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AN INVESTIGATION OF ALEXITHYMIA IN RAPISTS AND CHILD MOLESTERS

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BY

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DISSERTATION APPROVAL

This dissertation submitted by Tabitha E. Kalkstein has been read and approved by three faculty members of the American Academy of Clinical Sexologists at Maimonides University.

The final copies have been examined by the Dissertation Committee and the signatures which appear here verify the fact that any necessary changes have been incorporated and that the dissertation is now given the final approval with reference to content, form and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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VITA

Tabitha E. Kalkstein is a graduate of Nova Southeastern University in Ft. Lauderdale, Florida. She is a licensed mental health counselor and board certified clinical sexologist. For the past seven years, she has been providing mental health services to both victims and perpetrators of physical and sexual assault in a variety of settings. Ms. Kalkstein is currently practicing in a maximum-security correctional facility for adult males where she specializes in psychosexual evaluations, sexual disorder treatment, and the empowerment of sexual exploitation and trauma survivors.

ABSTRACT

The purpose of this research study was to investigate the alexithymia personality trait in child molesters and rapists. Eighty-four incarcerated sexual offenders were tested for alexithymia utilizing the Toronto Alexithymia Scale (TAS-20). Forty-nine child molesters (victims ≤ 13 y/o) and thirty-five rapists (victims ≥ 17 y/o) consented to participate in the study. Three hypotheses were tested. Hypothesis 1: Sexual offenders convicted of sexual crimes against children are more alexithymic than sexual offenders convicted of sexual crimes against adult victims. Hypothesis 2: Sexual offenders convicted of sexual crimes against children are alexithymic. Hypothesis 3: Sexual offenders convicted of sexual crimes against adult victims are not alexithymic. The data was analyzed utilizing a two sample t-test to compare the mean scores of rapists and child molesters. One sample t-tests were performed to determine the significance of alexithymia in each group. Pearson correlation coefficients and independent samples t-tests were computed to examine associations between alexithymia, demographic and clinical variables. Hypothesis 1 was partially supported: The TAS-20 total and 3-factor scores for the rapists and child molesters yielded no significant differences in mean scores. However, a higher percentage of child molesters (18.4%) scored in the alexithymic range, in comparison to the rapists (17.1%). Hypothesis 2 was not confirmed: The mean score for the child molester sample was not in the alexithymic range. As predicted, the results confirmed hypothesis 3: The mean score of the rapists on the TAS-20 was not in the alexithymic range. In this study, a significant negative correlation between educational level and alexithymia was found. Limitations of the study were discussed as well as the implications for treatment of the alexithymic sexual offender.

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CHAPTER 1

INTRODUCTION

Sexological theory related to the psychosexual assessment and treatment of sexual offenders is considered by some researchers to be in the pre-paradigmatic stage of development (Ward and Sorbello 2003). As a result, serious limitations exist within the criminal justice and mental health systems empowered with the responsibility to confront the problem of sexual violation in our society. Ten to twenty five percent of adult women are sexually assaulted (Koss 1993). At least twenty percent of American women and five to ten percent of American men have experienced childhood sexual abuse (Finkelhor 1994). Although sexual aggression is a serious societal problem, psychological research on sexual offenders has failed to result in empirically based, standardized methods to optimize the assessment, referral and treatment of sexual offenders.

Psychological treatment interventions with sexual offenders show small yet stable results in decreasing recidivism (Drake and Ward 2003). Convicted sexual offenders are either court-ordered for community based treatment or placed in correctional settings. However, individuals who are incarcerated may exercise the right to refuse treatment. Throughout incarceration, a sex offender may maintain his claim of innocence and continue to focus on the appeal process rather than on treatment. These offenders thereby avoid addressing the psychological precursors to their offending behavior. The criminal justice system's focus on the power of punishment rather than the process of treatment is ineffective. This retributive model towards sex offender management is counterproductive to the goals of effective rehabilitation. Consequently, once an individual has served his sentence, he may be released without any cognitive restructuring, emotional development or behavioral changes. Resolution rather than retribution should be the

primary objective of a scientifically based approach to the treatment of sexual violence. For psychological treatment as an aspect of the management of sexual offenders during incarceration to be effective, it is necessary to scientifically address the complex behavioral manifestation of aggressive sexuality toward adults and children.

Entrance into many sexual offender treatment programs requires admission of guilt (McGrath and Purdy 1999), which creates a legal dilemma for the offender and usually serves as a deterrent to the offender accepting treatment. However, researchers report that such admission of guilt is unrelated to sexual recidivism (Hanson and Bussiere 1998). In addition to the fact that social policy mandates are insufficient to address the sexual offending population, mental health professionals are given the responsibility of performing psychological evaluations, risk assessments and treatment without adequate education, training and psychometric instrumentation (Nelson, Herlihy and Oescher 2002). As a result of the inadequacy of training for sex offender treatment professionals, it is not surprising that treatment outcomes are negligible. The treatment of sex offenders in many cases is being provided based on biased assumptions rather than scientific criteria in determining the psychopathology of the offender. Further clinical investigation into the cognitive-emotional lives of sexual offenders is essential to deliver innovative and effective treatment to the sexual offender population.

Sex offender treatment programs generally include the following components: pharmacological treatment, evocative and cognitive behavioral therapy, and psychoeducational groups to address social skill deficits (Prentky 1999). The American Psychiatric Association (1999) reported that 94.5% of adult sexual offender treatment providers included strategies to increase victim empathy. Empirical evidence however, has not explained the definitive role of empathy in sexual offending behavior nor has research determined the relative efficacy of victim

empathy interventions (Polaschek 2003). Furthermore, providing empathy and social skills training to sex offenders may be based on the inaccurate assumption that they possess the ability to take other people's perspective, but choose not to (Ward, Keenan, and Hudson 2000). If certain sexual offenders have alexithymia, an emotional processing and regulation deficit, it would preclude the offender's capacity to empathize (Taylor, Bagby and Parker 1997) without first undergoing intensive, specialized treatment. An alexithymic individual has difficulty with the identification and expression of subjective emotional feelings, which is a prerequisite to communicating feelings to others and having empathy (Sifneos 1972).

Individuals with alexithymia have problems differentiating between their emotions and physiological arousal states, find it difficult to communicate their emotions, demonstrate a diminished fantasy life, and have a cognitive style that is externally oriented (Taylor, Bagby and Parker 2003). Researchers report that alexithymics have a limited capacity for empathizing with the emotional states of others (Krystal 1979; Bekendam 1997; Taylor, Bagby and Parker 1997). If indeed certain types of sexual offenders are alexithymic, it would be futile to teach them empathy and social skills. Without prerequisite emotional awareness training, teaching empathy skills to alexithymic sex offenders may be counterproductive in that it may intensify their internal discomfort, or lead to attrition from treatment.

Alexithymics lack self-awareness and display a paucity of inner world experiences and fantasy (Taylor and Bagby 2000). Therefore, clinicians report that they respond poorly to insight-oriented therapy (Sifneos 1972; Krystal 1979). Failure to complete treatment is a significant predictor of sexual offense recidivism (Hanson and Bussiere 1998). Alexithymia might be a key factor in explaining the resistance to treatment interventions that is commonly associated with sexual offenders. The subject of alexithymia has been relatively non-existent in

the sex offender literature. However researchers have postulated that this affective deficit contributes to certain maladaptive behaviors. According to Stephenson, alexithymic individuals express their arousal in "physical ways" because they do not possess the words to identify feelings (Matthews, Zeidner and Roberts 2002). In a study with female criminal offenders, Louth, Hare and Linden (1998) asserted that alexithymia was associated with a history of violence. Bekendam (1997) reported that alexithymics use maladaptive styles of emotion regulation, which include sexual and aggressive fantasies and behavior. Utilizing a population of male parolees who had been convicted of child molesting, Bekendam's findings showed a significant predictive relationship between alexithymia and a sexual/aggressive coping style. Taylor, Bagby and Parker (1997) reported that alexithymia is correlated with several maladaptive behaviors including sexual aggression and/or compulsivity.

Does alexithymia play a key role in maintaining sexual violence? Does alexithymia impede a sex offender's ability to benefit from treatment? Are there significant differences in the emotional processing mechanisms of the child molester compared to the rapist? If so, specific and distinctive treatment approaches are warranted. All too often, sexual criminals (adult and child offenders alike) are treated generically in groups, forcing one treatment model to fit several types of sexual offenders. "It is time to move away from a total reliance on manual-based or fixed interventions, and accept that knowledge of individual differences in sexual offending can be of immense clinical value (Drake and Ward 2003)."

The investigation of the cognitive-emotional capacities of different types of sexual offenders is essential to justify distinct and alternative treatment approaches for offenders with specific deficiencies requiring clinical attention. This study of sexual offenders is based on two fundamental beliefs: 1) sexual offenders with alexithymia require emotional literacy training as a

prerequisite to increase treatment effectiveness, and 2) different types of sexual offenders may require different treatment protocols. This study focuses on two types of incarcerated male sexual offenders: child sexual abusers and sexual batterers of adult victims. Individuals in each set were tested for alexithymia.

CHAPTER 2

WHAT IS SEXUAL DEVIANCE?

Disparate legal, moral and clinical terminology related to sexual offending, utilized by different social service delivery systems adversely affects the provision of services to sexual criminals and their victims. This contributes to public misconceptions regarding this topic. Therefore it is important to first define and discuss how terminology is devised by the legal, clinical and cultural systems in our society.

Sexual deviance is a socially constructed term that has moralistic, psychopathological and criminal connotations (Hensley and Tewksbury 2003). However, sexual deviance is not simply what is illegal, immoral, or insane. Sexual deviance can be more accurately defined as sexual behavior that deviates from the current norms and behavioral standards of the larger society. What complicates the definition of sexual deviance is the change in these behavioral norms and standards over time, the sociopolitical agendas of political groups, and the cultural, organizational and religious institutions of society impacting on its significance. In our society, the sexual norm has traditionally been identified as genital (i.e. penis-vagina) intercourse with a single partner of approximately the same age and of the opposite sex. However, the concept of sexual deviance may vary not only from culture to culture, but within each culture. For example, in the larger society, pre-marital sex resulting in the birth of a child may be considered deviant, however in certain subcultures, bearing and raising children without marriage is considered the norm.

Religious institutions have always had a tremendous impact upon the definitions of sexual deviance and value construction of the dominant culture. Formal religions often dictate behavioral guidelines in terms of absolutes, without consideration of situational variables.

Although religion continues to have its influence on sexual expression, this frequently creates a conflict between religious ideology and the actual sexual practices of the dominant culture. A typical conflict between religious and sociocultural values involves the developmental process of sexual exploration and orientation. Although most religious institutions may consider any homosexual behavior deviant, the dominant culture may not frown upon a female in the exploration of her sexuality, kissing another female.

Another influential factor in the conceptualization of sexual deviance is the statistical frequency of a sexual behavior; for example, oral sex may be considered deviant by many, however the fact is that a majority of individuals have engaged in oral sex. This emphasizes the importance of cultural diversity awareness, and the pitfalls of a clinician's prejudice in formulating a clinical diagnosis (American Psychiatric Association 2000). The phrase sexual deviance appears in many legal, academic and clinical settings as well as the professional literature and research. Consequently, this phrase must always be appropriately defined to enable the reader to fully comprehend the scope of the sexuality in question.

The term sexual offense is a legal one, defined as any sexual act prohibited by law (Groth 1979). Individuals who are deemed to be sexual offenders by the criminal justice system are a heterogeneous group (Polaschek 2003). These offenders may be convicted of a wide range of sexual crimes (e.g. sexual relations between children and adults, sexual compliance gained via force or threat of force, or exposure of one's sexual organs to another without consent). State laws dictate which sexual behaviors are considered legal and illegal within the United States. These laws vary greatly from state to state. Variances occur between states as to the legality of the following: oral and anal penetration, same-sex sexual activity, the purchase and use of objects designed for sexual gratification, the buying and selling of sexual acts, and the age of

consent for sexual activity. Therefore, it is critical that any evaluation of a sexual offender be explicit and comprehensive, to accurately determine the presence or absence of a psychosexual disorder in the offender.

Although the act of rape may be clinically defined as any non-consensual sexual activity toward a person of any age, the law categorizes an offender's actions based on the victim's age, severity of injuries to the victim and the intrusiveness of the sexual activity. Sexual battery, the legal term for rape, is defined in Florida as the oral, anal, or vaginal penetration or union with the sexual organ of another or by any other object without consent (2004 Florida Statutes). Sexual access to the victim may be obtained via the covert administration of substances, physical violence, and the threat of force with or without a weapon, all of which are distinct criminal offenses. However, criminality does not necessarily demarcate sexual deviance.

Legal terminology relevant to the sexual abuse of children is exemplified by the following: sexual battery, lewd and lascivious exhibition, lewd and lascivious conduct, lewd and lascivious molestation, lewd and lascivious battery or assault, or luring or enticing a child. These legal terms are assigned based upon the exact circumstances of the sexual abuse, including, how access to the child was gained, the intrusiveness of the sexual activity, the physical injury present in the child victim, and the age of the child. The legal age of consent for sexual activity varies from state to state, and sometimes within states depending on the circumstances. For example, in Florida, the age of consent is eighteen years old. However, with the permission from the legal guardian to marry, a sixteen year-old may give informed consent to sexual activity. (Such an exception demonstrates the religious and political influences involved in governing sexual behavior.)

Clinical terminology utilized to delineate deviance in the United States, is generally created by the psychiatric profession and classified through a criterion system outlined by the Diagnostic and Statistical Manual of Mental Disorders (DSM), written by the American Psychiatric Association. Although some sexual offenders meet current DSM criteria (APA 2000) for a sexual disorder, others do not. In the latest revision of the fourth edition of the DSM (DSM-IV-TR), sexual disorders are divided into the following sections: sexual dysfunctions, gender identity disorders and paraphilias. The term paraphilia was introduced by the APA in 1980 to describe recurrent sexual urges, fantasies or behaviors which involve unconventional "objects, activities or situations and cause clinically significant distress or impairment in social, occupational, or other important areas of functioning." The term paraphilia may be broken down into para (above/beyond, indicative of deviation) and philia (what one loves or is attracted to). The paraphilias included in the DSM-IV-TR are: exhibitionism, fetishism, frotteurism, pedophilia, sexual masochism, sexual sadism, transvestic fetishism, voyeurism, and paraphilia not otherwise specified (APA 2000).

Sexual sadism is a psychosexual disorder in which an individual derives sexual pleasure from humiliating and/or inflicting pain upon another individual. To meet criteria for sexual sadism, there must be a period of at least six months of activity that is sexually exciting to the individual, during which the recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving real acts (not simulated), cause the victim psychological or physical suffering (APA 2000). Controversy exists over how one measures sexual excitement in meeting the criteria (i.e. whether or not sexual excitement is defined by an erect penis during the sadistic acts or the sadist's subjective experience of being sexually excited). Sexual sadists may engage in sadistic behaviors with consenting partners called sexual masochists who are willing to endure

physical or psychological suffering. Other sexual sadists act on their sexual urges with non-consenting victims, and usually continue their behavior until they are apprehended. Fantasies and behaviors in this category include psychological suffering (e.g. forcing a victim to be kept in a cage, depriving a victim of the use of a toilet) as well as physical suffering (e.g. rape, torture, stabbing, strangulation, burning, beating, electrical shocks, whipping, mutilation and/or killing). The APA (2000) reports the age of onset is commonly early adulthood, although sadistic fantasies are likely to have been present in childhood. Sexual sadism is usually chronic and the severity of the sadistic acts increases over time. In severe cases of sexual sadism, the result is serious injury or death of the victim, especially when it is associated with Antisocial Personality Disorder.

One major criticism of the APA's classification system involves the absence of rape as a paraphilic category. Although many child sexual abusers may fit into the category of pedophilia, rapists of victims over the age of thirteen who do not meet criteria for sexual sadism, go undiagnosed. The APA's exclusion of rape as a manifestation of a mental disorder is controversial in the field of sexology. Some researchers (Abel and Rouleau 1990) hypothesize that rape is a symptom of psychopathology. Other researchers in this field suggest that attributing psychopathology to the behavior of a rapist would thereby reduce the inferred culpability of the criminal, and limit the personal responsibility of the offender. An attempt to include the category *paraphilic rapism* in the DSM III-R was abandoned as a result of feminist lobbyist groups concerned that it would form the basis of a legal defense against criminal responsibility for rape (Kutchins and Kirk 1997). Some experts support the inclusion of a paraphilia called *paraphilic coercive disorder*, a category into which rapists with intense, repetitive urges and/or behaviors involving rape would be diagnosed (APA 1999). However

currently, the behavior and/or fantasies of rapists are only considered paraphilic if the individual's sexual gratification is dependent upon the psychological urge to inflict harm or humiliate the victim. Such an individual would be given a diagnosis of sexual sadism. Despite the exclusion of rape in the DSM-IV-TR, many mental health providers diagnose repeat rapists with a paraphilia utilizing the category Paraphilia NOS, to allow them access to treatment. (This rationale is often used for clinical, research or legal agendas.)

According to the DSM-IV-TR the paraphilic focus in pedophilia is prepubescent children, generally age thirteen or younger. Pedophiles are most often males, and they may be heterosexual, homosexual or bisexual. The disorder is chronic and usually begins in adolescence, although some pedophiles claim their urges did not begin until middle age (APA 2000). The sexual activities of pedophiles vary, ranging from voyeurism (watching the child) and exhibitionism (exposing the genitals to the child), undressing and fondling the child, to oral and genital contact, penetration and intercourse. Most pedophiles depend on persuasion, guile and friendship rather than force, however when force is utilized, the victims are usually older children (Murray 2000).

To be diagnosed as a pedophile, one must be at least sixteen years old and at least five years older than the victim(s) involved. The APA (2000) emphasizes that a male in his late teens involved in an ongoing sexual relationship with a twelve or thirteen year-old should not be given the diagnosis, which demonstrates the importance of utilizing clinical judgment in the diagnosis of individuals in late adolescence. According to Murray (2000) many acts of child molestation are single acts and are not repeated. In those cases, the perpetrator would not meet criteria for diagnosis because the behavior or urge occurred without a recurrent pattern of sexual interest in children. In order to meet criteria for pedophilia, sexual urges and behaviors involving

prepubescent children must be present for at least a six month period. According to the DSM-IV-TR (APA 2000) pedophiles are classified utilizing specifiers regarding their preferences. A pedophile may be labeled with the following specifiers: exclusive type (if they are sexually attracted only to children), nonexclusive type (if they are attracted to both adults and children), limited to incest, and sexually attracted to males, females or both. The APA's classification system has received much criticism from researchers who have not found the paraphilic categories to be useful for clinical evaluation, treatment or research (Prentky 1999; Polascheck 2003; Abel and Rouleau 1990).

In this study, the term rapist shall refer to an individual convicted of sexual battery against at least one adult victim who is equal to or above the age of seventeen. The terms child molestation, child sexual abuse and pedophilic activity will be used interchangeably and will refer to illegal sexual activity perpetrated by an adult on a child, where the victim is too young to give consent by the clinical standard in our society. The age criterion (of the victim) from the Diagnostic Statistical Manual of Mental Disorders (APA 2000) for pedophilia was applied to this study. The child molesters and rapists were selected for participation based upon their criminal conviction rather than on the basis of DSM criteria.

CHAPTER 3

LITERATURE REVIEW

Alexithymia

Alexithymia is an emotional processing deficit first observed in psychiatric populations of patients suffering from psychosomatic illnesses who responded poorly to insight-oriented psychotherapy (Matthews, Zeidner and Roberts 2002). Sifneos (1972) coined the term *alexithymia*, (derived from the Greek) which literally means having no words for emotions *(a = lack, lexis = word, and thymos = emotion)*. Sifneos and his colleagues systematically investigated the cognitive and affective style of alexithymics in the late 1960's and early 70's. Several other researchers independently reported on the lack of affective expression and tendency toward externalized thinking in patients with post traumatic stress disorder, drug addiction and eating disorders (Sifneos 2000). A precise definition of alexithymia was agreed upon in 1976 at 11th European Conference on Psychosomatic Research (Taylor and Bagby 2000).

Alexithymia is a multidimensional trait (Kroner and Forth 1995). It is characterized by the following salient features: a) difficulty distinguishing between physiological and emotional states, b) deficits in the ability to identify and verbally communicate emotion, c) externally oriented cognition, and d) a systematized style of processing in which there is limited fantasy (Sifneos 1972). Alexithymics focus on the external details of everyday life rather than their emotions, fantasies and inner experiences (Taylor and Bagby 2000). Alexithymic individuals demonstrate low levels of emotional expressiveness (Matthews, Zeidner and Roberts 2002) and possess an extremely limited vocabulary to describe their feelings (Louth, Hare and Linden 1998; Roedema and Simons 1999). However, alexithymia is not merely a verbal deficit.

Alexithymics demonstrate significant impairments in both the verbal and non-verbal recognition of emotion stimuli (Lane et al. 1996). Haivland and his colleagues (2002) reported that alexithymics are literal, unimaginative, utilitarian, and lack insight, humor and personal meaning in life. Related research reveals that alexithymics lack the emotional experience of joy, happiness and love, thereby exhibiting an anhedonic quality in their lives (Taylor, Bagby and Parker 1997). Taylor and his colleagues (1997) point out that although alexithymic individuals do feel feelings, they are prone to experience more negative or unpleasant emotions, with a limited capacity to regulate them effectively through cognitive or other psychological processes. Although empathy deficits are not central to the definition of alexithymia, numerous researchers report that alexithymics demonstrate a limited ability to be empathic in their interactions with others (Krystal 1979; Taylor, Bagby and Parker 1997; Bekendam 1997).

Clinical research on alexithymia has been focused on hypothesized relationships between alexithymic characteristics and various medical and psychiatric disorders. Alexithymia is a personality trait believed to increase an individual's vulnerability to such psychiatric and medical conditions as depression, post traumatic stress disorder, substance abuse, pain and eating disorders, hypertension, obesity and gastrointestinal dysfunction, and other psychosomatic conditions (Sifneos 2000; Taylor 2000; Porcelli et al. 1999). Research to clarify the physiological correlates of alexithymia, reveals mixed results. Roedema and Simons (1999) reported findings of restricted arousal by the alexithymic subjects in response to affective stimuli. Others have postulated that alexithymia leads to chronic hyperactivation of the autonomic nervous system which impairs the autonomic, pituitary-adrenal and immune system (Martin and Pihl 1986; Papicak, Feuerstein, and Spiegel 1985).

It is important to distinguish alexithymia from other similar personality constructs and coping mechanisms with similarities. Suppression is a coping style in which regulation strategies are used (consciously or not) to reduce the expressive reaction of emotional experience (Gross 2002). However, the emotion is still experienced at some level of consciousness. Lane et al. (2000) reported similarities between alexithymia and repression in that both constructs involve impairments in the recognition of both pleasant and unpleasant emotions, which differentiates alexithymia from anhedonia. This study also revealed differences in the magnitude of between group impairments, rather than mere qualitative differences. Their findings suggest that alexithymics exhibit much larger deficits in the experiencing of emotion than repressors do.

According to Taylor, Bagby and Parker (1997), alexithymia is not a categorical phenomenon but is best described as a construct that exists on a continuum with a normal distribution in the general population. Research findings support the view that alexithymia is a constant, stable personality trait, independent of psychological distress or other effects of a medical or psychiatric illness (Taylor, Bagby and Luminet 2000; Louth, Hare and Linden 1998). Of particular importance is a study in which Luminet, Bagby and Taylor (2001) tested the relative stability of alexithymia with a clinical population who met DSM-IV criteria for major depressive disorder. The outcome of this study demonstrated a significant positive correlation between baseline and post-treatment alexithymia scores despite a significant decrease in depression scores after fourteen weeks of antidepressant medication treatment (Taylor, Bagby and Luminet 2000). Martínez-Sánchez, Ato-García and Ortiz-Soria (2003) demonstrated the absolute stability of the alexithymia construct in a university population of students in Spain. In this longitudinal study, students were tested for alexithymia, trait anxiety and physical symptoms during and following intervals of emotional distress related to their university examinations. The

results of this research revealed stable scores on alexithymic measures, which were not significantly altered by the state effects of academic stress. In a study with incarcerated individuals, Louth, Hare and Linden (1998) contributed more evidence to support the view that alexithymia is a personality trait. Although incarceration would be considered by most to be a stressful condition, their findings that two thirds of their offender sample was not alexithymic, suggests that alexithymia is a psychological trait.

Although alexithymia is less well known in the popular press than the more recently developed concept of emotional intelligence, alexithymia is a more narrowly defined and empirically researched construct (Taylor, Bagby and Parker 1997). The term emotional intelligence (EI), although popularized in the media by Goleman (1995), was originated by Peter Salovey and Jack Mayer (1990). Their definition of EI includes the ability to monitor emotions in oneself and others, to discriminate among emotions and to understand and use this information to self-regulate and guide one's thinking and actions. The broad concept of emotional intelligence is currently receiving much attention from modern society for its future application to education and the workplace. There appears to be an identifiable rebelliousness underlying our society's interest in EI. Perhaps it is a reaction to the conventional, restrictive conceptualization and measurement of intellectual intelligence and success (Epstein 1998). Although there are several instruments for measuring emotional intelligence, controversy remains concerning the construct validity of this term. One such measure, the Affective Orientation Scale (AOS) developed by Booth-Butterfield and Booth-Butterfield (1990), has been widely utilized to assess the following components: awareness, implementation, importance and intensity of emotion. The AOS is significantly correlated with the Twenty-Item Toronto

Alexithymia Scale (TAS-20) measure of alexithymia, including its three factor subscales (Matthews, Zeidner and Roberts 2002).

Alexithymia is also closely related to the well-known construct, psychological mindedness, which was formulated by Appelbaum (1973). While the alexithymia construct is focused on the processing and modulation aspect of emotions, psychological mindedness, similar also to EI, encompasses several other domains including access to one's own feelings, an interest in understanding human behavior, the willingness to talk about one's intrapsychic and interpersonal problems, the capacity for change, and the ability to utilize emotional information to formulate behavioral responses. The Psychological Mindedness Scale (PMS) developed by Conte et al. (1990) is significantly and negatively correlated with the Twenty Item Toronto Alexithymia Scale (Shill and Lumley 2002).

Lane and Schwartz (1987) define a similar construct to alexithymia, emotional awareness, as an individual's ability to recognize and describe emotion in oneself and others. According to Lane and Schwartz, emotional awareness is a cognitive skill that undergoes a developmental process similar in structure to Piaget's construct of general cognition. The Levels of Emotional Awareness Scale (LEAS) developed by Lane et al. (1990) was derived from the notion that there are five levels of emotional awareness: 1) physical sensations, 2) action tendencies, 3) single emotions, 4) blends of emotions, and 5) blends of blends of emotional experience in which one has the capacity to appreciate complexity in the experience of self and others. This measure will prove to be valuable in the treatment of alexithymics, due to its developmental conceptual framework. Once the level of emotional development has been identified, treatment goals may then be formulated based on that level.

Despite the tendency to view emotional awareness and expression as a socio-cultural phenomenon, the alexithymia construct is not confined to one particular culture. Cross-cultural studies have demonstrated that alexithymia may be a universal personality trait (Taylor, Bagby and Parker 2003). Although some preliminary studies suggest that alexithymia may be associated with certain demographic variables such as older age, male sex, lower socioeconomic status and fewer years of education (Lane, Sechrest and Riedel 1998), other studies have found no such associations (Parker, Taylor and Bagby 2003).

The most widely used instrument in the assessment of alexithymia is the self-report Twenty-Item Toronto Alexithymia Scale (Appendix 1) developed by Taylor, Bagby and Parker in 1992 (Taylor and Bagby 2000). A revised version of the original twenty-six item scale (Taylor, Ryan, and Bagby 1985), the Twenty-Item Toronto Alexithymia Scale (TAS-20) was devised using a combined empirical and rational method of scale construction (Parker, Taylor and Bagby 2003). The TAS-20 is comprised of the following three factors: (F1) difficulty identifying feelings and distinguishing between feelings and the physiological sensations of emotional arousal, (F2) difficulty describing feelings to others, and (F3) an externally oriented style of cognition (Taylor and Bagby 2000). Taylor and Bagby (2000) explained that the second and third factor together adequately measure the deficits in daydreaming and other imaginal activity originally assessed by a fourth factor in the original TAS-26. The fourth factor was removed primarily because of its high correlation with social desirability (Parker, Taylor and Bagby 2003).

The three-factor TAS-20 has demonstrated good internal consistency and test-retest reliability and has been replicated in both student and psychiatric populations in North America (Parker, Taylor and Bagby 2003). In a large community sample of approximately 2000 adults,

Parker, Taylor and Bagby (2003) administered the TAS-20 and used a confirmatory factor analysis to report that the test was replicable in the entire sample (internal reliability coefficient [IRC] = .86), as well as separately for men (IRC = .86) and women (IRC = .85). The same study established the internal consistency (mean inter-item correlation = .23) for the three-factor structure. The variables of gender, age and education accounted for relatively small or modest amounts of variability in total TAS-20 and factor scale scores. Kroner and Forth (1995) examined the English version of the TAS-20's psychometric properties in a sample of 508 male inmates, and found the scale to be a reliable assessment.

Earlier instruments for the measurement of the alexithymia construct such as the Schalling-Sifneos Personality Scale and the MMPI Alexithymia Scale have failed to exhibit the reliability and validity necessary to support its usage (Taylor, Bagby and Parker 1997). Other promising instruments include the Levels of Emotional Awareness Scale (LEAS), the modified Beth Israel Hospital Psychosomatic Questionnaire (BIQ), and the California Q-Set Alexithymia Prototype (CAQ-AP), however the TAS-20 is currently the best validated measure of the alexithymia construct (Taylor, Bagby and Luminet 2000). The TAS-20's results can be directly compared to one another as a dependent variable and, between-group studies may easily determine alexithymic and nonalexithymic subjects due to its empirically established cutoff scores (Taylor and Bagby 2000).

A primary focus of alexithymia research is on the etiology of personality traits related to cognitive-emotional deficits (Sifneos 2000). There are two major areas of investigation into the neurobiological differences between alexithymics and nonalexithymics. First, researchers have speculated that alexithymia is associated with deficits in anterior cingulated cortex activity during emotional arousal. In a study using functional magnetic resonance imaging with sixteen

healthy subjects, Berthoz et al. (2002) reported that alexithymics' level of activity in the anterior cingulate and mediofrontal region of the brain differed from controls during emotional stimuli processing. Research conducted by Kano and colleagues (2003) also demonstrated that alexithymia is associated with blood flow differences in the anterior cingulate cortex (as well as several other areas of the brain), during facial expression recognition tasks. Studies with larger numbers of subjects, may add credence to these findings in the future. Second, the functional commissurotomy model posits that the alexithymic brain does not effectively transfer emotional information from the right hemisphere to the language centers of the left hemisphere (Taylor 2000). Research conducted with alexithymic and nonalexithymic veterans diagnosed with PTSD, supports the hypothesis that interhemispheric communication dysfunction may account for alexithymia (Zeitlin et al. 1989). Taylor and Bagby (2000) point out that although these correlational studies have detected neural differences associated with alexithymia, they cannot be used to imply cause-effect relationships. They suggest a more comprehensive, psychobiological model to explain alexithymia, in which neural correlates may interact with environmental influences during early development such as the quality of emotional interaction and attachment with the caregiver, and/or the presence of traumatic or neglectful experiences. Nonetheless, it is clear that researchers will continue to look at brain organization and functionality in regard to alexithymia.

Sexual Offending: Theory and Research

Early psychoanalytic theory originated by Freud (1905/1953) has had a tremendous impact on the way professionals conceptualize sexually deviant behavior. Freud used the term *perversion* to indicate that either the aim or the object of an individual's sexual desire had become diverted, with the root cause stemming from early childhood development. Freud

believed that sexually deviant behavior was highly resistant to change because it is a manifestation of a character disorder; thus, necessitating a lengthy treatment process. The research of John Money (1988) supported this view. Money coined the term *lovemap* to refer to a template or blueprint of a person's love object. In reference to the etiology of paraphilias, Money postulates that an individual's *vandalized lovemap* becomes distorted as a result of negative childhood experience in early childhood. The untreatability aspect of these approaches has had the most profound influence on the field, and has only recently been challenged by contrasting viewpoints (Lanyon 1991).

In the 1970's, two typologies based on a neo-Freudian model of rape emerged. Cohen et al. (as cited in Lanyon 1991) proposed a classification system focused on the motivation or aim of the rapist (e.g. aggressive, sexual or sadistic). According to this view, the aggressive rapist's aim is humiliation and degradation, and the behavior is carried out with an intense rage. The sexually motivated rapist is fueled by sexual fantasy based on insecurities and interpersonal inadequacies. The sadistic rapist is described as psychopathic and impulsive, with his sexual excitation dependent on aggressive behavior. The second typology was created by Groth and his colleagues in the late 1970's. Groth (1979) asserted that rape is a pseudosexual act driven by nonsexual needs such as power and control, anger and hostility. This model views the act of rape as compensatory and retaliatory. Four subtypes of rapists are derived from this theory: power-assertive, power-reassurance, anger-retaliation and anger-excitation. Groth's anger-excitation category is analogous to Cohen's sadistic type, in which sexuality and aggression are somehow fused, so that violence is a prerequisite for sexual excitement. This small group of rapists were conceptualized as having a psychopathic character, with some considered to be psychotic.

With regard to child molestation, Groth (1979) divides perpetrators into two types, the regressive type and the fixated type. The regressed pedophile abuses children not because of his being attracted to children as the primary sexual object, but because he regresses to focus on the sexual attraction to children as love objects, in certain circumstances. The fixated offender's primary sexual attraction is toward children as a result of an inability to work through earlier psychosexual stages of development. The pseudosexual needs for power and/or affection drive the fixated pedophile, whose difficulties may have arisen in the context of childhood sexual abuse, neglect, and/or lack of affection. Childhood sexual abuse occurs either by force, utilizing physical violence or threats, or by applying methods of coercion including enticement, encouragement or instruction. Groth (1979) hypothesized that that if the perpetrator has strong pseudosexual needs to express power, anger and hostility, the child will most likely be forcibly raped. However, in child molestation, the sexual relationship develops through seduction of the victim. It is hypothesized that this offender identifies with the child, and has strong needs for admiration, validation, comfort and affection. The psychodynamic model appeals to naive clinicians as well as the public. However, empirical research has failed to substantiate this model as efficacious in either assessment or treatment of sex offenders. Furthermore, this theory fails to adequately explain the inability of the fixated pedophile to "work through" earlier stages of psychosexual development, how this inability manifests in sexually deviant preferences, or why a regressive type would choose sexual offending as a maladaptive coping strategy.

Feminist writings about rape derived from sociological and social learning theory emphasize the social, sexual, political and economic stratification system of society, to explain sexual aggression. From the radical feminist viewpoint, the subjugation of women and children is built into society's patriarchal organizational structure (via an opportunity and reward system)

which condones sexual violence as a means for all men to perpetuate their power and control (Brownmiller 1975). Less radical feminist researchers purport that males are more sexually aggressive in sexist societies. These societies endorse the macho personality (i.e. acceptance of physical aggression, high risk-taking and impersonal sexual activity) for men and the inferiority of women. Cross-cultural studies of sexual violence reveal that in rape-free societies, women are highly valued and respected (Sanday 1981).

Social factors commonly identified as being responsible for sexual violence include: cultural support for violence, gender-role socialization, pornography, social disorganization and male domination of society's socioeconomic resources. Baron and Straus (1989) found empirical support for their path model of rape, which integrates three of the above elements (pornography, gender inequality and social disorganization) and three additional factors of economic inequality, unemployment and urbanization alienation.

According to the sociocultural explanation of sexual aggression, any individual has the potential to become a rapist or a child molester. However, this potential is seen as a male characteristic. There is abundant empirical evidence demonstrating that rapists are not more psychologically pathological than other men (Koss and Leonard 1984). Hence, why only a portion of men offend and others do not could perhaps be explained by hypermasculinity, in which some men hold more offense-prone cognitions than others (Howitt 1995). Malamuth (1981) found that over 50% of normal (non-rapist) men stated that there was a chance they would rape if they thought they could get away with it. In addition, many research findings indicate that rapists as well as non-rapists with self-reported sexually aggressive tendencies possess callous attitudes about rape and believe in rape myths (Lottes 1988; Malamuth 1981). Examples of rape supportive attitudes are: 1) women enjoy sexual violence, 2) sex is the primary

motivation for rape, 3) women are responsible for rape prevention, 4) only certain women are raped, 5) women falsely report rape, 6) women are less desirable after rape, and 7) rape may be justified (Lottes 1988). These findings add credence to the role of rape-supportive attitudes as a facilitator of rape. They also substantiate the empirical data demonstrating that rapists and non-rapists are psychologically similar (McGrath and Purdy 1999). However, as McConaghy (1999) points out "a causal role for the presence of cognitions supportive of rape in sexually assaultive males has not been demonstrated." Cognitive therapists facilitate treatment of the offender by identifying, confronting and restructuring the core beliefs that are assumed to cause and perpetuate sexual violence. Future research is needed to determine exactly what role these attitudes play in the behavior of rape (e.g. motivational, disinhibitory and/or post-rape rationalization).

According to the feminist perspective, intrapsychic processes are deemed irrelevant in the explanation of sexually aggressive behavior. From this viewpoint the societal definition of masculinity with its implications of dominance and power in relationship dynamics is responsible for sexual aggression. It is the societal support for these behaviors that facilitates the creation and maintenance of sexual offending. Therefore, in this view, the problem of sexual violence must be dealt with on a macrosociological level; the prevention of sexual aggression is seen as the primary aim. Treatment of the individual rapist or child molester is secondary, and linked with the objectives of neighborhood crime watches, the education of women on self-defense tactics, and the increased use of safety precautions. The primary goal of prevention could be accomplished by addressing the aforementioned societal conditions that make rape and the sexual abuse of children more likely to occur. A more popular and empirically validated strategy in the field of sexual offender treatment is the psychological treatment of the offender

based on cognitive-behavioral methodology with an emphasis on relapse prevention (Matson 2002).

The behavioral perspective views sexually deviant behavior itself as the problem, not a symptom of deeper, underlying issues. Behavioral approaches are pragmatic, and focus on changing the dysfunctional behavior, independent of the social, cultural and psychological factors surrounding the behavior. In its application to rape, the behavioral model is based upon the hypothesis that there was an accidental pairing of certain stimuli with sexual arousal resulting in a sexual preference for and engagement in sexually assaultive behavior. Many researchers have utilized phallometry (the use of a penile plethysmograph to measure erectile arousal to depicted sexual stimuli) as well as other methods to verify this hypothesis. However, research findings to date lead to the conclusion that rapists in general are less aroused by stimuli depicting forcible sex than by stimuli depicting mutually enjoyable sex (Marshall, Fernandez and Cortoni 1999). Sadistic rapists are not aroused to depictions of mutually consenting intercourse with adult partners, while non sadistic rapists are (Abel et al. 1981). Therefore, the behavioral model does not explain why a non-sadistic rapist would choose to rape rather than having a consenting sexual encounter. Since rapists generally have access to consenting sexual partners at the time of their offenses (Groth 1979), the behavioral model then could only explain why a small group of individuals (labeled sadists) would choose rape over consenting sexual encounters.

Contrary to the above findings about rapists, many studies utilizing phallometric techniques have been able to demonstrate that child molesters can be discriminated from non-child molesters (Quinsey and Lalumiere 1996). Langevin's (1983) behavioral approach to child sexual abuse classifies offenders according to the preferred stimulus and response characteristics. For example, an individual offender's arousal level is assessed to determine the preferred stimuli

(e.g. immature physical shape of children) or the preferred response behavior (e.g. exposure of one's genitals) to determine which behavioral technique will be utilized for treatment. The strength of behavioral theory lies in its operationally defined methodology as well as its measurable assessment and treatment techniques (Maletzky 1991), but it is the generalizability of these treatment techniques into different environments and situations which presents the greatest challenge for producing long lasting change (Laws and Marshall 1990).

Laws and Marshall (1990) outline an etiological model which incorporates both behavioral and social learning theory. Their model focuses on both the process by which sexually deviant behavior is acquired, and how these behaviors are maintained. It is comprised of a set of thirteen general principles and fourteen derived propositions. According to this model, the acquisition process occurs via Pavlovian conditioning, operant conditioning, extinction, punishment, differential consequences, and behavioral chaining. Maintenance processes consist of autoerotic influences (masturbatory fantasy), social learning influences and intermittent reinforcement. This model based on conditioning and social learning variables may be utilized to explain the development of both conventional and deviant sexual behavior, and explains why sexually deviant behavior is so resilient and resistant to alteration.

There are several hypotheses associated with a biological explanation of sexual offending. The first is the assumption that organic factors in the brain are responsible for impulsivity and dysregulation of aggression. This hypothesis has little support, due to the clinical and research findings that point to the planning aspect involved in most sexual assaults (Pithers 1990), difficulty distinguishing rapists from nonrapists on psychological indices (Marolla and Scully 1982), and the fact that child molesters rarely use physically violent behavior, rather they seduce their victims (Knight and Prentky 1990). Similar unsubstantiated

theories involving the brain include the hypothesis that men are susceptible to sexually deviant thoughts due to interhemispheric communication problems in the brain. Another theory views sexual assaultive behavior as a result of elevated plasma testosterone levels in the offender. This theory has been abandoned by clinicians due to research findings which have demonstrated these hormonal elevations in only the most violent sexual offenders (Rada et al. 1983), and the hormonal explanation's inability to explain non violent child molesting behavior. A third hypothesis involves a genetic propensity for violence. In light of findings which demonstrate that only a small percentage of rapists (labeled sadists) are aroused by violent depictions (Abel et al. 1981), and the research conducted by Rada et al. (1983), it appears that these theories provide interesting yet inadequate explanations for the majority of sexual assaults. A biologically based approach to sexual offender treatment is appealing given the fact that the implementation of physiological treatment strategies aimed at the reduction of sexual arousal, is not a difficult process (e.g. "chemical castration" utilizing hormones such as medroxyprogesterone acetate or Depo-Provera). As with other areas of psychological rehabilitation such as substance abuse treatment and pain management, a biopsychosocial approach including a psychiatric component may be most efficacious in the treatment of sexual offenders.

Multifactorial Theories of Sexual Offending: A Pre-Paradigmatic Era

Because of the inadequacy of one-dimensional explanations of rape and/or child sexual abuse, researchers and practitioners have turned to a multitude of factors including social-cultural, biological, psychological and functional perspectives to explain these behaviors. The following theoretical models are derived not from one school of thought, but from a compilation of previously collected empirical data, integrated to formulate multifactorial theories of sexual offending. These theories are primarily focused on the explanation of child sexual abuse.

One of the first comprehensive theories of child sexual abuse, Finkelhor's (1984) precondition theory consists of four underlying factors (emotional congruence, sexual arousal, blockage, and disinhibition) which are grouped into four sequential preconditions that must be satisfied prior to the occurrence of sexual abuse. The first precondition is met by the offender being motivated. This motivation is comprised of three factors based on the following assumptions: 1) that the sexual relationship with a child is emotionally satisfying to the offender (emotional congruence), 2) that the offender is sexually aroused by a child (sexual arousal), and 3) that the men who have sex with children are unable to meet their sexual needs in appropriate ways (blockage). The second precondition is linked to the fourth factor of disinhibition. To meet this precondition, the offender must overcome his internal inhibitive mechanisms via the use of alcohol, impulsivity, senility, psychosis, severe stress, patriarchal societal attitudes or social tolerance of sexual interest in children. Overcoming the external inhibitions is the third precondition, which allows the offender access to the child. Examples of these conditions include: maternal absence/illness, lack of parental supervision or maternal closeness, social isolation of the family, unusual sleeping arrangements and paternal domination/abuse of the mother. The final precondition is the breakdown of the child's resistance to the abuse, accomplished by gifts, establishing emotional dependence, desensitizing the child to sex, using threats or physical violence. Despite some empirical evidence supporting the relevance of these four factors involved in child molestation, Araji and Finkelhor (1986) pointed out that this model represents only a conceptual framework, upon which future researchers may develop a clear and coherent explanation of exactly how the factors collaboratively result in child sexual abuse.

Hall and Hirschman's (1992) quadripartite model of child molestation is comprised of four components: physiological sexual arousal, inaccurate cognitions that justify sexual

aggression, affective dyscontrol and personality problems. According to their theory, these four factors interact with one another to motivate an individual to act in a sexually deviant manner. Hall and Hirschman suggest that for each child molester, one of the four factors is the primary motivator, which (in synergy with the others) propels the individual above the critical threshold to ultimately engage in child molestation. A typology of different child molesters with distinct treatment needs arises from this model. The first type has deviant sexual arousal and strong sexual preferences for children (the classic preferential offender). The second type is characterized by cognitive motivations. These offenders typically misinterpret children's behavioral cues as having a sexual intent, and have good self-regulatory and planning skills (e.g. incest offenders). The situational offender is the third type. He acts upon his impulses as a result of his inability to regulate his negative emotional states. The final group of offenders experience great difficulty establishing intimate relationships with adults and do not function interpersonally in an effective manner (preferential offenders). In order to deliver effective treatment services to these different types of offenders, the clinician must determine which primary motivators warrant the most clinical attention in the treatment process for each offender. The strength of this model lies in its categorization of different types of offenders. However it is not clear how the four factors interact to "propel the individual over the threshold" into sexual offending.

Marshall and Barbaree's (1990) integrated theory of sexual offending is noteworthy for its attempt to incorporate multi-theoretical, causal factors known to be associated with sex offending - biological, developmental, socio-cultural, and situational. This model stipulates that the process of socialization may inhibit or disinhibit the biological potential for sexual aggression in males. An individual is at risk for sexual offending if exposed to cruel and/or inconsistent parenting techniques and pornography at a young age, within a social context that

accepts violence, male dominance, and negative attitudes toward women including widespread belief in rape myths. During the critical period of adolescence when there is a tremendous surge in sex hormones, Marshall and Barbaree contend that sex and aggression (which originate from the same neural substrates) are fused while masturbatory practices serve as mental rehearsals to reinforce sexually deviant fantasy and behavior. The adolescent is already at risk for perpetrating a sexual offense due to social and emotional incompetence. Transitory situational factors may serve to further disinhibit him to engage in sexually offensive behavior. Such situational factors include: excessive use of alcohol, emotional states of anger and hostility, the presence of sexual arousal, and forms of permissive instructions that suggest that sexual offending is acceptable. The latter two situations may be created by the viewing of pornographic material. Additional transitory influences suggested by Marshall and Barbaree to play a role in sexual offending are stress and anxiety, anonymity and the reduced probability of detection and retribution. These researchers explain that although there is data to support each of these factors alone as relevant to sexual offending, they believe that the above linking of processes best explains how an individual ends up sexually offending. In a critical analysis of this theory, Ward and Sorbello (2003) point out that a major failure of this model is the lack of explanation as to exactly how sex and aggression are fused. They argue that it is not sufficient to state that they are fused because these two impulses are mediated by the same neural substrates. In addition, a loss of control combined with negative emotional states is implicated in sexual offending. This does not adequately explain the pattern of the offender who systematically plans his offense behaviors with a great deal of pleasure and emotional self-control, or of the offender who begins his abusive behavior later in his adulthood.

The pathways model (Ward and Sorbello 2003), similar to the three theories above, outlines four factors to explain child molestation: intimacy and social skill deficits, distorted sexual scripts, emotional dysregulation, and cognitive distortions. However, they contend that every sexual offense involves all four sets of psychological mechanisms (emotional, intimacy, cognitive and arousal components) albeit through five distinctive etiological pathways. These authors believe that although their model is a provisional theory, it integrates both the strengths and weaknesses of the theories by Finkelhor, Hall and Hirschman, and Marshall and Barbaree. (For a detailed explanation of this theory see Ward and Sorbello 2003, p14-18)

A person exhibiting a marked lack of emotional awareness as well as an externalized focus, may experience life as problematic. This deficit may manifest itself in a particularly acute way in meeting psychosexual needs. Specifically, the alexithymic sex offender might experience great difficulty in monitoring his internal environment due to this trait, and contribute to the relapse process in several ways. In this section, alexithymia will be considered as an underlying factor which is manifested in the social-emotional skill deficits of sex offenders.

Alexithymic offenders deficient in managing psychophysiological processes may tend to respond to internal sexually aggressive drives and act upon deviant patterns of sexual interest, to the exclusion of social norms and standards. Kroner and Forth (1995) agree that because an alexithymic person would not be able to monitor emotional arousal, reduced emotional feedback to cognition might consequently limit his control over potential aggressive behaviors. Louth, Hare and Linden (1998) reported that alexithymia is strongly associated with a history of violence in offenders. This pattern may be resistant to remediation thereby limiting the moderating effect of incarceration or current treatment in affecting the offender's potential risk of reoffense, especially during times of stress. Alexithymics have violent outbursts without an

awareness of the feelings underlying their behavior (Krystal 1979). Such aggression combined with sexuality marked by distorted cognitions (with or without deviant sexual interests) and the opportunity to offend, may manifest itself in sexually aggressive behavior toward women and children. According to Bekendam (1997), alexithymics tend to resort to sexually aggressive behaviors as a maladaptive coping strategy. In line with this view, alexithymia may play a disinhibitive role in some sexual offenders' offense process in the form of impulsivity and/or maladaptive mood regulation strategies; either by decreasing negative mood states or increasing positive mood states through the planning, rehearsal and implementation aspect of the offense process. This trait may thereby contribute to the motivation to reoffend, and to the situational lack of empathy for the victim (i.e. even if empathy was present in the offender prior to the arousal).

In addition to the process outlined above, alexithymia may play another role in sexual offending. Alexithymic individuals have difficulty perceiving and comprehending the emotional expressions of others (Lane et. al. 1996), and are particularly focused on the externalized events of every day living. Thus, alexithymia prevents empathic responding because of the inability of those with this trait to imagine themselves in another person's situation (Bekendam 1997; Krystal 1979; Goleman 1995). This deficit may therefore contribute to severe impairments in developing intimate attachments in social relationships with others. Intimacy may be defined as the ability to connect interpersonally. The development of intimacy requires the cognitive and emotional skills to identify and communicate one's own feelings, in addition to interpreting emotional information communicated by others. Deficits in empathy and intimacy in sexual offenders may be related to their inability to make accurate inferences about the mental states of others (Ward, Keenan and Hudson 2000). Because alexithymics are unable to differentiate or

communicate emotion effectively, or to accurately identify the emotional states of others (Lane et al. 1996), enhancing intimacy and decreasing loneliness are central to the effectiveness of treatment and relapse prevention of certain sexual offenders (Marshall et al. 1997). If certain types of sexual offenders are alexithymic, it would be pertinent to add emotional literacy training as a prerequisite to the empathy and social skills training necessary for increased intimacy. This intervention may also increase the likelihood of treatment completion by facilitating the expression and modulation of negative emotions that characterize the iatrogenic effects of the confrontation necessary in sexual offender treatment.

Empathy deficits have long been the focus of sexual offender evaluation, research and treatment; although this research has failed to adequately explain the role of empathy in the sexual offending process (Polaschek 2003). Nonetheless, there has been clinical acceptance of the simple notion that a lack of empathic capacity in the sexual offender must serve a causal role in the offense process. Alternatively, some researchers believe that empathy may be dynamically suppressed during the sexual offense process (Ward, Keenan and Hudson 2000).

Empathy may be recognized as a two-stage process, containing both emotional and cognitive components (Davis 1983). The cognitive component of empathy involves *perspective taking* and the ability to correctly identify another person's feelings and thoughts. The emotional component of empathy may be described as the experiential sharing of feelings with another person. Marshall and Maric (1996) found incarcerated child molesters to be deficient in both the cognitive and emotional components of empathy, a finding that suggests they may also be alexithymic. Treatment strategies focused on teaching sexual offenders empathy and social skills that fail to address alexithymia, assume that the lack of perspective taking is a conscious

choice (Ward, Keenan and Hudson 2000). This may be an aspect of an involuntary predisposition – alexithymia.

Evidently, empathy is a multifaceted, complex construct (Tierney and McCabe 2001). Because of differences in operationally defining this entity, attempts to demonstrate faulty empathy development in sex offenders have resulted in conflicting findings. It is unfortunate that empathy-based research with sexual offenders has been unable to delineate standardization in objectives to increase empathy in sexual offender treatment (Marshall, Hamilton and Fernandez 2001). It is clear, however that some researchers are placing emphasis on the provision of preliminary training for sexual offenders to learn effective ways of recognizing, distinguishing and expressing emotions (Marshall, O'Sullivan and Fernandez 1996). It is believed by this researcher that this investigation of the alexithymia trait in sexual offenders may perhaps justify the relevance of such emotional processing interventions.

Several studies have demonstrated that child molesters are more socially inept than rapists. In 1986, Oberholser and Beck reported that child molesters were more fearful of negative evaluations, unassertive, socially inept and overly sensitive than control groups which included rapists and non-sexual criminals (Murray 2000). Perhaps these differences in social skill deficits are indicative of underlying alexithymic traits. In fact, according to Grabe, Spitzer and Freyberger (2001) low self-directedness, low reward dependence and harm avoidance are independent predictors for alexithymia, as well as interpersonal detachment, low resourcefulness, and shyness with strangers.

According to several researchers (Bumby and Hansen 1997; Dresnick 2003), child molesters demonstrate significantly less heterosocial competence than rapists (operationally defined as the ability to competently interact with members of the opposite sex). This lack of

social competence may be associated with the alexithymia trait, since alexithymics' difficulty with identifying and communicating emotions as well as an externalized viewpoint may be responsible for the inability to interact in social situations.

Some researchers believe that social skills training may be inappropriate, ineffective and counterproductive for the rapist in treatment. Research by Muehlenhard and Falcoln suggests that social skills training for rapists may enable them to have greater access to their victims and, thus, greater opportunity to engage in sexual coercion (Dreznick 2003). No doubt they are referring to a non-alexithymic rapist, who already possesses the ability to recognize his own and his victim's emotions to target the victim and create the opportunity for the rape to occur. Considering the results of Hudson et al. (1993), which found violent offenders to be the most accurate in emotional recognition tasks, one may predict that violent sexual offenders, such as rapists may also be as adept at emotional processing tasks. This research supports the hypothesis that rapists are not alexithymic.

With a unique perspective, Ward (1999) discusses the various competencies of sexual offenders (as opposed to a deficit model) and compares the novice to the expert sexual offender. He suggests that the ability of the expert offender to lead a double life, to deceive people close to them, to read vulnerability cues and to regulate their emotional states, to some degree indicates the presence of enduring skills. Ward compares the offender's skills to the experienced physician whose effective management of fear and anxiety is a manifestation of his medical expertise. Taking this viewpoint, it is unlikely that experienced sexual offenders (regardless of the victim's age) would be alexithymic. In this study however, the sexual offenders being tested are incarcerated and therefore may be more representative of Ward's concept of the novice, because they have been apprehended for their crimes.

Further evidence that child sexual abusers may process emotions differently than other sexual offenders comes from a study by Hudson et al. (1993). Hudson and his colleagues found that child molesters were less accurate in identifying emotions, than rapists. This research suggests that child molesters appear to have a general deficiency in emotional recognition skills (which corresponds with the cognitive aspect of generalized empathy) in comparison to rapists. This impairment in the recognition of emotional verbal and non-verbal cues and facial expressions of others is a central aspect of alexithymia (Lane et al. 1996). Therefore, it makes sense to predict that child molesters would be more alexithymic than rapists.

Purpose of the Study

A common thread in the current theoretical models of the causal and maintenance processes of sexual deviance is the role of affective control and regulation of emotional processes. Hence, it is surprising there is little research with sexual offenders focused on the subject of alexithymia. To provide accurate and effective services to the sex offender population, alexithymia as a contributory factor in victim empathy, relational competence, social skills and affect regulation must be more thoroughly investigated.

Statement of the Problem

Sexual offenders are often labeled generically and treated in group settings. Treatment approaches typically include social skills training, and other psychoeducational methods to increase self-awareness, interpersonal skills and victim empathy. However, several studies appear to support the hypothesis that child molesters, in comparison to rapists, may exhibit more severe deficits in their ability to process emotional information. Child molesters may be missing the prerequisite emotional literacy needed to benefit from treatment. For rapists, social skills training may enhance their grooming skills thereby increasing their ability to victimize others

(Dreznick 2003). Because of the different psychosocial deficits in these two populations, treatment strategies that may facilitate effective treatment outcome in one group, may be counterproductive for another.

Hypotheses

Individuals in this study were divided into two types of incarcerated male sexual offenders: child molesters and rapists. Participants in each group were tested for alexithymia to investigate the following hypotheses:

Hypothesis 1: Sexual offenders convicted of sexual crimes against children are more alexithymic than sexual offenders convicted of sexual crimes against adult victims.

Hypothesis 2: Sexual offenders convicted of sexual crimes against children are alexithymic.

Hypothesis 3: Sexual offenders convicted of sexual crimes against adult victims are not alexithymic.

CHAPTER 4

METHOD

One hundred seventeen convicted sexual offenders housed in a maximum-security prison in South Florida were invited to participate in this between-group study. This research design was chosen to compare two groups of sexual offenders' scores on the personality trait, alexithymia. Subjects were identified for selection from a correctional facility list of sexual offenders. Once chosen for selection, the inmates were given appointments and subsequently asked to volunteer for the study. The selection criteria utilized limited the sample to those inmates who were serving a sentence for at least one current sexual offense conviction involving physical, sexual contact with the victim. Excluding those sexual offenders, who did not have any physical, sexual contact with their victim, was crucial for attaining specificity in the selection of a representative sample of rapists and child molesters. This selection process would theoretically eliminate from the sample an exhibitionist with an adult victim, who is neither a child molester nor a rapist. Offenders were also eliminated if they met selection criteria for both the child molester and rapist samples. Further narrowing of the sample occurred after a thorough review of all available records, to determine the age of the victim. If the age of the victim could not be determined, the subject was excluded from the sample.

Inmates who raped victims greater than or equal to seventeen years of age were placed in the rapist group. Inmates who perpetrated sexual crimes on children less than or equal to thirteen years of age were placed in the child molester group. Given that the DSM-IV-TR (2000) stipulates that a pedophile's object of attraction is generally age thirteen or younger, this age cut-off was employed in order to create a representation of a pedophilic group. Several factors prohibited the evaluation of each subject to determine the existence of a DSM diagnosis. First,

there were time constraints applied to the project, due to fact that there is a continuous flow of prisoners being transferred in and out of the facility, to other prisons in the Florida Department of Corrections system. Once identified and selected for the study, their participation had to be immediate in order to prevent the possibility that the subject would be transferred to another facility prior to the completion of their assessment. In addition, child offenders tend to deny their behavior/fantasy pattern in the evaluation or psychological interview setting within the prison system. Thus, even if subjects consented to be interviewed about their criminal sexual behavior (not likely), it would be safe to assume that the offenders' defense mechanisms would limit full disclosure; concealing the recurrent nature of their fantasy and behavior patterns necessary to formulate a diagnostic impression.

All sexual offenders whose victims ranged in ages fourteen through sixteen were excluded to ensure a distinctive representative sample of child molesters versus non child-molesting sex offenders. Inmates convicted as juveniles were also excluded from selection, due to the inability to designate their behavior as deviant, or non-consensual. For example, a juvenile may be convicted of a sexual crime as a result of an explorative, consensual or non-consensual sexual relationship with a female several years his junior, however the DSM would not classify his behavior as deviant or pedophilic, due to the lack of establishing a pattern of adult deviant interest in prepubescent children. To ensure accurate comprehension of the assessment items, one mentally disordered inmate was excluded from participation due the presence of an Axis I diagnosis involving psychosis. In total, sixty-seven child molesters and fifty rapists were invited to participate.

Selected participants were given appointments and asked to report to a 20'x30' room located in one of the housing units. Subjects were tested in groups of approximately fifteen at a

time over a period of three days. Each group consisted of participants from both groups in order to eliminate researcher bias in the testing process. Once each group of inmates was seated, the researcher read a standardized introduction to the study (Appendix 2). The explanation included details about the purpose of the study, the assessment to be completed, confidentiality procedures and their right to refuse participation without consequence. Following this general explanation of the study and a brief overview of the expectations of each subject, offenders were given the opportunity to leave the testing room if they chose to refuse participation or if they did not possess the English language skills necessary for the testing process. Next, informed consent was obtained from each volunteer subject willing to participate. Each offender was required to sign two consent forms: a corporate mandated consent form and one created by the researcher (Appendix 3). It was explained to the inmates that following the completion of the research project, a summary of the general findings of the study would be available to them upon their request. It should be noted that because of the stigma attached to being a sexual offender in the prison system, and because the subjects were tested in groups, the summary excluded the fact that all of the inmates selected were sexual offenders. This precaution was taken to ensure the safety of the inmates who were asked to participate.

The researcher provided a brief explanation of how to respond on a Likert scale, prior to the administration of the assessment. To account for the variation of subject reading levels, the researcher read each item aloud to the participants, allowing as much time as needed for the subjects to circle their responses in between items. No time limits were imposed during the administration of the test and no explanations of test items were given to participants during the testing process.

Of the one hundred seventeen inmates chosen to participate, eighty-four completed the testing process. Twenty three inmates either refused to participate or did not show up for two consecutively scheduled appointments. One inmate was transferred to another correctional facility prior to testing, and the remaining nine inmates did not comprehend the English language well enough to participate in the study. Demographic and clinical data were collected for all subjects, some of which was gathered by researcher review of an offender database utilized by the Florida Department of Corrections. Additionally, each participant completed an informational survey asking for their race, age, educational level and history of special education, substance abuse history, mental health treatment history, and history of head trauma (Appendix 4).

Individuals were tested for alexithymia utilizing the 20-item Toronto Alexithymia Scale, developed by Taylor, Bagby and Parker in 1992. The TAS-20 measure was chosen for several reasons including its objective method of scoring, time-efficiency, ease for group administration, and its proven psychometric properties. This self-report assessment is the most widely used and best validated measure of the alexithymia construct (Taylor and Bagby 2000). Although alexithymia is a dimensional construct, and scores may be analyzed as a continuous variable, this three-factor scale has empirically established cutoff scores allowing for easy demarcation of alexithymic and non-alexithymic individuals. The test consists of twenty statements, for which an individual must choose a response on how much they agree or disagree with each statement. Responses on a five point Likert scale range from strongly disagree to strongly agree. Respondents circle 1 to indicate they strongly disagree, 2 for moderately disagree, 3 for neither disagree nor agree, 4 for moderately agree, and 5 for strongly agree. To obtain the total score, responses for items 4, 5, 10, 18 and 19 are reversed, and then the 20 responses are combined for

a total score. If a subject scores less than or equal to fifty-one, the subject is not considered to be alexithymic. Scores greater than or equal to sixty-one are indicative of alexithymia.

In addition to the total score on the TAS-20, each of the factors may be scored individually to examine three different areas of the alexithymia construct: difficulty identifying feelings (F1), difficulty communicating or describing feelings (F2) and externally oriented thinking (F3). Factor 1 measures an individual's ability to identify feelings, and includes items such as number 1: "I am often confused about what emotion I am feeling", and number 9: "I have feelings that I can't quite identify." This factor also includes items which assess difficulties with differentiating emotional and somatic states; e.g. number 3: "I have physical sensations that even doctors don't understand," and number 7: "I am often puzzled by sensations in my body." Factor 2 measures an individual's ability to describe feelings; Item number 2 reads: "It is difficult for me to find the right words for my feelings," and number 4 (one of the reversed items): "I am able to describe my feelings easily." Factor 3 measures one's tendency toward externally-oriented thinking and includes the following items: number 15: "I prefer talking to people about their daily activities rather than their feelings," number 8: "I prefer to just let things happen rather than to understand why they turned out that way," and number 19 (reversed item): "I find examination of my feelings useful in solving personal problems."

Normative data for the TAS-20 was constructed on an English-speaking male population with a mean age of 35.47 (SD = 12.55) and a mean education level of 14.75 years (SD = 2.42) (Parker, Taylor and Bagby 2002). The subjects' data was divided into two groups of sexual offenders: sexual offenders against adults and sexual offenders against children. The data was analyzed utilizing a two sample t-test to compare means, one-sample t-tests to assess group

deviations from the norm, Pearson correlation coefficients and independent t-tests to examine associations between alexithymia, demographic and clinical variables.

CHAPTER 5

RESULTS & DISCUSSION

One hundred seventeen incarcerated sexual offenders at a maximum-security prison in South Florida were selected to participate in this study. Demographics were collected for the eighty-four sexual offenders who consented to complete the assessment process: thirty-five were White (41.7%), thirty-four were Black (40.5%) and fifteen were Hispanic (17.9%). The ages of the participants ranged from 24 - 76 with an average age of 41.94. The majority of the offenders reported having either a high school diploma or a GED (56%), resulting in a mean educational level of 12.05 years. Of the sexual offenders tested, 40% reported a history of having a problem with drugs or alcohol, 31% reported a history of head injury that resulted in a loss of consciousness, 15.5% reported a history of taking psychiatric medication, 10% reported a history of special education placement and 4.8% reported a history of psychiatric hospitalization.

The rapist sample of thirty-five participants consisted of nine Whites (25.7%), twenty-one Blacks (60%), and five Hispanics (14.3 %). The mean educational level of the rapists was 11.91 (SD = 1.07), with 65.7% obtaining either a high school diploma or GED. The mean age was 43.31 years (SD = 9.82), with a range of 26 - 76. The forty-nine child molesters were comprised of twenty-six Whites (53.1%), thirteen Blacks (26.5 %), and ten Hispanics (20.4%). The age of the respondents in the child molester group ranged from 24 - 65 with a mean of 40.96 (SD = 11.56). The mean educational level was 12.14 years (SD = 2.15), the majority (49%) obtained a high school diploma or GED. Three of the child molesters (6.1%) were actively participating in a voluntary, 20-week, sexual disorder psychotherapy group (conducted by the researcher). Age, race and education level data are presented in Table 1.

Table 1

Demographic Characteristics of Sexual Offenders

		Rapists	Child Molesters	Total Sample
Age				
	20-30	11.4% (4)	24.5% (12)	19.0% (16)
	31-40	28.6% (10)	24.5% (12)	26.2% (22)
	41-50	42.9% (15)	30.6% (15)	35.7% (30)
	51-60	14.3% (5)	12.2% (6)	13.1% (11)
	60 +	2.9% (1)	8.2% (4)	6.0% (5)
Race				
	White	25.7% (9)	53.1% (26)	41.7% (35)
	Black	60.0% (21)	26.5% (13)	40.5% (34)
	Hispanic	14.3% (5)	20.4% (10)	17.9% (15)
Education				
	Grade 8 or <	2.9% (1)	8.2% (4)	6.0% (5)
	Some High School	14.3% (5)	14.3% (7)	14.3% (12)
	High School or GED	65.7% (23)	49.0% (24)	56.0% (47)
	Some College	17.1% (6)	18.4% (9)	17.9% (15)
	College Degree	0% (0)	10.2% (5)	6.0% (5)

To examine the relationship between sexual offending, alexithymia and other offender variables, clinical information was gathered based upon the self report of each respondent. Inmates answered questions regarding their history in these areas: substance abuse, head injury that resulted in a loss of consciousness, special education placement, and a history of psychiatric medication or hospitalization. The data for the rapist sample is summarized in Table 2 as follows: 57.1% reported a history of an alcohol or drug problem, 17.1% reported a history of special education placement as well as a history of psychiatric medication, 34.3% reported a history of a head injury that resulted in a loss of consciousness, and 8.6% reported a history of psychiatric hospitalization. The child molester data is summarized in Table 2 as follows: 28.6%

reported a history of alcohol or drug problems, 6.1% reported a history of special education placement, 28.6% reported a history of head injury that resulted in a loss of consciousness, 14.3% reported a history of taking psychiatric medication, and 2% reported a history of psychiatric hospitalization.

Table 2

Clinical History of Sexual Offenders

	Rapists	**Child Molesters**	**Total Sample**
History of:			
Substance Abuse	57.1% (20)	28.6% (14)	40.0% (34)
Special Education	17.1% (6)	6.1% (3)	10.0% (9)
Head Injury	34.3% (12)	28.6% (14)	31.0% (26)
Psychiatric Medication	17.1% (6)	14.3% (7)	15.5% (13)
Psychiatric Hospitalization	8.6% (3)	2.0% (1)	4.8% (4)

Hypothesis 1: Sexual offenders convicted of sexual crimes against children are more alexithymic than sexual offenders convicted of sexual crimes against adult victims. The rapist sample was hypothesized to score significantly lower for alexithymia than the child molesters. This hypothesis was partially supported. A two sample t-test procedure was performed for a comparison of means between groups. Mean differences were not significant between the rapists and child molesters with regard to the total TAS-20 scores (presented in Table 3). The total mean score on the TAS-20 for the rapists was 45.86 (SD = 14.80). The total mean score on the TAS-20 for the child molesters was 45.90 (SD = 12.51). These scores yielded a mean difference of .04. Factors 1, 2 and 3 on the subscales of the TAS-20 also showed no significant differences between the sex offender samples. Despite the lack of findings from a comparison of mean

scores, a finding worth mention is that in comparison to the rapists, a higher percentage of child molesters were alexithymic. Utilizing the recommended cutoff points, nine of the child molesters (18.4%) and six of the rapists (17.1%) scored in the highly alexithymic range. This finding is consistent with the prediction that the child molesters would be more alexithymic than the rapists, however the difference was not statistically significant. (See Table 4 for the frequencies and percentages of the TAS-20 scores for both sexual offender groups).

Hypothesis 2: Sexual offenders convicted of sexual crimes against children are alexithymic. It was hypothesized that child molesters would score in the alexithymic range. This hypothesis was not supported. The total TAS-20 scores for the child molester group produced a mean of 45.90 (SD = 12.51), which is well below the cutoff of 51; indicating the absence of alexithymia. In fact, the mean score of the child molesters was lower than the norm for the community population of males on the TAS-20 (Mean = 47.30, SD = 11.32). A one sample t-test was executed, however a mean difference of -1.4 (t = -.785) indicated no significant deviation from the norm for the child molester sample.

Hypothesis 3: Sexual offenders convicted of sexual crimes against adult victims are not alexithymic. It was hypothesized that the rapists would score in the non-alexithymic range. This hypothesis was confirmed, demonstrated by a mean score of 45.86 (SD = 14.80) on the TAS-20. As predicted, this score indicated the absence of alexithymia in the rapist group. A one sample t-test was performed to test for significant deviation from the norm. The mean difference between the norm and the rapist sample was -1.44 (t = -.577), which was not significant. This finding indicates that the rapist sample did not differ from the norm on the alexithymia scale.

Table 3

Mean Scores & Standard Deviations for 3 Factors and Total TAS-20 Scores in Sexual Offenders

		Factor 1-Difficulty Identifying Feelings	Factor 2-Difficulty Describing Feelings	Factor 3-Externally Oriented Thinking	Total TAS-20 Score
Rapists	Mean	14.74	12.34	18.77	45.86
	N	35	35	35	35
	S D	6.49	5.41	5.86	14.80
Child Molesters	Mean	14.35	12.51	19.04	45.90
	N	49	49	49	49
	S D	6.28	4.92	4.18	12.51
Total Sample	Mean	14.51	12.44	18.93	45.88
	N	84	84	84	84
	S D	6.33	5.10	4.92	13.42

Although not all the hypotheses were supported, a number of interesting findings are worth discussing with regard to alexithymia in sexual offenders. To examine differences in the histories of alexithymics and non-alexithymics, independent samples t-tests were performed. The Levene test for equality of variances resulted in equal variances for all categories of clinical history with the exception of special education. The largest effect was found in the category of substance abuse. There was a moderate but not statistically significant association between alexithymia and substance abuse history. Utilizing the recommended cutoff points for the TAS-20 (≥ 61 and ≤ 51), sexual offenders who scored in the alexithymic range reported a greater amount of substance abuse problems than the non-alexithymic sexual offenders ($p = .082$). This

finding is consistent with the fact that alexithymia is associated with maladaptive strategies of mood regulation such as substance abuse (Taylor, Bagby and Parker 1997).

Utilizing Pearson correlation coefficients, statistically significant findings emerged in relation to the demographic variables and alexithymia. Total TAS-20 scores were significantly correlated with years of education in a negative direction at the .01 significance level ($r = -.386$). This is consistent with preliminary findings which have demonstrated that the alexithymia construct is related to fewer years of education (Lane, Sechrest and Riedel 1998). All three factors of the TAS-20 were significantly correlated with each other at the .01 significance level. This finding substantiates the factorial reliability of the TAS-20.

Although upper and lower cutoff points were used in the analysis to categorize the samples (into alexithymics and non-alexithymics), a central tenet of the alexithymia construct is the fact that it is a continuous variable. The TAS-20 score measures the degree of alexithymia in the respondent, and thus scores may be presented in more than two discrete groups. Table 4 presents the frequencies and percentages of rapists and child molesters who fell into three categories of alexithymia: highly alexithymic, moderately alexithymic and non-alexithymic. In consideration of the dimensional nature of the alexithymia construct, twelve (34.3%) of the rapists and fifteen (30.6%) of the child molesters demonstrated a moderate to high degree of alexithymia; twenty-seven (32.1%) in the total sexual offender sample.

Table 4

Frequencies and Percentages for 3 Categories of TAS-20 Scores in Sexual Offenders

	Rapists	**Child Molesters**	**Total Sample**
Non-Alexithymic (TAS-20 ≤ 51)	23 (65.7%)	34 (69.4%)	57 (67.9%)
Moderately Alexithymic (TAS-20 = 52 – 60)	6 (17.1%)	6 (12.2%)	12 (14.3%)
Highly Alexithymic (TAS-20 ≥ 61)	6 (17.1%)	9 (18.4%)	15 (17.9%)
Total Moderate - High Alexithymia (TAS-20 ≥ 52)	12 (34.3%)	15 (30.6%)	27 (32.1%)

Treatment Implications

Since approximately one-third (32.1%) of the sexual offenders demonstrated alexithymic traits, alexithymia appears to be a significant deficit worth studying in the sexual offender population. This data provides a preliminary justification for targeting emotional literacy training among other focal areas in sexual offender treatment (e.g. decreasing denial, changing distorted cognitions supportive of sexual aggression, increasing victim empathy, social skills training, anger/stress management, substance abuse treatment, relapse prevention, etc.). However, as mentioned previously, the treatment of emotional processing deficits should not be generically provided to all sexual offenders who enter treatment. Offenders must be carefully assessed for alexithymia, preferably with several measures including not only the self-report TAS-20 but also observer-rated measures such as the BIQ and the CAQ-AP (Haivland et al. 2002). Although certain sexual offenders may under-report symptoms due to denial mechanisms

and/or social desirability, other offenders frequently exaggerate symptoms as a justification to decrease their level of personal responsibility for their crimes.

It is important to be cautious when treating certain types of sexual offenders who may ultimately utilize emotional literacy training to enhance their repertoire of predatory skills in social manipulation. Specifically, emotional processing training may increase an offender's ability to identify, target and groom their victims. Examples of such treatment-resistant offenders are those sexually disordered individuals with concomitant, severe Axis II characteristics, such as in Antisocial Personality Disorder (APA 2000) or psychopathy as assessed by objective measures of personality (Hanson and Bussiere 1998). Each sex offender entering a facility for treatment and/or punishment should be fully assessed for the presence of such contraindications by participating in a psychological evaluation. This evaluation should include a battery of standardized personality measures and a full psychosexual clinical assessment (including criminal background dating back to adolescence).

Once the presence of alexithymia has been established, the sex offender should enter individual therapy as a prerequisite to sexual offender group treatment. The goal of therapy is to increase the offender's likelihood of successful sexual offender treatment participation by decreasing alexithymia. Treatment objectives should include increasing the offender's ability to: 1) recognize and differentiate emotions, 2) regulate and tolerate negative affects (which inevitably arise during the course of sexual offender treatment), and 3) label and communicate emotional information to others.

To introduce the client to the therapeutic process, a psychoeducational approach may be utilized to explain the concept of alexithymia and how it is treated (Krystal 1979). The therapist should be directive yet supportive, to create the environment of respect and deliver a hopeful

message for alleviation of this emotional deficit. The therapeutic approach with alexithymics attempts to elevate emotions from a level of perceptually bound experience (of sensations and actions) to a conceptual representational level of feelings and thoughts (Lane and Schwartz 1987). To increase affect tolerance, clients are taught that states of emotional arousal are self-limited in duration and intensity, and are not to be feared or avoided, but observed (Krystal 1979). Behavioral techniques such as relaxation/autogenic training and biofeedback are beneficial. They focus not only on increasing awareness and regulation of bodily sensations, but also on how these physiological sensations are related to external life events (Taylor, Bagby and Parker 1997). In the later stages of therapy, body movement techniques and psychodrama may be particularly useful due to the physiological and experiential nature of these methods (Bekendam 1997). To increase the developmental level of emotional processing, expressive therapies such as art therapy, music therapy, and play therapy may help to develop emotional awareness and an internal focus. Additionally, eye movement desensitization reprocessing (EMDR), neuro-linguistic programming (NLP) and energy therapies such as thought field therapy (TFT) may decrease alexithymia because they work to break up the somatic registration of perceptions rather than the cognitive underpinnings of the disturbance.

After the prerequisite emotional skill-building phase is completed, clients should then be placed in a sexual offender treatment group. With an increased level of emotional competency their likelihood of successful treatment participation is increased. Hanson and Bussiere (1998) assert that non-successful therapeutic treatment involvement is a significant predictor of sexual recidivism. Therefore, it is critical to address (i.e. assess and treat) alexithymic traits prior to the commencement of group interventions with the sexual offender because of the relationship between the presence of this trait and attrition from treatment.

Limitations of the Study

There are several reasons why alexithymia may have been underrepresented in this sample. First, the self-report measure TAS-20 was the sole instrument utilized to assess the alexithymia trait. Although the authors of the TAS-20 recommend its usage for both clinical and research purposes, it is acknowledged that self-report measures may not adequately assess emotional and cognitive deficits that alexithymics may not know they have (Taylor, Bagby and Parker 1997). Therefore, it would be best to evaluate the outcome of the assessment within the context of clinical observations and/or additional measures. For example, three of the child molesters in this study were actively participating in a sexual disorder treatment group for offenders at the time of the testing. Although two of these child molesters scored in the nonalexithymic range, it is believed by the researcher (after more than 15 hours of clinical interactions and observations of these inmates) that both of these offenders exhibited the alexithymia trait. There are two possible explanations for their low scores on the instrument: either they were not consciously aware of their deficits, or they did not acknowledge them due to reasons of social desirability. Despite the assurances made regarding research confidentiality, it is common for incarcerated child molesters in treatment to display fear-based compliance with authority figures, thereby producing a *fake-good* response to the items on the assessment.

As Kroner and Forth (1995) point out, the TAS-20 is psychometrically sound for assessing criminal offenders, however those who have difficulty understanding their emotions may tend to endorse an "all or none heuristic of responding." Consistent with this viewpoint, therapists who provide services to criminals frequently characterize offenders as having distorted thought patterns which are typically expressed in terms of an absolutist, black-and-white presentation. The offenders may have been reluctant to choose response number 2 or 4 on the 5-

point Likert scale (indicating only moderate agreement or disagreement with an item), which could have lowered the total scores on the TAS-20.

Offenders with psychopathic personality traits tend to be grandiose and use pathological lying to gloss over personal inadequacies (Louth, Hare and Linden 1998). This may result in such offenders choosing non-alexithymic, socially desirable responses to TAS-20 items on Factor 1 which may be perceived as ego-dystonic (e.g. Item 1: I am often confused about what emotion I am feeling, Item 11: I find it hard to describe how I feel about people). Thus, although more time consuming, it may be a more comprehensive and accurate assessment of alexithymia if a combination of the BIQ, CAP-Q, and a structured interview were utilized in addition to the TAS-20 self-report measure.

Generalizability is typically related to sample size; larger samples being more representative of the population being studied. This is particularly true with a volunteer sample. Future studies with a larger sample size may lead to more statistically significant findings relative to alexithymia and sexual offending. Finally, it has been discussed by numerous researchers that the majority of sexual assaults are never reported or dealt with by the criminal justice system (Finkelhor 1986). Since most perpetrators of sexual violence are never apprehended, incarcerated samples may not be representative of the sexual offender population as a whole.

Conclusion

Due to the increased incidence and public awareness about sexually violent behavior in our society, there is an increasing demand for innovative and effective approaches to sexual offender evaluation and treatment (Drake and Ward 2003). Generally, psychotherapeutic treatment of sexual offenders is conducted in psychoeducational groups with a cognitive-

behavioral approach (Prentky 1999). Teaching social skills such as assertiveness and empathy is a central aspect of the typical sexual offender treatment plan (APA 1999). However, this approach may be counterproductive for the alexithymic sexual offender who has an externally-oriented style of cognition and an impaired emotional awareness. Because this trait precludes the ability to identify, differentiate, regulate and communicate emotion, providing empathy and social skills training to alexithymic sex offenders will intensify their internal discomfort and contribute to premature termination from treatment. In this investigation, approximately one-third of the sexual offenders demonstrated at least a moderate degree of alexithymia. Therefore, sexual offender treatment should be modified to increase the likelihood of success in ameliorating their sexually aggressive behavior. It is recommended that individual therapy designed to increase emotional competency, be added as a prerequisite to the sexual offender group treatment offered, to fit the treatment needs of these offenders.

To determine how to meet the specific needs of each individual sexual offender, a full personality assessment is recommended, which should include assessment of alexithymia. In therapy, a combination of psychoeducational and behavioral methods are recommended to guide the alexithymic client into increasing levels of self awareness and affective mastery (Krystal 1979; Taylor, Bagby and Parker 1997). It is imperative that clinicians have a working knowledge of alexithymia, to avoid misperceiving the behavior of sexual offenders with this trait who may appear cold and may display a low-frustration tolerance. A naïve clinician may inaccurately interpret these behavioral manifestations of alexithymia as a lack of motivation or focus in therapy. Severe impairments in emotional expression combined with misinterpretation by therapists, may lead to unsuccessful termination of treatment, and ultimately more sexual victimization by the perpetrator. A clinician must always communicate professionalism and

respect, considering the stigma the sexual offender in treatment has already experienced. This professionalism is especially important in the case of the alexithymic sex offender because of the difficulties he has with expressing feelings of guilt and shame associated with sexual offending.

Future studies utilizing multiple measures of alexithymia in combination with social desirability scales, may yield more significant outcomes in delineating the alexithymia trait in sexual offenders. The precise role of the alexithymia construct in the development of a sexual assault paradigm is open to conjecture. However this study provides preliminary evidence that further investigation into alexithymia with sexual offenders is warranted. Alexithymia is a significant impediment to effective psychotherapeutic treatment. Given the economic, social and psychological costs of sex offender recidivism in our society, alexithymia can no longer be excluded from a comprehensive approach to sexual offender assessment and treatment protocols.

APPENDIX 1

TORONTO ALEXITHYMIA SCALE (TAS-20)

Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements by circling the corresponding number. Give only one answer for each statement.

Circle 1 if you STRONGLY DISAGREE
Circle 2 if you MODERATELY DISAGREE
Circle 3 if you NEITHER DISAGREE NOR AGREE
Circle 4 if you MODERATELY AGREE
Circle 5 if you STRONGLY AGREE

	Strongly Disagree	Moderately Disagree	Neither Disagree Nor Agree	Moderately Agree	Strongly Agree
1. I am often confused about what emotion I am feeling.	1	2	3	4	5
2. It is difficult for me to find the right words for my feelings.	1	2	3	4	5
3. I have physical sensations that even doctors don't understand.	1	2	3	4	5
4. I am able to describe my feelings easily.	1	2	3	4	5
5. I prefer to analyze problems rather than just describe them.	1	2	3	4	5
6. When I am upset, I don't know if I am sad, frightened, or angry.	1	2	3	4	5
7. I am often puzzled by sensations in my body.	1	2	3	4	5
8. I prefer to just let things happen rather than to understand why they turned out that way.	1	2	3	4	5
9. I have feelings that I can't quite identify.	1	2	3	4	5
10. Being in touch with emotions is essential.	1	2	3	4	5

	Strongly Disagree	Moderately Disagree	Neither Disagree Nor Agree	Moderately Agree	Strongly Agree
11. I find it hard to describe how I feel about people.	1	2	3	4	5
12. People tell me to describe my feelings more.	1	2	3	4	5
13. I don't know what's going on inside me.	1	2	3	4	5
14. I often don't know why I am angry.	1	2	3	4	5
15. I prefer talking to people about their daily activities rather than their feelings.	1	2	3	4	5
16. I prefer to watch "light" entertainment shows rather than psychological dramas	1	2	3	4	5
17. It is difficult for me to reveal my innermost feelings, even to close friends.	1	2	3	4	5
18. I can feel close to someone, even in moments of silence.	1	2	3	4	5
19. I find examination of my feelings useful in solving personal problems.	1	2	3	4	5
20. Looking for hidden meanings in movies or plays distracts from their enjoyment.	1	2	3	4	5

APPENDIX 2

INSTRUCTIONS TO SUBJECTS

Thank you for your patience and welcome. My name is Ms. Kalkstein. I am a Psychological Specialist at this facility, but today I stand before you as an independent researcher. I am inviting you to participate in a study designed to gain a better understanding of the relationship between personality and criminal history. This independent research study has no connection to the Florida Department of Corrections or to this facility. Although I have been given approval by DOC and the corporation to conduct this research, they will not have access to the information I collect from this project. If you volunteer to participate in this research, your contribution will be greatly appreciated. If you do not wish to participate in this study, you are free to refuse without penalty.

The information you provide will be kept strictly confidential and will not appear on any documents including your medical, psychological, or classification records. Your identity will not be revealed. Your consent forms will be the only documents containing your name, and these will be kept separate from your questionnaires. Your participation will take approximately 20 minutes to complete a brief survey, and a 20-item questionnaire. I will read each of the 20 items aloud, and you will be asked to circle how much you agree or disagree with each statement on a scale from 1-5. You will be asked to remain silent while selecting your responses. There are no right or wrong answers to these questions.

You must be able to speak and understand the English language to take part in this study. If you can speak and understand English, but have difficulty reading, you may still participate since I will be reading the questions aloud.

If you do not speak English, please raise your hand at this time. (Researcher will raise hand and say, “No habla ingles?”)

I want to thank those of you who are willing to participate. Please remain in your seats. We will begin momentarily.

Please raise your hand now if you do not want to be a part of this voluntary study.

APPENDIX 3

INFORMED CONSENT

I hereby give consent to participate in an independent research study, approved by the Florida Department of Corrections. I understand that the purpose of this study is to gain a better understanding of the relationship between personality factors and criminal history.

I understand that my participation involves filling out a brief survey and a 20-item questionnaire, which will take approximately 20 minutes. I understand that there are no foreseeable risks or benefits from my participation, because this is not a treatment study.

I understand that my participation is completely voluntary and I am free to refuse without penalty. I understand that my participation in this study will have no effect on my mental health status, sentence, parole, or disciplinary record. I understand that all information will be kept strictly confidential, which means that my identity will not be revealed. I understand that information collected from this research will not appear in any of my medical, psychological or classification records, and will only be available to the researcher, T. Kalkstein, M.S., Psychological Specialist, and the research supervisor, T. O'Higgins, Ph.D., Senior Psychologist. I understand that if I have any questions or comments about this research following my participation, I may write a request addressed to the mental health department.

I am a voluntary participant of the above research and understand that information given is to be used in research and possibly will result in a published document. I understand that my identifying information will remain confidential and will not be revealed in any published documents.

My signature below indicates that I agree to the above conditions and therefore give consent to participate in this research:

Inmate Signature: _____ DC#: _____

Last Name (Print): _____ First Name (Print) _____ Date:_____

Researcher Signature: _____ Date:_____

FACILITY RESEARCH CONSENT FORM

I FREELY AGREE TO PARTICIPATE IN THE RESEARCH PROJECT ENTITLED

Personality and Criminal History

I fully realize that my participation is of my choosing, and I agree not to hold Correctional Facility responsible. The project has been completely and satisfactorily explained to me and all my questions have been satisfactorily answered. I further understand that I will not be compensated in any way for participation in this research program.

SIGNATURE OF INMATE DC# DATE

SIGNATURE OF WITNESS DATE

APPENDIX 4

PARTICIPANT INFORMATION

DC #_____ Age_____

Race/Ethnicity (Circle): African American
Caucasian
Hispanic
Asian American
Other (Specify) _____

Highest Grade Level Completed _____

(Circle): GED
H.S.Diploma
College: 1 2 3 4
Postgraduate (Specify) _____

Have you ever had an Alcohol or Drug Problem?
(Circle): YES NO

Have you ever been enrolled in Special Education? (Circle): YES NO
If YES, (Circle): SLD EH Other _____

Have you ever had a Head Injury Causing Loss of Consciousness?
(Circle): YES NO

Have you ever taken medication prescribed to you for mental health/psychological reasons?
(Circle): YES NO

Have you ever been hospitalized due to mental health/psychological problems?
(Circle): YES NO

SELECTED BIBLIOGRAPHY

American Psychiatric Association. 1999. *Dangerous sex offenders: A task force report of the American Psychiatric Association*. Washington, D.C., American Psychiatric Association.

American Psychiatric Association. 2000. *Diagnostic Statistical Manual of Mental Disorders, 4th Edition, Text Revised*. Washington, D.C., American Psychiatric Association.

Abel, G. G., Becker, J. V., Blanchard, E. B., and Flanagan, B. 1981. The behavioral assessment of rapists. In J. Hays, T. Roberts, and Solway, K. eds., *Violence and the violent individual*, 211-230. Holliswood, NY: Spectrum Publications.

Abel, G. G. and Rouleau, J. L 1990. The nature and extent of sexual assault. Part I Chapter 1 in *Handbook of Sexual Assault: Issues, Theories and Treatment of the Offender,* ed. Marshall, W. L., Laws, E. R., and Barbaree, H. E, 9-21. New York: Plenum Press.

Appelbaum, S. A. 1973. Psychological-mindedness: word, concept, and essence. *International Journal of Psychoanalysis*, 54, 35-45.

Araji, S., and Finkelhor, D. 1986. Abusers: A Review of the Research. Chapter 3 of *A Sourcebook on Child Sexual Abuse,* Finkelhor, D. and Associates, 89-118. U.S: Sage Publications.

Baron, L. and Straus, M. A. 1989. *Four Theories of Rape in American Society: a state-level analysis.* New Haven and London: Yale University.

Bekendam, C. C. 1997. Dimensions of emotional intelligence: Attachment, affect regulation, alexithymia and empathy. Unpublished doctoral dissertation, The Fielding Institute, Santa Barbara, CA.

Berthoz, S., Artiges, E., Van de Moortele, P. F., and Poline, J. B. 2002. Effect of impaired recognition and expression of emotions on frontocingulate cortices: An fMRI study of men with alexithymia. *American Journal of Psychiatry*, 159, no. 6: 961-7.

Booth-Butterfield, M. and Booth-Butterfield, S. 1990. Conceptualizing affect as information in communication production. *Human Communication Research*, 16, 451—76.

Brownmiller, S. 1975. *Against our will: Men, women and rape.* New York: Simon and Schuster.

Bumby, K. M., and Hansen, D. J. 1997. Intimacy deficits, fear of intimacy, and loneliness among sexual offenders. *Criminal Justice and Behavior*, 24, 315-331.

Conte, H. R., Plutchik, R., Jung, B. B., Picard, S., Karasu, T. B., and Lotterman, A. 1990. Psychological mindedness as a predictor of psychotherapy outcome: A preliminary report. *Comprehensive Psychiatry*, 31, 426-431.

Davis, M. 1983. Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113-126.

Dreznick, M. 2003. Heterosocial competence of rapists and child molesters: a meta-analysis. *The Journal of Sex Research*, May, 40, i2: 170(9).

Drake, C. R. and Ward, T. 2003. Treatment models for sex offenders: A move toward a formulation-based approach. Part II Chapter 13 of *Sexual deviance: Issues and controversies*, ed. Ward, T., Laws, D. R., Hudson, S. M., 172-189. Thousand Oaks: Sage Publications.

Epstein, S. 1998. *Constructive thinking: The key to emotional intelligence*. New York: Praeger.

Finkelhor, D. 1984. *Child sexual abuse: New theory and research*. New York: Free Press.

Finkelhor, D. 1994. Current information on the scope and nature of child sexual abuse. *The Future of Children*, 4, no. 2: 31-53.

Freud, S. 1953. Three essays on the theory of sexuality. In *The Complete Psychological Works of Sigmund Freud*, Standard ed, vol. 7, London: Hogarth Press. (Original work published 1905)

Goleman, D. 1995. *Emotional intelligence*. New York: Bantam Books.

Grabe, H. J., Spitzer, C., Freyberger H. J. 2001. Alexithymia and the temperament and character model of personality. *Psychotherapy and Psychosomatics*, 70, no 5: 261-267.

Gross, J. J. 2002. Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, 39: 281-291.

Groth, A. N. 1979. *Men Who Rape: The psychology of the offender*. New York and London: Plenum Press.

Haivland, M.G., Warren, W. L., Riggs, M. L., and Nitch, S. R. 2002. Concurrent validity of two observer-rated alexithymia measures. *Psychosomatics*, 43: 472-477.

Hall, G. C. N., and Hirschman, R. 1992. Sexual aggression against children: A conceptual perspective of etiology. *Criminal Justice and Behavior*, 19, 8-23.

Hanson, K. R., and Bussiere, M. T. 1998. Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, no. 2: 348-362.

Hensley, C. and Tewksbury, R. 2003. The social construction of sexual deviance. Introduction in *Sexual deviance: a reader*. ed. Hensley, C. and Tewksbury, R., 1-8, Colorado and London: Lynne Rienner Publishers, Inc.

Howitt, D. 1995. *Paedophiles and sexual offences against children.* England: John Wiley & Sons.

Hudson, S. M., Marshall, W. L., Wales, D., McDonald, E., Bakker, L. W., and McLean, A. 1993. Emotional recognition skills of sex offenders. *Annals of Sex Research*, 6: 199-211.

Kano, M., Fukudo, S., Gyoba, J., Kamachi, M., Tagawa, M., Mochizuki, H., Masatoshi, I., Hongo, M., and Yanai, K. 2003. Specific brain processing of facial expressions in people with alexithymia: an $H_2^{15}O$-PET study. *Brain: A journal of neurology*, 126, 6, 1474-1484.

Knight, R. A. and Prentky, R. A. 1990. Classifying sexual offenders: The development and corroboration of taxonomic models. Part I Chapter 3 of *Handbook of Sexual Assault: Issues, Theories and Treatment of the Offender*, eds. Marshall, W., Laws, D. R. and Barbaree, H. E. New York: Plenum Press.

Koss, M. P. 1993. Rape: Scope, impact, interventions and public policy responses. *American Psychologist*, 48, 1062-1069.

Koss, M. P. and Leonard, K. E. 1984. Sexually aggressive men: empirical findings and theoretical implications. In *Pornography and sexual aggression*, ed. N. Malamuth and E. Donnerstein, 213-32. New York: Academic Press.

Kroner, D. and Forth, A. E. 1995. The Toronto Alexithymia Scale with incarcerated offenders. *Personality and Individual Differences*, 19, no. 5: 625-634.

Krystal, H. 1979. Alexithymia and psychotherapy. *American Journal of Psychotherapy*, 33, 17-31.

Kutchins, H. and Kirk, S.A. 1997. *Making us crazy: DSM: The psychiatric bible and the creation of mental disorders.* New York: Free Press.

Lane, R., Quinlan D., Schwartz, G., Walker, P., and Zeitlin, S. 1990. The levels of emotional awareness scale: a cognitive-developmental measure of emotion. *Journal of Personality Assessment*, 55, 124-134.

Lane, R., Sechrest, L., and Riedel, R. 1998. Sociodemographic correlates of alexithymia. *Comprehensive Psychiatry*, 39, no. 6: 377-385.

Lane, R., Sechrest, L., Riedel, R., Shapiro, D., and Kaszniak, A. 2000. Pervasive emotion recognition deficit common to alexithymia and the repressive coping style. *Psychosomatic Medicine*, 62, no. 4: 492-501.

Lane, R., Sechrest, L., Reidel, R., Weldon, V., Kaszniak, A., and Schwartz, G.E. 1996. Impaired verbal and nonverbal emotion recognition in alexithymia. *Psychosomatic Medicine*, 58, no. 3: 203-210.

Lane, R. D., and Schwartz, G. E. 1987. Levels of emotional awareness: a cognitive-developmental theory and its application to psychopathology. *American Journal of Psychiatry,* 144, 133-143.

Langevin 1983. *Sexual Strands*. Hillsdale, N.J.: Erlbaum.

Lanyon, R. I. 2001. Psychological Assessment Procedures in Sex Offending. *Professional Psychology: Research and Practice*, 32, no. 3: 253-260.

Lanyon, R. I. 1991. Theories of Sex Offending. Part 1 Chapter 2 of *Clinical Approaches to Sex Offenders and Their Victims*, ed. Hollin, C. R. and Howells, K., 35-54. West Sussex, England: John Wiley and Sons, Ltd.

Laws and Marshall 1990. A Conditioning Theory of the Etiology and Maintenance of Deviant Sexual Preference and Behavior. Part III Chapter 13 of *Handbook of Sexual Assault: Issues, Theories and Treatment of the Offender*, eds. Marshall, W., Laws, D. R. and Barbaree, H. E. New York: Plenum Press.

Lottes, I. L. 1988. Sexual socialization and attitudes toward rape. Part 2 Chapter 12 of *Rape and Sexual Assault II*, ed. Burgess, A. W., 193-220. New York and London: Garland Publishing, Inc.

Louth, S. M., Hare, R. D., and Linden, W. 1998. Psychopathy and alexithymia in female offenders. *Canadian Journal of Behavioural Science*, 30, no. 2: 91-98.

Luminet, O., Bagby, M., and Taylor, G. 2001 An evaluation of the absolute and relative stability of alexithymia in patients with major depression. *Psychotherapy and Psychosomatics*. 70, no. 5: 254-260.

Malamuth, N. 1981. Rape proclivity among males. *Journal of Social Issues*, 37, 138-57.

Maletzky, B. M. 1991. *Treating the sexual offender*. Newbury Park, CA: Sage.

Marolla, J. and Scully, D. 1982. *Attitudes toward women, violence and rape: A comparison of Convicted rapists and other felons.* Rockville, Md.: National Institute of Mental Health.

Marshall, W. L. and Barbaree, H. E. 1990. An Integrated Theory of the Etiology of Sexual Offending. Part III Chapter 15 of *Handbook of Sexual Assault: Issues, Theories and Treatment of the Offender*, eds. Marshall, W., Laws, D. R. and Barbaree, H. E. New York: Plenum Press.

Marshall, W., Champagne, F., Brown, C., and Miller, S. 1997. Empathy, intimacy, loneliness, and self-esteem in nonfamilial child molesters: A brief report. *Journal of Child Sexual Abuse*, 6, 87-98.

Marshall, W. and Maric, A. 1996. Cognitive and emotional components of generalized empathy deficits in child molesters. *Journal of Child Sexual Abuse*, 5, 101.

Marshall, W., Fernandez, Y. M., and Cortoni, F. 1999. Rape. Part IV Chapter 13 of *Psychological Approaches to Violent Offenders: Contemporary Strategies and Issues,* ed. Van Hasselt, V. B. and Hersen, M, 267-300. New York: Kluwer Academic/Plenum Publishers.

Marshall, W., Hamilton, K., and Fernandez, Y. 2001. Empathy deficits and cognitive distortions in child molesters. *Sexual Abuse: A Journal of Research and Treatment*, 13, 123-130.

Martin, J. B. and Pihl, R. 1986. Influence of alexithymic characteristics on physiological and subjective stress response in normal individuals. *Psychotherapy and Psychosomatics*, 45, 66-77.

Martínez-Sáncehez, F., M. Ato-García, and B. Ortiz-Soria. 2003. Alexithymia-State or Trait? *The Spanish Journal of Psychology* 6, no. 1: 51-59.

Matson, S. 2002. Sex offender treatment: A critical management tool. *Corrections Today*, 64, 6, 114-117.

Matthews, G., M. Zeidner, and R. D. Roberts. 2002. The Clinical Psychology of Emotional Maladjustment. Chapter 10 of *Emotional Intelligence: Science and Myth*, 387-400. Cambridge: Massachusetts Institute of Technology

McConaghy, N. 1999. Paraphilias. Part IV Chapter 12 of *Psychological Approaches to Violent Offenders: Contemporary Strategies and Issues,* ed. Van Hasselt, V. B. and Hersen, M, 267-300. New York: Kluwer Academic/Plenum Publishers.

McGrath, R. J. and Purdy, L. A. 1999. Referring sex offenders for psychosexual evaluation: A review. *Journal of Addictions and Offender Counseling*, 19, no. 2: 62-75.

Money, J. 1988. *Gay, Straight, and In-Between*. New York: Oxford University Press.

Murray, J. B. 2000. Psychological profile of pedophiles and child molesters. *The Journal of Psychology*, 134, 2: 211-224.

Nelson, M., Herlihy, B., Oescher, J. 2002. A survey of counselor attitudes towards sex offenders. *Journal of Mental Health Counseling*, 24, 1: 51-67.

Papicak, A. S., Feurestein, M. and Speigel, J. A. 1985. Stress reactivity in alexithymia: Decoupling of physiological and cognitive responses. *Journal of Human Stress*, 11, 135-142.

Parker, J. D. A., Taylor, G. J., and Bagby, R. M. 2003. The 20-Item Toronto Alexithymia Scale III. Reliability and factorial validity in a community population. *Journal of Psychosomatic Research*, 55, 269-275.

Pithers, W. D. 1990. Relapse Prevention with Sexual Aggressors: A Method for Maintaining Therapeutic Gain and Enhancing External Supervision. Part IV Chapter 20 of *Handbook of Sexual Assault: Issues, Theories and Treatment of the Offender*, eds. Marshall, W., Laws, D. R. and Barbaree, H. E. New York: Plenum Press.

Porcelli P., Taylor, G. J., Bagby, R. M., and De Carne, M. 1999. Alexithymia and functional gastrointestinal disorders: a comparison with inflammatory bowel disease. *Psychotherapy and Psychosomatics*, 68, no. 5: 263-269.

Polaschek, D. L. L. 2003. Empathy and victim empathy. Part I Chapter 10 of *Sexual Deviance: Issues and Controversies*, ed. Ward, T., Laws, D. R., Hudson, S. M, 172-189. Thousand Oaks: Sage Publications.

Polaschek, D. L. L. 2003. The classification of sex offenders. Part I Chapter 9 of *Sexual Deviance: Issues and Controversies*, eds. Ward, T., Laws, D. R., Hudson, S. M, 172-189. Thousand Oaks: Sage Publications.

Prentky, R. A. 1999. Child Sexual Molestation. Part IV Chapter 14 of *Psychological Approaches to Violent Offenders: Contemporary Strategies and Issues,* ed. Van Hasselt, V. B. and Hersen, M, 267-300. New York: Kluwer Academic/Plenum Publishers.

Quinsey, V. L. and Lalumiere, M. L. 1996. *Assessment of sexual offenders against children: The APSAC study guides*, Vol. 1, ed. Conte, J. R., Thousand Oaks: Sage Publications.

Rada, R. T., Laws, D. R., Kellner, R., Stivastava, L., and Peake, G. 1983. Plasma androgens in violent and nonviolent sex offenders. *Bulletin of the American Academy of Psychiatry and the Law*. 11, 149-158.

Roedema, T. M., and Simons, R. F. 1999. Emotion processing deficits in alexithymia. *Psychophysiology*, 36, 379-387.

Salovey, P. and Mayer, J. D. 1990. Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.

Sanday, P. R. 1981. The socio-cultural context of rape: A cross-cultural study. *Journal of Social Issues*, 37, 5-27.

Shill, M., and Lumley, M. 2002. The psychological mindedness scale: Factor structure, convergent validity and gender in a non-psychiatric sample. Psychology and Psychotherapy, 75, 2, 131.

Sifneos, P. E. 1972. *Short-term psychotherapy and emotional crisis*. Cambridge (MA): Harvard University Press.

Sifneos, P. E. 2000. Alexithymia, clinical issues, politics and crime. *Psychotherapy and Psychosomatics*. 69, no. 3: 113-116.

Taylor, G. J. 2000. Recent developments in alexithymia theory and research. *The Canadian Journal of Psychiatry*, 45: 134-142.

Taylor, G. J., and R. M. Bagby. 2000. An Overview of the Alexithymia Construct. Chapter 3 of *Handbook of Emotional Intelligence*, ed. R. Bar-on and J. D. A. Parker, 40-67. San Francisco: Jossey-Bass.

Taylor, G. J., Bagby, R. M., and Luminet, O. 2000. Assessment of alexithymia. Chapter 14 of *Handbook of Emotional Intelligence*, ed. R. Bar-on and J. D. A. Parker, 301-319. San Francisco: Jossey-Bass.

Taylor, G. J., Bagby, R. M., and Parker, J. D. A. 1997. *Disorders of affect regulation: Alexithymia in medical and psychiatric illness*. Cambridge (UK): Cambridge University Press.

Taylor, G. J., Bagby, R. M., and Parker, J. D. A. 2003. The 20-Item Toronto Alexithymia Scale IV. Reliability and factorial validity in different languages and cultures. *Journal of Research*, 55, 277-283.

Taylor, G. J., Ryan, D., and Bagby, R. M. 1985. Toward the development of a new self-report alexithymia scale. *Psychotherapy and Psychosomatics*, 44, 191-199.

Tierney, D. W. and McCabe, M. P. 2001. An evaluation of self-report measures of cognitive distortions and empathy among Australian sex offenders. *Archives of Sexual Behavior*, 30, 5, 495.

Ward, T. 1999. Competency and deficit models in the understanding and treatment of sexual offenders. *The Journal of Sex Research*, August v36 i3 p298.

Ward, T., Keenan, T., and Hudson, S. M. 2000. Understanding cognitive, affective and intimacy deficits in sexual offenders: A developmental perspective. *Aggression and Violent Behavior*, 5, no. 1: 41-62.

Ward, T. and Sorbello, L. 2003. Explaining Child Sexual Abuse: Integration and Elaboration. Part I Chapter 1 of *Sexual Deviance: Issues and Controversies*, ed. Ward, T., Laws, T. and Hudson, S., 3-20. Thousand Oaks: Sage Publications.

Zeitlin, S. B., Lane, R. D., O'Leary, D. S., and Schrift, M. J. 1989. Interhemispheric transfer deficit in alexithymia. *American Journal of Psychiatry*, 146, no. 11: 1434-1439.