify people on the verge of being emotionally overwhelmed, or suicidal with heightened antisocial thinking. In these situations, the offender feels progressively more and more emotionally isolated and desperate. Such people are dangerous and even more so when the Violence Scale is also elevated (e.g., terrorists). The Antisocial Scale can be interpreted individually or in combination with other SAI scales.

Impulsiveness Scale

Impulsiveness is often described as “activities abruptly engaged in without forethought, reflection or consideration of consequences.” Impulsive people are characterized by a tendency to act hastily and without reflection. The Impulsiveness Scale consists of 19 true-false and multiple choice items that measure sex offender impulsiveness.

Numerous studies have demonstrated a relationship between impulsiveness and sexual offenses. In their analysis of predictors of sexual recidivism, Hanson & Morton-Bourgon, (2004) demonstrated that impulsiveness significantly predicted serial and non-serial sex offenders. Baltieri & de Andrade (2008) demonstrated that higher impulsivity levels distinguished between non-serial (one victim) sex offenders and serial (3 or more victims) sex offenders. Several studies (e.g., Kravitz, Fawcett, McGuire, Kravitz, & Whitney, 1999; Pelissier, Camp & Motivans, 2003) have shown that higher levels of sex offender impulsiveness are associated with treatment attrition.

According to Knight & Sims-Knight (2004), impulsiveness is an important contributing factor to sexual offending. Giotakos, Markianos, Vaidakis, & Christodoulou (2003) found that impulsivity scores were higher for male rapists when compared to normal males. In another study, sexual offenses against adult women had higher impulsivity scores than sexual offenses against girls and pubertal females (Baltieri & de Andrade, 2008). Higher levels of impulsivity have also been associated with substance abuse (Moeller, Dougherty, Barratt, Schmitz, Swann & Grabowski, 2001; Langström, 2004).

Impulsiveness Scale scores are distributed in four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile) risk. Low risk Impulsiveness Scale scorers are not impulsive. Medium risk scorers have average or non-problematic impulsiveness. The problem risk

threshold is the 70th percentile. Problem risk Impulsiveness Scale scorers act hastily without adequate forethought. Severe problem Impulsiveness Scale scorers are extremely spontaneous, thoughtless, reckless and careless. Sex offender research clearly shows that severely impulsive sex offenders have to learn how to become less impulsive in order for treatment to be effective.

Impulsivity has been linked to sex offenses, violence and substance abuse (alcohol and other drugs). As noted earlier, impulsiveness characterizes offenders that do things on the spur of the moment, with little forethought or consideration of consequences. Elevated Impulsiveness Scale scores (or impulsiveness per se) can interact with all SAI scales (both sex-related and non-sex-related scales). Consequently, elevated Impulsiveness Scale scores can be problematic by themselves or even more so in combination with other elevated SAI scales.

Alcohol Scale

The Alcohol Scale measures alcohol use, and when appropriate, the severity of abuse. Alcohol refers to beer, wine and other liquors, and it is a licit substance. A history of alcohol problems could result in an abstainer (current non-drinker) attaining a low to medium risk score on the Alcohol Scale. Consequently, precautions have been built into the SAI to correctly identify “recovering” alcoholics. The offender’s answer to the “recovering” alcoholic question (item #216) is printed on page 5 of the SAI report for easy reference. In addition, high risk Alcohol Scale paragraphs caution staff to clarify if the client is a “recovering” alcoholic. If recovering, for how long?

In evaluation and treatment settings, the offender’s Alcohol Scale score helps staff work through offender denial. Most offenders accept the objective and standardized Alcohol Scale score. This is particularly true when it is explained that elevated (70th percentile and higher) scores do not occur by chance. Offenders must answer a definite pattern of alcohol-related admissions for an elevated score to occur.

An important factor that must be taken into account when evaluating sex offenders is the presence and severity of substance abuse (alcohol and other drugs) (Dowden & Brown, 1998). The use and abuse of alcohol and drugs are well-established as correlates of crime (Harrison & Backenheimer, 1998), and substance abuse has been shown to contribute to offender recidivism (Gendreau, Little & Goggin, 1996; Motiuk, 1998).

Considerable research has demonstrated a relationship between substance abuse and sex offending. Alcohol is involved in one third to two-thirds of rapes (Abbey, 1991; Pernanen, 1991). Two out of three incarcerated sex offenders have a history of alcohol or drug abuse addiction (Peugh & Belenko, 2001). Sex offender scores on the Michigan Alcohol Screening Test (MAST) were twice that of other violent offenders (Looman, Dickie & Abracen, 2005). In a study of 113 convicted sex offenders in a voluntary treatment program, 85 percent had a DSM-IV lifetime substance abuse disorder diagnosis (Dunsieth, Nelson, Brusman-Lovens, Holcomb, Beckman, Welge, Roby, Taylor, Soutullo, McElroy, 2004).

Despite substance abuse and sex offender awareness, little research has used standardized measures of alcohol and drug problems (Looman, Dickie & Abracen, 2005). To help meet this need, the SAI includes a 19-item Alcohol Scale and a 19-item Drugs Scale. Inclusion of these independent Alcohol and Drugs Scales enables evaluators to identify and measure the severity of substance abuse problems so they can be matched to appropriate treatment program intensity.

Alcohol Scale scores are distributed among four SAI risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile) risk. Low risk scorers do not manifest alcohol problems. Medium risk scorers typically drink socially, but an established pattern of alcohol abuse is unlikely. The 70th percentile is the threshold for problem drinkers. Problem risk scorers (70 to 89th percentile) drink excessively and may be heavy drinkers in the early stage of alcoholism.

An elevated Alcohol Scale score in the severe problem (90 to 100th percentile) range identifies serious, severe, and established drinking problems. These individuals typically have a history and pattern of alcohol abuse.

Alcohol is a significant problem in our society. The mental, physical and emotional harm associated with alcohol abuse is well documented. All too frequently, sex offenders say they were intoxicated when the sex offense occurred (rationalizations include “I was drunk” or “I was high and I don’t know what happened”). Concurrently elevated (70th percentile and higher) Alcohol Scale and Drugs Scale scores indicate polysubstance abuse, and the higher score reflects the client’s substance of choice. Elevated Alcohol Scale and Violence Scale scores are a malignant sign. Alcohol abuse can magnify a person’s violent tendencies. Similarly, alcohol abuse can serve as a release mechanism for antisocial thinking and behavior.

Alcohol Scale scores in the severe problem (90 to 100th percentile) range compound client risk even more. Elevated Alcohol and Distress Scale scores may initially represent an attempt to self-medicate, while intoxication may in severe cases exacerbate suicidal ideation. The more SAI scales that are elevated with the Alcohol Scale, the more problem prone the offender’s situation becomes. When alcohol abuse is problematic, it becomes an important part of the sex offender’s treatment program.

Drugs Scale

The Drugs Scale measures drug use and the severity of abuse. Drugs refer to marijuana, cocaine, crack, amphetamines, barbiturates, ecstasy, heroin, etc., which are illicit or illegal substances. The 19-item Drugs Scale measures one’s use or abuse of illicit or illegal drugs.

A history of drug-related involvement could result in an abstainer (drug use history, but presently not using drugs) attaining a low to medium risk score. Thus precautions have been built into the SAI to correctly identify “recovering” drug abusers. The offender’s answer to the “recovering drug abuse” question (item 216) is printed on page 5 of the SAI report for easy reference. In addition, elevated (70th percentile and higher) Drugs Scale paragraphs caution staff to clarify if the offender is a recovering drug abuser. And if recovering, how long?

Research has demonstrated that substance use (alcohol and other drugs) is associated with sexual offending. Substance (particularly drugs) use by sex offenders has consistently been shown to be associated with victimization of teenagers or children (Baltieri & de Andrade, 2008). Peugh & Belenko (2001) observed that sex offenders who abuse both alcohol and drugs victimized strangers more than offenders with no substance abuse problems or only alcohol abuse. They also found that substance-abusing sex offenders had a longer and more varied criminal history than non-users. In 1997 the Minnesota Department of Corrections reported that 56 percent of sex offenders who were on probation and had recidivated had histories of heavy substance abuse, compared to 35 percent of sex offenders who were on probation and did not recidivate. Hanson & Morton-Bourgon (2004) demonstrated that substance abuse was significantly correlated with sexual offender recidivism.

Drugs Scale scores are distributed 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 (90 to 100th percentile) risk. Low risk range scorers may have used drugs experimentally or socially, but they do not present an established pattern of drug abuse. Indeed, most low risk scorers do not use drugs. Medium risk scorers may have used drugs socially, but they do not currently present an established pattern of drug abuse. The 70th percentile is the Drugs Scale problem threshold.

A problem (70 to 89th percentile) risk Drugs Scale score is indicative of an emerging drug problem. Problem risk scorers likely still use drugs. However, to be safe, check the offender’s answer to the “recovering” question (item 216). A Drugs Scale score in the severe (90 to 100th

percentile) problem range identifies serious drug abusers. These offenders invariably have a drug abuse history along with an established pattern of abuse.

Elevated (70th percentile and higher) Drugs Scale scores with any other elevated SAI scales is problematic. This means elevated Violence Scale, Antisocial Scale, Alcohol Scale, Distress Scale, and Impulsiveness Scale scores with an elevated Drugs Scale score is a malignant sign. Drug abuse can exacerbate or magnify the affects of all other SAI scales. Concurrently elevated Drugs and Alcohol Scales are indicative of codependency and the highest score is representative of the offender's substance of choice. Drug abuse can be part of polysubstance abuse, exacerbating violence, magnifying antisocial thinking and elevating impulsiveness. Elevated Drugs and Distress Scale scores often represent an attempt to self-medicate. However, severe scores can be associated with suicidal ideation. The more scales that are elevated with the Drugs Scale score, the more serious the offender's situation. The Drugs Scale can be interpreted individually, however, with co-elevated scales it should be understood in combination with the other scales.

Distress Scale

The Distress Scale measures two symptom clusters (anxiety and depression), that when taken together represent distress. The blending of these symptom clusters is clear in the definition of dysphoria, i.e., a generalized feeling of anxiety, resentment and depression (DSM-IV, 1994).

Anxiety is an unpleasant emotional state characterized by apprehension, stress, nervousness and tension. Depression refers to a dejected emotional state that includes melancholy, dysphoria, moods and despair. Added together you have a very uncomfortable person who may be emotionally overwhelmed and in severe cases can be on the verge of giving up (e.g., withdrawal, despondent, desperate, suicide, etc.).

Emotional distress has been shown to be related to illegal activities and aggression, as well as risk-taking in sexual relationships (Cherek, Moeller, Dougherty, & Rhoades, 1997; Giotakos, Markianos, Vaidakis & Christodoulou, 2003). With regard to sexual offenders, sexual deviation can function as a form of self-medication to ward off anxious, lonely or depressed feelings (Quayle, Vaughn & Taylor, 2006). Sex offenders might displace their emotional distress about their life situation into sexually deviant acting out (LoPiccolo, 1944).

Risk range classification of Distress Scale scores are low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile) and severe problem (90 to 100th percentile). Low risk range scorers experience very little distress. Medium risk scorers experience some distress in their lives but it is not a focal issue. Elevated (70th percentile and above) Distress Scale scores identify hurting individuals that may benefit from help. Problem risk scorers are experiencing noticeable distressful events in their lives. These offenders are uncomfortable, feel apprehensive and are distressed about their life. Left untreated, this distress can become overwhelming. Severe problem range Distress Scale scorers are often on the verge of being emotionally overwhelmed and giving up (e.g., resigned, reclusive, despondent, suicidal, etc.). These individuals are usually desperate and need help.

It is not unusual for sex offenders to experience distress after engaging in sexual offenses such as child molestation or rape, and a person's mood is often related to their sexual adjustment. Distress is one of the most common reasons people initiate counseling, and it often serves as the beginning point in clinical inquiry. The magnitude of the Distress Scale score is important. Elevated (70th percentile and higher) Distress Scale scores indicate that something is wrong (e.g., the person is troubled, worried or distressed). Distress Scale scores in the severe problem (90 to 100th percentile) range indicates the offender is hurting badly, is on the verge of being emotionally overwhelmed and is desperate.

Concurrently elevated Distress Scale, Violence Scale and Antisocial Scale scores are problematic. The highest score provides insight regarding internalization (suicide) or externalization (homicide) of anger, frustration, hostility and distress. This combination of elevated scores is a malignant prognostic sign. An elevated Distress Scale score with any sex-related scale would have a direct association and interpretation in terms of dissatisfaction, unhappiness or guilt. A severe problem Distress Scale score and Antisocial Scale score would characterize dangerous people. Add in an elevated Violence Scale score and such a person would be capable of terrorist-type acts.

An elevated Distress Scale score in conjunction with an elevated Alcohol and/or Drugs Scale score could identify hurting individuals that may be self-medicating. This is a dangerous combination and is not uncommon among very disturbed individuals. The higher the scale score the more serious the risk. The Distress Scale can be interpreted individually or in combination with other SAI scale scores.

SAI SCALE CONCLUSION

This completes our discussion of the **Sexual Adjustment Inventory (SAI)**. As an adult sexual offender test the SAI has many unique features. For example, it contains 13 scales (measures): six sex-related scales and seven non-sex-related scales.

Sex-Related Scales

Sex Item Truthfulness Scale
Sexual Adjustment Scale
Child Molest Scale
Sexual Assault Scale
Incest Classification
Exhibitionism Scale

Non-Sex-Related Scales

Test Item Truthfulness Scale
Violence (Lethality) Scale
Antisocial Scale
Impulsiveness Scale
Alcohol Scale
Drugs Scale
Distress Scale

Another unique SAI feature is its inclusion of **two truthfulness scales**. In sex offender assessment it is very important to know whether or not the offender was truthful when answering questions. To make this truthfulness determination the SAI has two truthfulness scales.

The **Sexual Item Truthfulness Scale** determines if the offender was truthful when answering sex-related items (questions). And the **Test Item Truthfulness Scale** determines if the offender was truthful while answering non-sex-related items.

For additional information on the SAI visit www.bdsltd.com. The SAI is also discussed on www.online-testing.com.

To put the discussion of the **Sexual Adjustment Inventory (SAI)** in proper perspective a 5 page “example (made up) SAI report” follows. The format or arrangement of the report always stays the same, but the content (attained scores, their interpretation and score-related recommendations) varies with the sex offender’s answers and scale scores. The format insures an easy-to-read-and-understandable outline. The 5-page report format is maintained, whereas attained scale score interpretations are highly individualized. And space is provided on page 3 of the report for evaluator input and comments.

An Example SAI Report Follows

ALCOHOL SCALE SCALE SCORE:82
 This client's Alcohol Scale score is in the Problem Risk (70 to 89th percentile) range. Alcohol abuse is indicated. This individual states (item #216) that she is not a recovering alcoholic. Relapse risk is high. Admission items include: # 26, 38, 50, 109. Recommendation: consider chemical dependency (alcohol) treatment augmented with mandatory Alcoholics Anonymous meetings. This person may be in the early stages of alcoholism.

DRUGS SCALE SCALE SCORE:79
 This person's Drugs Scale score is in the Problem (70 to 89th percentile) range. Drug use or abuse is indicated. This client states (item #216) that she is not a recovering drug abuser. Admission items include: # 18, 30, 42, 54. Recommendation: outpatient (individual or group) drug counseling should be considered. Treatment intensity should match drug problem severity. Narcotics Anonymous (NA) or Cocaine Anonymous (CA) meetings might augment-but should not take the place of treatment.

INFORMATION PROVIDED BY CLIENT

Age at first conviction.....	NA	Exhibitionism Arrests.....	0
Total Number of Arrests.....	2	Incest-related Arrests.....	1
Times Sentenced to Prison.....	0	Alcohol-related Arrests.....	1
Non-Sexual Violence Arrests....	0	Drug-related Arrests.....	0
Number of Sex-Related Arrests..	1	Months employed in last yr..	12
Sexual Assault Arrests.....	0	Registered Sex Offender	F
Child Molest Arrests.....	0	In Sex Treatment.....	F

MULTIPLE CHOICE ANSWERS

THESE MULTIPLE CHOICE ANSWERS: reflect the client's opinions with all their biases. Comparison of these subjective opinions with objective SAI Scale Scores can facilitate offender understanding.

208. Drinking not a problem	217. Not suicidal or homicidal
209. Drug use not a problem	218. None of the above
210. Temper not a problem	219. Has not forced sex
211. Distress not a problem	220. No prior counseling/treatment
212. Violence not a problem	221. No time in sexual treatment
213. Sex Adjustment not a problem	222. Distress: 1 or 2 (None)
214. No need for counseling	223. Adjustment: 1 or 2 (OK)
215. Not distressed or depressed	224. Impulsiveness: 1 or 2 (OK)
216. Not a recovering abuser	225. Antisocial thoughts: 1 or 2

OBSERVATIONS/RECOMMENDATIONS: _____

 STAFF MEMBER SIGNATURE

 DATE

SIGNIFICANT ITEMS: each of these answers is a direct admission or unusual answer. These answers give insight into the offender's thinking, motivation and rationalizations. When numerous, significant items may overflow onto a 6th page.

SEXUAL ADJUSTMENT

- 110. watches pornography
- 144. Has (had) sex therapy
- 190. Required to be in sex trtmnt

CHILD MOLEST

- 17. Sexually excited by youth
- 29. Sexually aroused by child

SEXUAL ASSAULT

- 95. Has forced someone to have sex
- 204. Admits has raped someone

EXHIBITIONISM

- 45. Aroused: thinks of exposing

ALCOHOL

- 26. Drinking is a problem
- 38. Concerned about drinking
- 50. Alcoholics Anonymous
- 109. Last year drinking problem

DRUGS

- 18. Uses marijuana
- 30. Denies using drugs but does
- 42. May or may not use drugs
- 54. worries about drug use

VIOLENCE

- 20. Gets angry quickly
- 44. Often thinks about revenge
- 56. Two or more items apply

ANTISOCIAL

- 107. Two or more apply to client

DISTRESS

- 10. Often lonely and unhappy
- 34. Often desperate and hopeless
- 46. Recently very distressed

IMPULSIVENESS

- 52. Acts on spur of the moment

SAI RESPONSES

1- 50	FTTFFFTFTFT	TFFTFTTTTFT	FFFTTTTFFTT	TTFTFFTTTTF	FTTTTTTFTT
51-100	TTFTTTTFFFF	FFFFFFFFFFFF	FFFFFFFFFFFF	FFFFFFFFFFFF	FFFFFFFFFFFF
101-150	FFFFFFFFTTTT	FFFFFFFFTFFF	FFFFFFFFFFFF	FFFTFFFTTFT	FFFTFFFTFTT
151-200	FFFTFFFTTFF	FFFFFFFFFFFF	TFFTFTTTTFT	FFFFFFFFFFFF	TTFTTFTTTFT
201-225	TTFTFFF444	4444444444	41111		

Copyright © Behavior Data Systems, Ltd.
ALL RIGHTS RESERVED

**AN SAI RESEARCH STUDY INVOLVING
4,854 SEX OFFENDERS FOLLOWS**

RESEARCH INTRODUCTION

“Effectively testing sexual offenders requires sound information about problem identification and where to intervene.” Continuing, Hanson (2002) emphasized “intervention and treatment are aided by evaluation and assessment findings.” Sex offender assessment involves tests that identify sexual problems and their antecedents while enabling staff to match problem severity with treatment intensity. A multidimensional approach to screening (a test with multiple scales) offers evaluators a more complete understanding of sex offenders, their risk, problems and needs.

Although preventing sexual offenses from occurring is most desirable, everybody would agree that effective intervention and/or treatment must be provided for those who are already engaging in sexual offenses. McMahon (2000) noted “imprisonment as punishment has limitations because there is no direct attempt to alter the attitudes and behavior that led the offender to the point of abuse.” With regard to re-arrest rates, Langan and Levin (2002) found that 46 percent of incarcerated rapists were arrested for a similar crime within three years of their release. Sex offender recidivism underscores the need for effective intervention and treatment, which in turn begins with risk and needs assessment.

The **Sexual Adjustment Inventory (SAI)** identifies sexually deviate and paraphiliac behavior in adults accused or convicted of sexual offenses. The SAI incorporates thirteen (13) scales (measures).

13 SAI SCALES

6 Sex-Related Scales

Sex Item Truthfulness Scale
Sexual Adjustment Scale
Child Molest Scale
Sexual Assault Scale
Incest Classification
Exhibitionism Scale

7 Non-Sex-Related Scales

Test Item Truthfulness Scale
Violence Scale
Antisocial Scale
Impulsiveness Scale
Alcohol Scale
Drugs Scale
Distress Scale

SAI RESEARCH STUDY

Population Studied

The reliability, validity and accuracy of the Sexual Adjustment Inventory (SAI) were investigated in a sample of 4,854 adult sex offenders residing in the United States. These sex offenders were administered the SAI as part of their court, probation, treatment or community service intake procedures. The test data in this study was obtained from offender’s SAI answer sheets.

There were 4,854 sex offenders tested with the SAI. Of the 4,854 offenders tested 4,654 were male (95.9%) and 197 were female (4.1%). Offender age ranged from 18 through 49. Males average age was 36 years, whereas the average female age was 30.7

The demographic composition of participants was as follows. Race/Ethnicity: Caucasian 78.5%; Black 14.1%; Hispanic 5.4%; and other 2.0%. Education: 8th grade or less 7.6%, some High School 29.6%; High School/GED 41.4%; some college 15.3%; and college graduates 6.1%. Marital Status: Single 43.1%; Married 29.9%; Divorced 18.8%; Separated 7.6% and Widowed 0.6%.

Offenders’ criminal histories were obtained from their SAI answer sheets and verified by staff. First offenders totaled 4,286 and multiple offenders totaled 564. This sex offender population was broadly defined as Caucasian (78.5%); 21 through 50 years of age (43.4%); High School graduates or better (63.0%) and single (43.4%) or married (29.0%).

SAI Scale Reliability

Table X.1 presents Cronbach Alpha reliability coefficients for the thirteen (13) SAI scales (six sex-related and seven non-sex-related).

Sex Item Scales	Coefficient Alpha	Non-Sex Item Scales	Coefficient Alpha
Sex Item Truthfulness	.85*	Test Item Truthfulness	.88*
Sexual Adjustment	.88*	Violence (Lethality)	.87*
Child Molest	.86*	Antisocial	.89*
Sexual Assault	.88*	Distress	.88*
Exhibitionism	.89*	Impulsiveness	.86*
Incest Classification	**	Alcohol	.93*
		Drugs	.92*

*All SAI scales reliability coefficients are significant. ** Incest Classification consists of 3 items “yes” versus “no” classification which was discussed earlier in this chapter.

All SAI scales have impressive Cronbach Alpha reliability coefficients, which are well above the professionally accepted standard of .75 (Nunnally, 1978; Roberts and Rock, 2002).

SAI Validity

Many validity studies have been conducted on the Sexual Adjustment Inventory (SAI). Early research used criterion measures and the SAI was validated with other tests, polygraph exams, and the Minnesota Multiphasic Personality Inventory (MMPI). Much of this research is summarized in the document “SAI: Inventory of Scientific Findings” which is available for review on two websites: www.bdsltd.com, and www.online-testing.com.

Many sex offender screening agencies, supervisory settings, treatment facilities and mental health professionals are reluctant to administer two tests for validation purposes unless they are compensated. As an alternative, the present study compared “first offender” (one sex-related arrest) and “multiple offenders” (two or more sex-related arrests). Discriminant validity results are presented in Table X.2.

SAI Scales	FIRST OFFENDERS			MULTIPLE OFFENDERS			t-Value
	Mean	SD	Max	Mean	SD	Max	
Test Item Truthfulness	7.7	5.37	21	6.87	5.39	31	3.22*
Sex Item Truthfulness	8.60	4.62	19	7.32	4.72	19	5.34
Sexual Adjustment	13.62	11.09	51	19.65	12.55	52	9.39*
Child Molest	8.79	8.17	37	10.73	9.30	34	4.07*
Sexual Assault	5.29	5.32	33	6.61	6.15	34	4.19*
Exhibitionism	1.29	2.47	18	3.41	4.99	18	8.59*
Alcohol Scale [^]	6.62	8.99	38	21.03	12.44	38	21.95*
Drugs Scale [^]	5.65	7.67	34	16.86	9.96	33	13.75*
Violence Scale	3.90	5.33	33	4.55	6.06	33	2.08***
Antisocial Scale	1.97	2.80	18	2.36	3.10	18	2.49**
Distress Scale	6.22	7.20	29	7.45	7.74	29	3.06*
Impulsiveness Scale	3.12	2.71	17	3.49	3.01	16	2.42**

NOTE: There were 4 cases with missing information. *Significant at p<.001, **Significant at p<.01, ***Significant at p<.05; [^]Offender status based on alcohol-related and drug-related arrests.

In the “first offender” versus “multiple offender” comparisons, multiple offenders scored significantly higher than first offenders on all scales except the two truthfulness scales. Higher SAI scale scores are associated with more severe problems.

Contrary to expectations, first offenders scored significantly higher than multiple offenders on the Test Item Truthfulness Scale, which consists of non-sex-related questions. This suggests that first-time sex offenders were more focused upon or concerned about sex-related questions. Consequently, they may have inadvertently not been as alert, cautious, vigilant or on their guard when answering non-sex-related questions.

With regard to the Sex Item Truthfulness Scale, there was no significant difference between first offender and multiple offender scores. It appears that first offenders and multiple offenders were equally guarded, defensive and in denial regarding sex-related questions. More positively stated, first and multiple offenders were equally truthful when answering sex-related questions on the Sex Item Truthfulness Scale. This assertion is more plausible when one considers that both first and multiple offenders are “sex offenders.” And most, if not all, sex offenders are familiar with the serious consequences associated with being labeled a sex offender.

The scale scores presented in Table X.2 are derived from test item (raw) scores. These raw scores do not include court history, which permits first offender and multiple offender comparisons. Table X.2 clearly shows that multiple offenders scored significantly higher than first offenders on the following scales: Sexual Adjustment Scale, Child Molest Scale, Sexual Assault Scale, Exhibitionism Scale, Alcohol Scale, Drugs Scale, Distress Scale, Impulsiveness Scale, Antisocial Scale and the Violence Scale.

These discriminant validity results support the validity of SAI scale. Multiple offenders were believed to have more severe problems than first offenders and this was confirmed.

Court History and SAI Scale Scores

Correlation coefficients were calculated between court history items like “Number of sex-related arrests” and SAI sex-related scales and these coefficients are presented in Table X.3 below. **Number of sex-related arrests and sex-related convictions correlate significantly with all SAI sex-related scales.** These correlations demonstrate a positive relationship between number of sex-related arrests and convictions with all SAI sex-related scale scores. As the number of sex-related arrests increases, SAI sex-related scale scores increase. However, some first time sex offenders do score high on SAI sex-related scales and these first offenders would be “missed” if only court records were used to determine sex offender risk. In other words, court records alone are not sufficient to accurately predict sex offender risk. SAI scale scores enhance accurate sex offender prediction.

Court History	Sex Item Truthfulness	Sexual Adjustment	Child Molest	Sexual Assault	Exhibitionism
# Sex-related Arrests	.074*	.250*	.104*	.080*	.099*
# Sex-Related Convictions	.064*	.298*	.161*	.105*	.068*
Age at First Conviction	.005	.129*	.157*	-.004	-.013
Total # Misdemeanors	.024	.010	-.025	.057*	.025
Total # Felonies	.061*	.152*	.115*	.118*	-.014
Times on Probation	.011	.050*	-.021	.029	-.023
Total # of Arrests	.025	.001	-.024	.068*	-.003

* Significant at $p < .001$.

Sex-related arrests and sex-related convictions are correlated highest with the Sexual Adjustment Scale. In a separate correlation analysis of non-sex-related scale and court history, discriminant validity of the Alcohol Scale and Drugs Scale was demonstrated. For example, number of alcohol-related arrests correlated highest ($r=.336$) with Alcohol Scale scores. Similarly, number of drug-related arrests correlated highest ($r=.262$) with Drugs Scale scores. All SAI criminal history variables correlated significantly with the SAI Violence Scale. These results support discriminant validity of the Sexual Adjustment, Alcohol, Drugs, and Violence Scales. Nearly 12 percent of the 4,854 offenders tested have previous sex-related arrests. The preceding table shows that number of sex-related arrests correlates significantly with the following SAI scales: Sex Item Truthfulness Scale, Sexual Adjustment Scale, Child Molest Scale, Sexual Assault Scale, and the Exhibitionism Scale.

Predictive Validity

SAI Scale validity was also studied in terms of offender admissions. SAI scale problem identification involves elevated scores (scale scores at or above the 70th percentile). Offender problem identification was defined in terms of their problem admission (direct admission, problem arrests or treatment history). The percentage of offenders having both an “elevated scale score” and “problem admission” was calculated for each SAI scale, other than the Truthfulness Scales. These predictive validity and accuracy results for the correct identification of problems were as follows.

The Sexual Adjustment Scale correctly identified 99.6 percent or 251 of the 252 sex offenders who admitted they had serious sexual adjustment problems. The Child Molest Scale accurately identified 97.6 percent or 856 of the 877 offenders who had been arrested for child molestation. The Sexual Assault Scale flawlessly identified 100 percent of the 1,059 offenders that had been arrested for sexual assault or rape. The Exhibitionism Scale correctly identified all of the 203 offenders that admitted being exhibitionists. These results support the validity of the SAI sex-related scales.

The predictive validity and accuracy results of the SAI’s non-sex-related scales were as follows. The Violence Scale correctly identified 97.0 percent of the 688 participants who reported being arrested for assault, domestic violence or a violent crime. The Antisocial Scale identified 99.5 percent of the 574 offenders that admitted to antisocial thinking and behavior. The Impulsiveness Scale appropriately identified 98.4 percent of the 711 offenders who admitted to impulsiveness and impulsive behavior. The Distress Scale identified 96.7 of the 303 offenders who stated they were in counseling or treatment for anxiety or depression. The Alcohol Scale errorlessly identified all of the 634 offenders who reported having been in treatment for their drinking problem. The Drugs Scale accurately identified 98.0 percent of the 395 offenders that had been treated for drug problems. These results support the validity of the SAI non-sex-related scales.

Gender Differences

Gender differences between male and female scale scores are presented in Table X.4. These results demonstrated that male sex offenders scored significantly higher than female sex offenders on many of the SAI sex-related scales.

SAI Scales	MALES (n=4,654)			FEMALES (n=197)			t-Value
	Mean	SD	Max	Mean	SD	Max	
Test Item Truthfulness	7.66	5.38	21	6.82	5.10	21	t=1.79
Sex Item Truthfulness	8.44	4.65	19	10.13	5.15	19	t=3.69*
Sexual Adjustment	14.35	44.45	52	10.10	11.05	47	t=4.26*
Child Molest	9.03	8.34	34	7.66	7.79	32	t=.2000***
Sexual Assault	5.45	5.44	34	5.04	5.17	26	t=0.85
Exhibitionism	1.55	2.97	19	1.10	2.18	13	t=2.28***
Alcohol Scale	6.38	9.92	38	5.10	8.36	35	t=1.75
Drugs Scale	4.01	7.22	34	4.62	8.00	32	t=0.88
Violence Scale	3.98	5.42	33	3.85	5.28	27	t=0.28
Antisocial Scale	2.02	2.84	19	1.90	2.77	15	t=0.48
Distress Scale	6.37	7.28	29	9.63	8.61	27	t=4.36*
Impulsiveness Scale	3.18	2.76	18	3.16	2.78	15	t=0.08

NOTE: There were 3 cases with missing information. *Significant at $p < .001$, **Significant at $p < .01$, ***Significant at $p < .05$.

With regard to Table X.4, male sex offenders scored higher than female sex offenders on the Sexual Assault Scale, although this difference was not statistically significant. Female sex offenders scored significantly higher than males' on the Sex Item Truthfulness Scale and the Distress Scale. Differences between male and female sex offenders on the Test Item Truthfulness Scale, Violence Scale, Antisocial Scale, Alcohol Scale, Drugs Scale and Impulsiveness Scale were not significantly different. On all SAI scales, both sex-related and non-sex-related, the maximum scale scores for females were either the same as the males maximum scale scores or they were lower.

These gender comparisons were tempered by the fact that there were many more male sex offenders (n=4,654) than female sex offenders (n=197) in this study. With the inclusion of more female sex offenders, these results might shift or change. However, the present analysis indicates that female sex offenders tend to minimize their sex-related problems more than male sex offenders. These male versus female sex offender comparisons point out that sex offender assessment procedures and tests should incorporate separate male and female scoring procedures.

SAI Scale Accuracy

Earlier in this chapter the SAI's four risk ranges were discussed. These risk ranges are: low risk (zero to 39th percentile, includes 39 percent of offender population), medium risk (40 to 69th percentile, includes 30 percent of offenders), problem risk (70 to 89th percentile, includes 20 percent of offenders) and severe problem risk (90 to 100th percentile, includes 11 percent of offenders).

These four risk ranges (low, medium, problem and severe problem) and the predicted percentages for each risk range category are set forth in bold print in Table X.5 (on the top row in bold type) with the risk range name (low, medium, problem, severe). For example:

Scale Risk Range	Low Risk	Medium Risk	Problem Risk	Severe Problem
Percentile:	(39%)	(30%)	(20%)	(11%)

With reference to Table X.5, the "attained" percentile for each risk range is set forth as a percentile to the right of the scale's name, and the difference between the "attained" percentage and the "predicted" percentage is shown in bold parenthesis. For clarification, refer to Table

X.5. Reading from left to right “Test Item Truthfulness.” It was predicted for the “low risk” range that 39% of sex offenders’ scores would be in the low risk range. However, 38.3 percent of offenders scored in the low risk range and the difference is shown in bold parenthesis **(0.7)**. Each scale’s risk ranges are presented in this manner. Continuing, for the Test Item Truthfulness Scale 30 percent of offenders were predicted to score in the “medium” risk range. Actually, 31.6 percent of the offenders scored in this range. The difference between predicted and attained was 1.6 percent, which is reported as **(1.6)**. The format for the “problem” risk and “severe” problem risk ranges are the same. SAI scale accuracy is summarized in the following graph and table.

Attained SAI Scale Scores Risk Range Graph

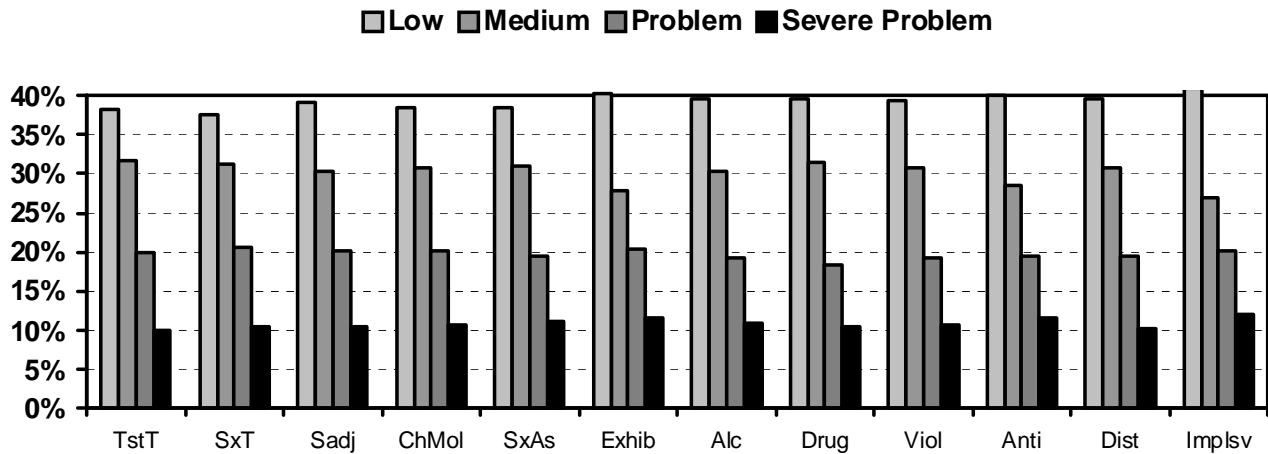


Table X.5, SAI Scales Accuracy: Predicted versus Attained (n=4,854, 2008)

Scale	Low Risk (39%)	Medium Risk (30%)	Problem Risk (20%)	Severe Problem (11%)
Test Item Truthfulness	38.3 (0.7)	31.6 (1.6)	20.0 (0.0)	10.1 (0.9)
Sex Item Truthfulness	37.5 (1.5)	31.3 (1.3)	20.7 (0.7)	10.5 (0.5)
Sexual Adjustment	39.0 (0.0)	30.3 (0.3)	20.3 (0.3)	10.4 (0.6)
Child Molest Scale	38.4 (0.6)	30.7 (0.7)	20.3 (0.3)	10.6 (0.4)
Sexual Assault Scale	38.4 (0.6)	31.0 (1.0)	19.4 (0.6)	11.2 (0.2)
Exhibitionism Scale	40.2 (1.2)	27.9 (2.1)	20.4 (0.4)	11.5 (0.5)
Alcohol Scale	39.5 (0.5)	30.3 (0.3)	19.3 (0.7)	10.9 (0.1)
Drugs Scale	39.6 (0.6)	31.5 (1.5)	18.4 (1.6)	10.5 (0.5)
Violence Scale	39.3 (0.3)	30.7 (0.7)	19.3 (0.7)	10.7 (0.3)
Antisocial Scale	40.1 (1.1)	28.6 (1.4)	19.6 (0.4)	11.7 (0.7)
Distress Scale	39.6 (0.6)	30.7 (0.7)	19.4 (0.6)	10.3 (0.7)
Impulsiveness Scale	40.8 (1.8)	27.0 (3.0)	20.2 (0.2)	12.0 (1.2)

The 3 item Incest Classification is not included in this table because of its “yes” versus “no” methodology.

The four risk ranges (low, medium, problem and severe) and the predicted percentages for each risk range category are shown in bold print in the top row of the table. **All offender obtained risk range percentages were within 3.0 percentage points of the predicted percentages. Accuracy of the SAI is shown by the small differences between obtained risk**

range percentages and predicted percentages. When the 12 SAI scales (Incest Classification not included) are compared (predicted versus attained) with the 4 risk ranges (12x4=48), there are 48 comparison points. One comparison (Impulsiveness Scales medium risk range) differed from the predicted percentage by 3 percentage points. In other words, out of 48 comparisons only one attained percentile was 3 points different from the predicted percentile. Most sex offender evaluators would consider this accurate assessment. Offenders' scores can conservatively be considered 97% accurate. The SAI is an accurate sex offender assessment test.

Conclusion

In summary, the **Sexual Adjustment Inventory (SAI)** is a 225-item self-report adult sex offender assessment instrument or test that takes 45 minutes to an hour to complete. From test data computer input, SAIs are computer scored and reports are printed within 3 minutes. The SAI incorporates 12 scales (measures) and the Incest Classification. The SAI's six sex-related scales identify sexual deviance and paraphilias in people accused or convicted of sex offenses. And the seven non-sex-related scales identify co-determinants of sexual problems, which are also called criminogenic needs.

This study incorporated 4,854 sex offenders who were administered the SAI as part of their court, probation, supervision, treatment or community service intake procedure. The reliability, validity and accuracy of the SAI were investigated and found to meet and even exceed professional standards. The professionally accepted reliability standard is .75 (Roberts and Rock, 2002). All Cronbach Alpha reliability coefficients for SAI scales were between .85 and .93. This empirically demonstrates that SAI scales have impressive reliability coefficients.

"Multiple offenders" SAI scale scores were compared to "first offenders" SAI scale scores. It was hypothesized that multiple offenders had more severe problems than first offenders; consequently their scale scores would be higher. This was demonstrated with all SAI scale scores except for the two truthfulness scales. "Sex Item Truthfulness Scale" scores were essentially alike for first and multiple offenders. In other words, first and multiple offenders were equally guarded and defensive when answering sex-related questions. In contrast, first offender's scored significantly higher than multiple offenders on the "Test Item Truthfulness Scale," which consists of non-sex-related questions. This suggests first offenders may have been hypervigilant regarding sex-related questions and inadvertently careless or not on their guard with non-sex-related questions.

With the exception of the truthfulness scales, all multiple offender SAI scale scores were significantly higher than first offenders. Multiple offenders do indeed have more severe problems than first offenders. Multiple offenders scored significantly higher than first offenders on the Sexual Adjustment Scale, Child Molest Scale, Sexual Assault Scale, Exhibitionism Scale, Violence Scale, Antisocial Scale, Distress Scale, Impulsiveness Scale, Alcohol Scale and Drugs Scale.

Correlation coefficients were calculated between court history items like "Number of sex-related arrests" and SAI sex-related and non-sex-related scales. Number of sex-related arrests and number of convictions correlated significantly with all sex-related scales. Moreover, discriminant validity was demonstrated in court history and non-sex-related scale correlations. For example, number of alcohol-related arrests correlated highest with the Alcohol Scale. Similarly discriminant validity was shown with the Drugs Scale and the Violence Scale. These results support SAI scale validity. Number of sex-related arrests correlates highly significantly with the following scales: Sex Item Truthfulness, Sexual Adjustment, Child Molest, Sexual Assault, and the Exhibitionism Scale. As the number of sex-related arrests increase, so do SAI sex-related scale scores. However, court records alone do not appear sufficient for accurately

predicting sex offender risk. The inclusion of SAI scale scores enhances accurate sex offender assessment and prediction.

SAI scales' predictive validity was studied in terms of offender admissions. Offender problem admission (admission, arrest records or treatment history) was matched to elevated (70th percentile and higher) scale scores. The percentage of offenders having both an "elevated scale score" and "problem admission" were calculated for each SAI scale. The Truthfulness Scales were not included in this analysis. For the SAI sex-related and non-sex-related scales predictive validity percentages varied between 96.7 percent and 100 percent. These results further support the validity of the SAI scales (both sex-related and non-sex-related).

Gender differences between male and female sex offenders were studied. Male sex offenders scored significantly higher than female sex offenders on all SAI scales except the Sex Item Truthfulness Scale and the Distress Scale. These gender comparisons were tempered by the fact that there were more male sex offenders (4,654) than female sex offenders (197). However these findings indicate that sex offender tests should incorporate separate male and female scoring procedures.

SAI scale accuracy was evaluated in terms of the closeness of expected (predicted) scale risk range percentages and actual or attained risk range percentages. There are four risk ranges: low, medium, problem and severe. All sex offenders' obtained risk range percentages were within 3.0 percentage points of predicted risk range percentages. These results support the validity and accuracy of the SAI and its scales.

In a related SAI validation study, "convicted" sex offenders Sexual Adjustment Scale scores were compared to "normals" (adults never charged with a sex offense) scores. The purpose of this study was to determine if the SAI differentiated between normals and sex offenders. There were 227 participants (91 normals and 136 sex offenders). Normals and sex offenders were male, between 18 and 35 years of age, high school graduates and at least 60 percent Caucasian, with the remaining 40 percent composed of Blacks and Hispanics. Both groups were administered the SAI Sexual Adjustment Scale. Mean scale scores are presented in Table X.6.

Group	N	Mean	S.D.	Minimum	Maximum
Normal	91	2.42	2.87	0	14
Offender	136	8.57	5.56	0	23

Normal means never charged with a sex offender offense. Offender refers to convicted sex offenders.

The t-test comparison of the difference between the means demonstrated that sex offender scores were significantly higher ($t=9.6$, $p<.001$) than normals' scores. A t-test comparing these distributions indicated that the variances of the two groups were different. The scores were transformed by taking the square root of the scores. The t-test comparison of transformed scores showed the difference between means was again highly significant ($t=9.7$, $p<.001$). These t-test statistics further support the validity of the Sexual Adjustment Scale.

In addition to additional reliability, validity and accuracy studies, future analysis of the SAI's recidivism prediction ability will be explored. Goals will include accurate sex offender assessment, identification of effective intervention and treatment techniques, and help in identifying effective recidivism measures to reduce the danger recidivism poses to our society.

References

- Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses: How are they linked? *J. Amer. Coll. Hlth* 39 (4): 165-169.
- Abel, G. G., & Rouleau, J. L. (1990). The nature and extent of sexual assault. In W. L. Marshall, D. R. Laws & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender*. New York: Plenum.
- Alexander, M.A. (1999). Sexual offender treatment efficacy revisited. *Sexual Abuse: A Journal of Research and Treatment*, 11(2), 101-116.
- Allan, M., Grace, R. C., Rutherford, B., & Hudson, S. M. (2007). Psychometric assessment of dynamic risk factors for child molesters. *Sexual Abuse : A Journal of Research and Treatment*, 19(4), 347-367.
- Andrews, D. A., & Bonta, J. (1998). *The psychology of criminal conduct* (2nd ed.). Cincinnati, OH: Anderson.
- Andrews, D.A., & Bonta, J.L. (1995). *LSI-R: The Level of Service Inventory-Revised*. Toronto, Canada: Multi-Health Systems.
- Baltieri, D.A. & de Andrade, A.G. (2008). Comparing serial and nonserial sexual offenders: Alcohol and street drug consumption, impulsiveness, and history of sexual abuse. *Rev Bras Psiquiatr* 30 (1), 25-31.
- Barbaree, H.E. & Marshall, W.L. (1988). Deviant sexual arousal, offense history, and demographic variables as predictions of reoffense among child molesters. *Behavioral Sciences & the Law*, 6, 267-280.
- Beckett, R.C. (1994). Cognitive-behavioural treatment of sex offenders. In T. Morrison, M. Erooga, & R.C. Beckett (Eds.), *Sexual offending against children* (pp. 80-101). London: Routledge.
- Beech, A. R. (1998) A psychometric typology of child abusers. *International Journal of Offender Therapy and Comparative Criminology*. 42, 319-339.
- Beech, A., Friendship, C., Erickson, M., & Hanson, R.K. (2002). The relationship between static and dynamic risk factors and reconviction in a sample of U.K. child abusers. *Sexual Abuse: A Journal of Research and Treatment*, 14, 155-167.
- Beech, A., Oliver, C., Fisher, D., & Beckett, R.C. (2006). *STEP 4: An evaluation of the U.K. Prison Sex Offender Treatment Programme as used for the treatment of rapists and sexual murderers*. Birmingham, UK: University of Birmingham. Available at www.hmprisonservice.gov.uk/assets/documents/100013DBStep_4_SOTP_report_2005.pdf
- Beech, A.R., Ward, T., & Fisher, D. (2006). The identification of sexual and violent motivations in men who assault women: Implication for treatment. *Journal of Interpersonal Violence*, 21, 1635-1653.

- Boer, D.P. (2008) Ethical and practical concerns regarding the current status of sex offender risk assessment. *Sexual Offender Treatment*, 3(1), 1-6.
- Bonta, J. (2002). Offender risk assessment: Guidelines for selection and use. *Criminal Justice and Behavior*, 29(4), 355-379.
- Cherek, D.R., Moeller, F.G., Dougherty, D.M. & Rhoades, H. (1997). Studies of violent and nonviolent male paroles: II. Laboratory and psychometric measurements of impulsivity. *Biological Psychiatry*, 41, 523-529.
- Corsini, R. (1999). *The Dictionary of Psychology*. Brunner/Mazel.
- Craig, L.A., Browne, K.D., & Stringer, I. (2003). Treatment and sexual offence recidivism. *Trauma, Violence, & Abuse*, 4(1), 70-89.
- Daly, J. & Pelowski, S. (2000). Predictors of dropout among men who batter: A review of studies with implications for research and practice. *Violence and Victims*, 15, 137-160.
- Davis, G., and Leitenberg, H. (1987). Adolescent Sex Offenders. *Psychological Bulletin* 101:417-427.
- Diagnostic and Statistical Manual IV (DSM-IV), American Psychiatric Association, 1994.
- Doren, D.M. (2002). *Evaluating sex offenders: A manual for civil commitments and beyond*. Thousand Oaks, CA: Sage.
- Doren, D.M. (2004). Stability of the interpretive risk percentages for the RRASOR and Static-99. *Sexual Abuse: A Journal of Research and Treatment*, 16, 25-36.
- Dowden, C. & Brown, S.L. (1998) Case need domain: Substance abuse. *Forum on Corrections Research*, 10, 32-34.
- Dunsieth, Jr., N.W., Nelson, E.B., Brusman-Lovins, L.A., Holcomb, J.L., Beckman, D., Welge, J.A., Roby, D., Taylor, Jr., P., Soutullo, C.A., McElroy, S.L. Psychiatric and legal features of 113 men convicted of sexual offenses. *J Clin Psychiatry*. 2004;65(3):293-300.
- Dutton, D. G., & Starzomski, A. J. (1994). Psychological differences between court-referred and self-referred wife assaulters. *Criminal Justice and Behavior*, 21, 203-222.
- Finkelhor, D. (1984). *Child Sexual Abuse: New theory and research*. New York: Free Press.
- Firestone, P., Bradford, J., Greenberg, D., & Serran, G. (2000). The relationship of deviant sexual arousal and psychopathy in incest offenders, extrafamilial child molesters, and rapists. *Journal of the American Academy of Psychiatry and the Law*, 33, 223-232.
- Firestone, P., Kingston, D., Wexler, A., & Bradford, J.M. (2006). Long-term follow-up of exhibitionists: Psychological, phallometric, and offense characteristics. *Journal of American Academy of Psychiatry and Law*, 34, 349-359.
- Fisher, D. Beech, A., & Browne, K. (1999). Comparison of sex offenders to nonoffenders on selected psychological measures. *International Journal of Offender Therapy and*

- Comparative Criminology, 43, 473-491.
- Geer, T. M., Becker, J. V., Gray, S. R. & Krauss, D. (2001). Predictors of treatment completion in a correctional sex offender treatment program. *Journal of Offender Therapy and Comparative Criminology*, 45, 302-313.
- Gendeau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, 34 (4) 575-608.
- Gentry, A.L., Dulmus, C. N., & Theriot, M.T. (2005). Comparing sex offender risk classification using the Staic-99 and LSI-R Assessment Instruments. *Research on Social Work Practice*, 15(6), 557-563.
- Giotakos, O., Markianos, M., Vaidakis, N., & Christodoulou, G.N. (2003). Aggression, impulsivity, plasma sex hormones, and biogenic amine turnover in a forensic population of rapists. *Journal of Sex and Marital Therapy*, 29, 215-225.
- Girard, L. & Wormith, J.S. (2004). The predictive validity of the Level of Service Inventory-Ontario Revision on general and violent recidivism among various offender groups. *Criminal Justice and Behavior*, 31, 150-181.
- Glancy, G., & Regehr, C., (2002). A step by step guide to assessing sexual predators, in *Social Worker's Desk Reference*, pp 702–8.
- Grann, M. & Wedin, I. (2002). Risk factors for recidivism among spousal assault and spousal homicide offenders. *Psychology, Crime, and Law*, 8, 5-23.
- Grove, W.M. & Meehl, P.E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law*, 2, 293-323.
- Grubin, D. & Wingate, S. (1996). Sexual offense recidivism: Prediction versus understanding. *Criminal Behavior and Mental Health*, 6, 349-359.
- Hall, G.C.N. (1995). Sexual offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology*, 63, 802-809.
- Hanson R.K. & Bussière, M.T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66(2), 348-364.
- Hanson, K.R., Gordon, A., Harris, A.J.R., Marques, J.K., Murphy, W., Quinsey, V.L. and Seto, M.C. (2002). First Report of the Collaborative Outcome Data Project on the Effectiveness of Psychological Treatment for Sex Offenders. *Sexual Abuse: A Journal of Research and Treatment*, 14, 169-194.
- Hanson, R. (1997). The development of a brief actuarial risk scale for sexual offense recidivism. (User Report No. 1997-04). Ottawa: Solicitor General of Canada. Retrieved December 2, 2008, from http://ww2.ps-sp.gc.ca/publications/corrections/199704_e.pdf.
- Hanson, R. K. (2005). Twenty years of progress in violence risk assessment. *Journal of*

- Interpersonal Violence, 20 (2), 212-217.
- Hanson, R. K., & Harris, A. J. R. (2000b). Where should we intervene? Dynamic predictors of sex offense recidivism. *Criminal Justice and Behavior*, 27, 6-35.
- Hanson, R.K. & Morton-Bourgon, K. (2004). Predictors of sexual recidivism: An updated meta-analysis (User report No. 2004-02). Ottawa, ON: Public Safety and Emergency Preparedness Canada.
- Hanson, R.K. (2002). Introduction to the special section on dynamic risk assessment with sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 14, 99-101.
- Hanson, R.K., & Thornton, D. (2000). Improving risk assessments for sexual offenders: A comparison of three actuarial scales. *Law and Human Behavior*, 24, 119-136.
- Hanson, R.K., & Thornton, D. (2003). Notes on the development of Static-2002 (User Report 2003-01). Ottawa, Ontario, Canada: Department of the Solicitor General of Canada.
- Hanson, R.K., Morton, K.E., & Harris, A.J.R. (2003). Sexual offender recidivism risk: What we know and what we need to know. In R. A. Prentky, E. S. Janus, & M. C. Seto (Eds.), *Sexually coercive behavior: Understanding and management* (Vol. 989, pp. 154-166). New York: Annals of the New York Academy of Sciences.
- Harrell, A. & Smith, B.A. (1996). Effects of restraining orders on domestic violence victims. In E.S. Buzawa & C.G. Buzawa (Eds.), *Do arrests and restraining orders work?* (pp. 214-242). Thousand Oaks, CA: Sage.
- Harris, A., & Hanson, R. K. Sex offender recidivism: A simple question. (User Report 2004-03). Ottawa: Public Safety Canada. Retrieved December 11, 2008, from <http://www.static99.org/pdfdocs/harrisandhanson2004simpleq.pdf>.
- Harrison, L. & Backenheimer, M. (1998). Evolving insights into the drug-crime nexus. *Substance Use and Misuse*, 33(9), 1763-1777.
- Hartley, CC. (2001). Incest offenders' perceptions of their motives to sexually offend within their past and current life context. *Journal of Interpersonal Violence*, 16, 459-475.
- Henning, K. & Holdford, R. (2006). Minimization, denial, and victim blaming by batterers: How much does the truth matter? *Criminal Justice and Behavior*, 33, 110-130.
- Hilton, N. Z., Harris, G. T., Rice, M.E. Houghton, R.E. & Eke, M.E. (2008). An in-depth actuarial assessment for wife assault recidivism: The Domestic Violence Risk Appraisal Guide. *Law and Human Behavior*, 32, 150-163.
- John Howard Society of Alberta. Offender risk assessment. Retrieved November 25, 2008, from <http://www.johnhoward.ab.ca/PUB/PDF/C21.pdf>.
- Kemshall, H. (2001). Risk assessment and management of known sexual and violent offenders: A review of current issues. *Police Research Series, Paper 140*. London: Home Office.
- Knight, R.A. & Prentky, R.A. (1990). Classifying sexual offenders: The development and

- corroboration of taxonomic models. In W.L. Marshall, D.R. Laws, & H.E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 23-53). New York: Plenum.
- Knight, R.A., & Sims-Knight, J.E. (2004). Testing an etiological model for male juvenile sexual offending against females. *Journal of Child Sexual Abuse*, 13, 33-55.
- Kravitz, H., Fawcett, J., McGuire, M., Kravitz, G., & Whitney, M. (1999). Treatment attrition among alcohol-dependent men: Is it related to Novelty Seeking Personality Traits? *Journal of Clinical Psychopharmacology*, 19, 51-56.
- Kropp, P.R., Hart, S.D., Webster, C.D., & Eaves, D. (1995). *Manual for the Spousal Assault Risk Assessment Guide* (2nd ed.). Vancouver, Canada: B.C. Institute on Family Violence.
- Langan, P., and D. Levin. 2002. "Recidivism of Prisoners Released in 1994." Bureau of Justice Statistics Special Report. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Långström, N. (2004). Accuracy of actuarial procedures for assessment of sexual offender recidivism risk may vary across ethnicity. *Sexual Abuse: A Journal of Research and Treatment*, 16, 107-120.
- Longo, R.E. & Groth, A.N. (1983). Juvenile sexual offenses in the histories of adult rapists and child molesters. *International Journal of Offender Therapy and Comparative Criminology*, 27 (2), pp.150-155
- Looman, J., Dickie, I., & Abracen, J. (2005). Responsivity issue in the treatment of sexual offenders. *Trauma, Violence & Abuse*, 6 (4), 330-353.
- LoPiccolo, J. (1944). Acceptance and change: the central dialectic in psychotherapy. In S.C. Hayes, N.S. Jacobson, V.N. Follete & M.J. Dougher (Eds.). *Acceptance and change: Content and context in psychotherapy*. Reno, NV: Context Press.
- Lowenkamp, C.T., Latessa, E.J., & Holsinger, A.M. (2004). Empirical evidence on the importance of training and experience in using the Level of Service Inventory-Revised. *Topics in Community Corrections*, 49-53.
- Malamuth, N.M. & Brown, L.M. (1994). Sexually aggressive men's perceptions of women's communications: Testing three explanations. *Journal of Personality and Social Psychology*, 67, 699-712.
- Marshall, W.L. & Pithers, W.D. (1994). A reconsideration of treatment outcome with sex offenders. *Criminal Justice and Behavior*, 21, 10-27.
- Marshall, W.L., & Eccles, A. (1991). Issues in clinical practice with sex offenders. *Journal of Interpersonal Violence*, 6, 68-93.
- McMahon, P.M. (2000). The public health approach to the prevention of sexual violence. *Sexual Abuse: A Journal of Research and Treatment*, 12, 27-36.

- Meehl, P.E. (1954). *Clinical Versus Statistical Prediction*. Minneapolis: University of Minnesota Press.
- Menzies, R., Webster, C. D., McMain, S., Staley, S., & Scaglione, R. (1994). The dimensions of dangerousness revisited: Assessing forensic predictions about violence. *Law and Human Behavior*, 18(1), 1-28.
- Mills, J.F., Anderson, D., & Kroner, D.G. (2004). The antisocial attitudes and associates of sex offenders. *Criminal Behaviour and Mental Health*, 14, 134-145.
- Moeller, F.G., Dougherty, D.M., Barratt, E.S., Schmitz, J.M., Swann, A.C., & Grabowski, J. (2001). The impact of impulsivity on cocaine use and retention in treatment. *Journal of Substance Abuse Treatment*, 21, 193-198.
- Mossman, D. (2006) Another look at interpreting risk categories. *Sexual Abuse: A Journal of Research and Treatment*, 18(1), 41-63.
- Motiuk, L. (1998). Using Dynamic Factors to Better Predict Post-Release Outcome. *Forum on Corrections Research*, 10, 3.
- Murphy, C. M., & Baxter, V. A. (1997). Motivating batterers to change in the treatment context. *Journal of Interpersonal Violence*, 12, 607-619.
- Myhill, A. & Allen, J. (2002). Rape and sexual assault of women: Findings from the British Crime Survey. Home Office Research Development and Statistics Directorate Research Findings, 159. Available at www.ndad.nationalarchives.gov.uk/CRDA/2/DD/1/2002/1/
- Nicholaichuk, T., Gordon, A., Gu, D., & Wong, S. (2000). Outcome of an institutional sexual offender treatment program: A comparison between treated and matched untreated offenders. *Sexual Abuse: A Journal of Research and Treatment*, 12(2), 139-153.
- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Olver, M.E., Wong, S.C., Nicholaichuk, T., & Gordon, A. (2007). The validity and reliability of the Violence Risk Scale- Sexual Offender Version: Assessing sex offender risk and evaluating therapeutic change. *Psychological Assessment*, 19(3), 318-329.
- Pelissier, B., Camp, S., & Motivans, M. (2003). Staying in treatment: How much difference is there from prison to prison? *Psychology of Addictive Behaviors*, 17, 134-141.
- Pernanen, K. 1991. *Alcohol in Human Violence*. New York: Guilford.
- Peugh, J. & Belenko, S. (2001). Examining the substance use patterns and treatment needs of incarcerated sex offenders. *Sex Abuse: A Journal of Research and Treatment*, 13, 179-195.
- Prochaska, J.O., DiClemente, C.C., & Norcross, J.C. (1992). In search of how people change: Applications to the addictive behaviors. *American Psychologist*, 47, 1102-1114.
- Quayle, E., Vaughn, M., & Taylor, M. (2006). Sex offenders, internet child abuse images, and emotional avoidance: The importance of values. *Aggression and Violent Behavior*, 11, 1-

11.

- Quinsey, L., Harris, G.T., Rice, M.E., and Cormier, C.A. (1998). *Violent Offenders: Appraising and Managing the Risk*. Washington, D.C.: American Psychological Association.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C.A. (1998). *Violent offenders: Appraising and managing risk*. Washington DC: American Psychological Association.
- Roberts, A. & Rock, M. (2002) An overview of forensic social work and risk assessments with the dually diagnosed. In Roberts, A.R. & G. Greene (Eds.) *Social Workers' Desk Reference*. New York: Oxford University Press.
- Roehl, J. & Guertin, K. (1998). Current use of dangerousness assessments in sentencing domestic violence offenders: Final report. State Justice Institute.
- Scalora, M.J. & Garbin, C. (2003). A multivariate analysis of sex offender recidivism. *International Journal of Offender Therapy and Comparative Criminology*, 47(3), 309-323.
- Scott, K.L. & Wolfe, D.A. (2003). Readiness to change as a predictor of outcome in batterer treatment. *Journal of Family Violence*, 16, 131-149.
- Seidman, B. T., Marshall, W. L., Hudson, S. M., & Robertson, P. J. (1994). An examination of intimacy and loneliness in sex offenders. *Journal of Interpersonal Violence*, 9, 518-534
- Seto, M.C. & Barbaree, H.E. (1997). Sexual aggression as antisocial behavior: A developmental model. In D. Stoff, J. Breiling, & J.D. Maser (Eds.), *Handbook of antisocial behavior* (pp. 524-533). New York: Wiley.
- Simourd, D. J. (2004). Use of dynamic risk/need assessment instruments among long term offenders. *Criminal Justice and Behavior*, 31, 306-323.
- Simourd, D.J. & Malcolm, P.B. (1998). Reliability and validity of the Level of Service Inventory-Revised among federally incarcerated sex offenders. *Journal of Interpersonal Violence*, 13, 261-274.
- Snyder, H. N., & Sickmund, M. (1999). *Juvenile offenders and victims: 1999 national report* (NCJ 178257). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Sreenivasan, H., Kirkish, P., Garrick, T., Wineberger, L., & Phenixa, A. (2000). Actuarial risk assessment models: A review of critical issues related to violence and sex offender recidivism assessments. *Journal of the American Academy of Psychiatry and the Law*, 28, 438-448.
- Tan, L. & Grace, R.C. (2008). Social desirability and sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 20(1), 61-87.
- Thornton, D. (2002). Constructing and testing a framework for dynamic risk assessment. *Sexual Abuse: A Journal of Research and Treatment*, 14, (2) 139-153.

- Thornton, D., Mann, R., Webster, S., Blud, L., Travers, R., Friendship, C., & Erikson, M. (2003). Distinguishing and combining risks for sexual and violent recidivism. In R.A. Prentky, E.S. Janus & M.C. Seto (Eds). *Sexually Coercive Behavior: Understanding and Management*. *Annals of the New York Academy of Sciences* 989, 225-235.
- Tierney, D.W. & McCabe, M.P. (2001). An evaluation of self-report measures of cognitive distortions and empathy among Australian sex offenders. *Archives of Sexual Behavior*, 30, 495-519.
- Tierney, D.W., & McCabe, M.P. (2002). An evaluation of self-report measures of cognitive distortions and empathy among Australian sex offenders. *Archives of Sexual Behavior*, 30, 495-519.
- Wong, S., Olver, M.E., Nicholaichuk, T.P., & Gordon, A. (2003). *The Violence Risk Scale-Sexual Offender version (VRS:SO)*. Regional Psychiatric Centre and University of Saskatchewan, Saskatoon, Saskatchewan, Canada.
- Wong, S., Olver, M.E., Nicholaichuk, T.P., & Gordon, A. (n.d.). *The Violence Risk Scale-Sexual Offender version: A brief introduction*. Retrieved December 5, 2008, from <http://www.psynergy.ca/pdf/vrs-sowebsummary.pdf>.
- Worling, J. & Curwin, T. (2000). Adolescent sexual recidivism: Success of specialized treatment and implications for risk prediction. *Child Abuse & Neglect*, 24(7), 965.
- Zolondek, S.C., Abel, G.G., Northey, W.E. & Jordan, A.D. (2001). The self-reported behaviors of juvenile sex offenders. *Journal of Interpersonal Violence*, 16, 73-85.