Project STOP

Cognitive Behavioral Assessment and Treatment for Sex offenders with Intellectual Disability

Christine Maguth Nezu, Jeffrey Greenberg, and Arthur M. Nezu

Abstract

In this brief article, we provide relevant background concerning the prevalence, characteristics and vulnerabilities of intellectually disabled (ID) sex offenders, as well as scientifically-informed guidelines for treatment. Finally, we provide a description of Project STOP, an outpatient cognitive behavioral assessment and treatment program.

Keywords: intellectually disabled, sex offenders, cognitive behavioral assessment and treatment, problem solving, intervention

Introduction

Sex offending behavior in persons with intellectual disabilities (ID) is a serious problem with significant and long-term consequences for the victims, offenders, and their communities (Barron, Hassiots, & Banes, 2002). A growing awareness of such problems in persons with ID requires effective solutions with regard to assessment and treatment.

Defining Sex Offending

The term sex offender is a broad one that is applied to individuals who commit a sex offense (Lanyon, 2001). Examples of sex offenses include sexual conduct with a minor and forcible, nonconsensual sexual acts toward an adult, including sexual acts involving an individual who is unable to give consent for sexual acts. Moreover, people who sexually offend may be diagnosed with additional psychological or behavioral disorders, including s, deviant sexual interests, mood or anxiety disorders, psychotic disorders, personality disorders, brain injury, or ID, such as mental retardation. Thus, sex offenders represent a heterogeneous population for which few generalizations can be made regarding etiology, assessment, or treatment that can be easily applied to all offenders.

Sex Offenders with Intellectual Disabilities

The prevalence of people with mental retardation among sex offenders is estimated between 10 and 15% (Murphy, Coleman, & Haynes, 1983) and much higher if persons with borderline intellectual functioning are included in this estimate. However, there is no support for a direct or causal association between intellectual functioning and sex offending behavior (McCurry et al., 1998), and estimated rate may be partially due to the decreased likelihood that people with ID can evade detection and arrest.

When compared to other sex offenders, the availability and investigation of effective treatment programs for ID offenders has lagged far behind those of than their non-disabled cohorts (Barron, Hassiotis, & Banes, 2002; Lindsay, 2002; Timms & Goreczny, 2002;). In order to develop effective interventions for this population, it is important to understand what diathetic factors contribute to the development of sex offending behavior in persons with ID. This requires an integration of existing scientific knowledge concerning both sex offending treatment and the unique challenges to sexuality concerning persons with ID.

Unique Challenges of Sexual Risk for ID Offenders

Due to a history of institutionalization, the sexual of lives of persons with ID have been historically under society's control (Kempton & Kahn, 1991; Pitceathly & Chapman, 1985). Such societal controls, including and sterilization, were viewed as acceptable prevention methods and no education in sexuality or treatment for sexual disorders were provided (Woodill, 1992).

Despite several decades of a nationwide de-institutionalization and a trend toward community integration, negative community biases still serve as obstacles to the adaptive sexual expression of people with ID. One extreme stereotypic view characterizes people with ID as having uncontrollable sexual desires. An alternative, but equally extreme view is that they are innocent and naïve persons who have no sexual desire (Szollos & McCabe, 1995). It is unfortunate that such views prevail, because significant restrictions concerning sexuality continue to occur. Without the support from caregiving systems to provide accurate and effective sexual educative experiences, the sexual knowledge that an individual inadvertently learns can be subject to significant distortion and misinterpretation (Jurkowski & Amado, 1993).

Another unique challenge for ID individuals is that, due to their dependency on residential and community living situations, people with ID are often the victims of sexual exploitation or abuse themselves (Schoen & Hoover, 1990); however, they may lack access to the legal support or psychotherapy alternatives that are available to non-disabled individuals (Prout & Drabik, 2003). Moreover, cognitive limitations, expressive speech deficits, and limited adaptive skills can further complicate their experience of victimization and create challenges to psychological evaluation when it is available (Nezu, Nezu, & Gill-Weiss, 1992). Without effective remediating experiences, the likelihood that a former victim may become a future offender is may be increased.

Sex Offending Vulnerability Characteristics

Cognitive and behavioral explanatory models of sexual offense behavior have evolved over the past few decades. Initially, such models were rooted in theories of conditioning and deviant arousal (Maguire, Carlisle, & Young, 1965). However, research has not supported deviant arousal as a sole causal factor (Nezu, et al., in press). For example, there are men who experience deviant arousal, but do not carry through with their behavior and commit a sexual offense.

Other models attempt to explain sex offending by focusing on the aggressive or coercive aspect of the behavior, emotional dyscontrol, poor coping skills, and lack of social competency, as problems related to offending (Marshall, Anderson, & Fernandez, 1999; Marshall & Barbaree, 1990). Consistent with social cognitive processing theories, sex offenders may also lack social and interpersonal skills, and use sexual aggression to solve their personal problems (Nezu, Nezu, Dudek, Peacock & Stoll, 2005). Other models explain sex offending with a focus on interpersonal vulnerabilities resulting from the offender's own history of abuse or neglectful family backgrounds (Hall, 1996; Prentky, Knight, & Lee, 1997). For example, several offenders treated at our clinic, as a way of coping with their own history of physical or sexual abuse, developed attributions that support the belief that they are victims who must fight and control others, in the service of self-preservation. In such cases, there may be little desire to change, and this can significantly interfere with treatment progress while simultaneously increase reoffense risk (Tierny & McCabe, 2002; Nezu, Nezu & Dudek, 1998). If this coping style exists, additional factors such as alcohol or drug abuse, which further reduce behavioral control of impulses, can serve to increase one's potential to sexually offend. For example, John, a 36 year old offender in our clinic, who was convicted of the rape of an 82-year old neighbor saw himself as a victim of his neighbor's desire to "have an affair." As a child, John had been locked in a dark basement for days at time. During this time,

he reportedly "learned" that he had to "stand up for what he wanted" because no one cared about him. He was most likely to act on these impulses when he drank.

Finally, specific developmental vulnerabilities may present unique challenges to understanding ID sex offenders, because longstanding developmental deficits in social information processing ability have been associated with aggression in recent studies (Basquill, Nezu, Nezu, & Klein, 2004; Fuchs & Benson, 1995). For example, one offender we treated, Tony, exhibited a developmental impairment with perspective taking, such that he was unable to separate another person's intention from the actual outcome of a situation. For example, when he experienced arousal, he was certain that this outcome was the intention of the individual to which he was attracted.

At present, rather than a clear consensus as a "cause" of sex offending, the literature supports the notion that many different risk factors collectively result in a general <u>vulnerability</u> to commit a sex offense (Marshall, Anderson, & Fernandez, 1999). In other words, various cognitive and behavioral learning theories provide us with an understanding of the different pathways of vulnerability factors that either alone or in combination lead to offending behavior (Marshall, et al., 1999). When learning is <u>deviant</u> or <u>deficit</u> in any one or a combination of these areas, it can lead to an increased offending risk.

Deviance Vulnerability

Theoretically rooted in sexual conditioning theories, one path to sexual offending is deviant sexual desires (Marshall et al., 1999). This view has been supported through repeated observation of a relation between phallometrically assessed fantasies and sexually deviant behavior (Prentky & Knight, 1991). Although there have been no published studies regarding the deviant arousal characteristics of sex offenders with ID, our clinical experience suggests that, as is the case with nondisabled offenders, arousal patterns are quite heterogeneous but are often functionally related to sex offending behavior.

In addition to deviant fantasies, the literature concerning nondisabled offenders has supported the presence of other characteristic deviant cognitions associated with sex offending risk (Bumby, 1996; Garland & Dougher, 1991). These include a tendency toward self-serving bias, and frequent use of denial, minimization, and rationalization to justify offense. These deviant thought patterns have also been observed in sex offenders with ID (Nezu, et al., 1998).

Due to the difficulty in determining whether offending behavior itself is sexually deviant or sexually inappropriate, Hingsburger and colleagues (1991) have developed the term, *counterfeit deviance* to describe behavior that is topographically deviant but found to be causally related to other factors. This view of other factors as the important causal link to deviant sexual behavior is focused on vulnerabilities associated with deficits.

Deficit Vulnerability

The deficit view of sex offending behavior links problems of social incompetence, poor interpersonal skills, and poor coping skills, to risk for offense (Marshal, et. al., 1999). There may be few differences between populations of ID and non-disabled offenders with regard to the nature of these deficits (Demetral 1993; Murphy, Coleman, and Haynes, 1983). They include lack of information about sexual expression, interpersonal deficits associated with a history of victimization, poor assertiveness and social skills, poor problem-solving ability, poor emotional recognition or tolerance, verbal and physical challenges, lack of education concerning sex and intimacy, and limited social opportunities (Nezu, et. al., in press).

Guidelines for Assessment of Vulnerability with ID Offenders

Consistent with the practice parameters for assessment of individuals with developmental disabilities and co-morbid behavioral disorder, a comprehensive diagnostic assessment should be conducted. (Bernet & Dulcan, 1999; Nezu, Nezu, & Gill-Weiss, 1992). Assessment data should be summarized consistent with a behavioral case formulation model (Nezu, Nezu, & Lombardo, 2004). A case formulation is defined as a set of hypotheses, generally framed by a particular personality theory or psychotherapy orientation, regarding what vulnerability factors serve as causes, triggers, and maintaining factors (Eels, 1997) of an individual's referral problems. Additionally, it includes a description of a patient/s behavioral difficulties and symptoms of distress, and serves as an organizing mechanism to help the clinician understand how such complaints came into being, how various symptoms co-exist, what environmental or intrapersonal stimuli trigger such problems, and why such symptoms persist. Although not an exhaustive list of all case formulation variables, assessment areas that we have found pertinent to a case formulation for ID sex offenders are provided below.

Intellectual Functioning and Adaptive Assessment

Assessment of IQ and adaptive behavior should be a common and integral component of this evaluation. Tools for this assessment include a wide battery of intellectual and adaptive behavior measures, including those developed for individuals with sensory or expressive disabilities (see Nezu, Nezu, & Gill-Weiss, 1992 for a review and description).

Assessment of Sexual Deviance

With regard to deviant sexual arousal, several different measures have been described and recommended as applicable for persons with developmental disabilities. The Abel Assessment for Sexual Interest (Abel, Huffman, Warberg, & Holland, 1998) is an instrument that includes both a self-report interview and a measure of visual reaction time to stimulus slides. This test requires additional investigation in order to determine its usefulness for individuals with mental retardation. The Multiphasic Sex Inventory II (MSI-II; Nichols & Molinder, 1996) is a self-report measure of sexually deviant cognitive and behavioral characteristics that may be useful for men who admit their deviancy (Lanyon, 2001). The use of card sort measures, which depict pictures of various sexual stimuli as a way to assess individual offender preferences and arousal patterns, has been suggested in the clinical literature (Griffiths, Quinsey, & Hingsburger, 1989). However, data to support the reliability and validity of these assessment procedures is lacking (Lanyon, 2001). Penile plethysmography (PPG) is traditionally the most popular approach for assessing sexual arousal, and has been recommended for individuals with developmental disabilities (Caparulo, 1991; Haaven & Schlank, 2001; Nezu, Nezu, & Dudek, 1998; see also Card & Byrne, 1997; Lalumiere & Earls, 1992).

Assessment of Cognitive Distortions

Assessment of cognitive distortions, denial, justification and minimization of offenses can be conducted through interviews or self-report questionnaires (Abel et al., 1989). Additionally, standardized tests, such as the MSI II include several scales aimed at identifying a tendency to lie or patterns of self-serving bias. However, most existing measures have not been specifically tested with persons with ID. The etiology of such distortions may be tied to developmental level of information processing, learned thought patterns, or both.

Assessment of Social and Sexual Skills

Caparulo (1991) recommends using the Socio-Sexual Knowledge and Attitude Test (SSKAT; Wish, McCombs, & Edmondson, 1980) to assess an individual's knowledge and attitudes about sex. The SSKAT is specifically designed for use with individuals who may not be verbally proficient. It is recommended that social skills be assessed through questionnaires, naturalistic observations, simulated role-playing, and videotapes (Edwards, 1979; Griffiths, et. al., 1989; Johnson, 1981) as well as common standardized measures to assess social adaptive skills such as the Social Behavior Inventory for the Developmentally Disabled (Tymchuk, 1984). In our own clinic we developed role play measures, based upon the behavioral analytic method of assessment (Goldfried & D'Zurilla, 1969).

Offenders with impoverished problem solving abilities may rely more frequently on denial and sexually deviant fantasies as a way of coping with the day-to-day problems (Nezu, Nezu, & Dudek, 1998; McMurran, Egan, Richardson, & Ahmadi, 1999; O'Connor, 1996). To specifically assess the various components of the problem solving process, the Social Problem-Solving Inventory-Revised (SPSI-R Technical Manual; D'Zurilla, Nezu, & Maydeu-Olivares, 2002) is a multidimensional, self-report measure of social problem-solving ability with robust psychometric characteristics.

In cases where self-report is unreliable, or cognitive deficits interfere with an offender's ability to provide valid responses to the SPSI-R, a Problem-Solving Task for Persons with Intellectual Disabilities-Adapted for Sex Offenders was developed by two of the authors to evaluate the product of problem-solving efforts ID offenders (PST-Sex Offenders; Nezu, Nezu, Good, & Saad, 1997).

Additional Areas of Vulnerability Associated with Offense Behavior

Several areas of vulnerability, such as affective instability, and additional coping deficits can be assessed through instruments that have been developed for individuals with ID and comorbid psychopathology (e.g., the Psychopathology Inventory for Mentally Retarded Adults, Matson, 1988, and the Reiss Screen for Maladaptive Behavior, Reiss, 1988, see also Reiss, 1993). The Reiss Profile of Fundamental Goals and Motivation Sensitivities for Persons with Mental Retardation (Reiss & Havercamp, 2001) is a measure of motivation in people with cognitive disabilities and can aid in facilitating compatible relationships, diagnosing certain disorders, setting therapy goals, and conducting functional analyses.

There may be occasions when it is useful to include assessment measures in one's case formulation that have been helpful to the assessment of various clinical problems, but have not been specifically tested with ID populations. When measures that have not been specifically developed for the population are used we recommend caution when interpreting the results. For example, one instrument that has received much support in assessment of non-disabled populations is The Psychopathy Checklist Revised (PCL: R; Hare, 1991). This is a semi-structured interview that can assess for the presence of symptoms typically associated with psychopathy. However, more research is required for its use with ID offenders (Nezu, et al., 2004, in press).

Collaborative Relationships with Law Enforcement

During the assessment process it is useful to establish a collaborative relationship with public safety and correctional services personnel. As part of the preliminary survey, it is important to review the police records and any available files (Griffiths et al., 1989). Many times, offenders will lie or minimize their offense, and it is useful to have the records available to indicate the interviewer's knowledge of the event. For similar reasons, it is also important to have a person identified that knows the person well and can serve as a collateral contact for relevant information. Assessment of the environment is essential. Information gleaned from this assessment will assist in determining the level of supervision required, and may also provide insight into whether treatment will be successfully implemented in the home milieu.

Clinical Case Formulation

Once assessment across areas of possible sex offending vulnerability is complete, a behavioral case formulation approach can provide a clinical map with which to guide treatment as well as specific recommendations for determining an individual's level of risk for re-offense and required level of supervised community risk management.

Treatment design flows directly from an individual/s unique case formulation. Because the literature concerning treatment outcome for sex offenders with ID is sparse, any intervention that has received empirical support in the literature which addresses identified targets of vulnerability should be considered. Different interventions that address the same goal, as well as ways to adapt interventions for persons with ID require further decision-making efforts. We provide a brief summary of the extant research concerning interventions for offenders with ID below.

CBT Treatment of Sex Offending in Persons with ID

To date, most reports of specific treatments for offenders with ID consist of case reports, single subject designs, and clinical program descriptions. A summary of intervention strategies that have been reported as useful for the population with regard to the various areas of vulnerability indicate that comprehensive cognitive behavior therapy (CBT) programs show promise as potentially effective interventions.

With respect to treatment of deviant arousal, respondent conditioning techniques were among the first therapies reported for sex offenders with ID and commonly included satiation, covert sensitization, and overt reconditioning techniques (Lund, 1992; O'Connor, 1997; Schilling & Schinke, 1989; Stermac & Sheridan, 1993).

With respect to operant-based treatment strategies, Wong, Gaydos, and Fuqua (1982) reported the use of in vivo community training and contingency management to reduce inappropriate social behavior toward peers. LaVigna and Donnellan (1986) proposed the use of non-aversive procedures that focus on instructional control, manipulation of antecedents, fading, and positive reinforcement to increase adaptive social sexual behavior. Our experience indicates that positive reinforcement strategies can maintain gains when alternative sexually adaptive behavior was paired with the positive reinforcement.

Multicomponent Treatment (Complex Problems Require Complex Solutions)

The most impressive clinical treatment programs for sex offenders with ID provide descriptions of multi-component treatment programs and consist of strategies aimed at arousal, cognitions, adaptive behavior, and interpersonal areas of vulnerability. A recent meta-analysis of outcome research for persons with dual diagnosis supported the effectiveness of cognitive behavior therapy (CBT) for this population (Prout & Nowak-Drabik, 2003). For example, Lindsay reported a successful series of CBT studies of group therapy for aggression and anger in offenders with ID (Lindsay, Neilson, & Morrison, 1998; Lindsay et al., 1998a; Lindsay et al., 1998b; Lindsay, Olley, Baillie & Smith, 1999). Additionally, Griffiths and colleagues (1989) provide a description of a successful CBT program that included covert sensitization to decrease deviant arousal, behavioral techniques such as masturbatory reconditioning to increase arousal to appropriate stimuli, social skills training, and sex education.

Problem-solving can be an important strategy toward reduction of impulsivity as part of a multi-component treatment package for sexual offenders with ID (Griffiths et al., 1989; Lund, 1992; Nezu, Nezu, Dudek, Peacock & Stoll, 2005; O'Connor, 1997).

Some authors have underscored the importance of the social milieu with regard to treatment planning. For example, O'Connor (1997) described several programs that have advocated for the importance of social support in relapse prevention programs and Demetral (1994) reported that coping strategies learned as part of treatment are more likely to be used effectively by participants if a positive social support is in place. Day (1994) further reported four factors indicative of favorable outcomes for sexual offenders with ID: stable residential placement, regular occupation, regular supervision, and support in the community.

Project STOP: An Outpatient Model for Sex Offending Treatment

During the past 14 years, we have implemented an outpatient assessment and treatment program for sex offenders with ID that provides an integration of the assessment and treatment models described thus far. The program, Project STOP, provides assessment and treatment to adults with ID who have been convicted or identified as being at risk for sex offending behavior. Treatment is based upon a multicomponent, cognitive-behavioral model of treatment, and employs an individualized case formulation approach. Our prescriptive and individualized treatments are based upon a scientific and problem-solving approach to decision-making (Nezu, Nezu, & Lombardo, 2004). Treatment decisions for specific clinical targets are consistent with expert consensus guidelines regarding treatment of persons with ID and comorbid behavioral disorders (Rush & Frances, 2000).

We recently evaluated the outcome of treatment provided through Project STOP for men who were referred for treatment over the past three years. Our evaluation included a pre and post treatment assessment of patient behavior change (for example, the amount of specific progress in treatment goals and changes in clinical target behaviors), as well as clinician ratings of treatment motivation, participation and attendance, and current level of offense risk. Our data also included the patient rate of re-offense.

Description of the Clinical Population

The records of twenty-five (25) patients who were actively engaged in treatment indicated that the problem behaviors for which the men were referred included: stalking, incest, child molestation, child rape, adult rape, other sexual assault, exhibitionism, and sexual threat. Diagnoses, consistent with DSM IV (Diagnostic and Statistical Manual; American Psychiatric Association [APA], 1994), were varied. Axis I diagnoses included paraphillia, dysthymia, voyeurism, generalized anxiety disorder, schizophrenia, oppositional disorder, and pedophilia. In addition to the presence of DD, Axis II diagnoses included nonspecific personality disorder, dependent personality disorder, passive personality disorder, narcissistic personality disorder, and antisocial personality disorder.

Description of Clinical Services

The type of treatment provided to patients included individual, group and family therapy at our clinic. Additionally, the treatment was based upon a broadly-defined, cognitive-behavioral approach. For each patient, the treatment was individually planned and based upon the patient's assessment and case formulation. Our assessment methods included clinical interview, traditional psychological testing, adaptive behavior assessment, self-report and informant-report questionnaires, role-play measures designed to assess different areas of psychological, emotional, and behavioral areas of vulnerability, forensic assessment of psychopathic characteristics, functional analysis of behavior, and measures of deviant sexual arousal (e.g., PPG, Abel Assessment).

The primary treatment approaches prescribed at Project STOP included: applied behavior analysis, behavioral accelerating and decelerating procedures, behavioral staff and family consultation,

behavior therapy techniques such as relaxation, and masturbatory conditioning, and many cognitive-behavior therapy (CBT) techniques. CBT techniques included problem-solving therapy, anger management, stress management, cognitive restructuring, interpersonal skills training, social and sexual education, and functional family therapy, i.e., with a strong emphasis on skills development and improved self-control. For example, dependent upon the patient's individual case formulation, he may learn relaxation techniques to decrease anger arousal, self-instruction strategies to increase self-control while his family may be learning how to reinforce these skills at home. Moreover, family members may be guided in changing their patterns of inadvertently reinforcing the patient's sexually aggressive behavior.

Group treatment was aimed at providing specific adaptive, rehabilitative, and coping skills in the context of peer participation, feedback, and support. These groups included: (a) a group designed to increase social skills; (b) a clinical "mapping group" which helped patients to identify and change patterns or "maps" of their offense behaviors; and (c) a problem-solving coping skills group.

Program Effectiveness

With regard to the pre- and post-scores of treated patients, their adaptive behavior increased, as well as ratings of motivation, and levels of participation in treatment. Although identified individual clinical target behaviors showed strong trends of improvement for a majority of the patients, these changes were not statistically significant for the group as a whole.

Re-offense rate

Recidivism rates over the past three years for Project STOP were low. One patient committed another sexual offense, resulting in a recidivism rate of 4%. This is consistent with the rates associated with the treatment program over the past twelve years. Three other patients were briefly re-incarcerated for a short period of time due to probation violations, and upon their release, returned to treatment. Possible reasons for low recidivism may include: (1) an individualized, case formulation approach to treatment that focuses on each sex offender's own unique vulnerability factors; (2) a multiple treatment approach which incorporates individual, group, and family CBT strategies matched to these vulnerability factors; (3) the operation of a contingency management system in the clinic that resulted in a high adherence rates; and (4) extension of treatment to beyond two years. We found that individuals in combined treatments seem to have the most improvement. For example, patients in combined treatments such as individual and family, or group and individual, therapy had the most improvement in many areas, although no specific combination was associated with the best outcome.

Finally, for about 35% of our patients, their level of offense risk increased in the first few months of treatment, before it started to reduce. This was not surprising, because when many offenders first enter treatment, they are resistant to facing their problem behaviors. Treatment progress occurred slowly and where changes in the clinical target behavior significantly improved, the change occurred over two or more years.

Summary

There is a dearth of research findings to guide the clinician who is faced with assessment and, especially, treatment of sex offending behavior in persons with ID. However, the studies and program reports that do exist suggest that one promising framework through which to guide treatment is via CBT approach that is based upon individual case formulation. Whether the initial treatment is delivered in a residential or ambulatory environment, generalization of new skills to the community environment appears to be an inevitable and necessary part of treatment. Additionally, contingency management systems that are designed to increase the likelihood of continued attendance of outpatient therapy sessions

may further boost treatment outcomes. This treatment approach appears to be an effective strategy in reducing re-offense rates and improving behavioral skills for sex offenders who are living in the community. For example, within Project STOP, attendance was extremely high, changes in adaptive and target behaviors occurred, and repeat offending behavior (recidivism), was very low.

References

- Abel, G.G., Gore, D.K. Holland, C. Camp, N., Becker, J., & Rathner, J. (1989). The measurement of cognitive distortions of child molesters. *Annals of Sex Research*, 2, 135-152
- Abel, G. G., Huffman, J., Warberg, B., & Holland, C. L. (1998). Visual reaction time and plethysmography as measures of sexual interest in child molesters. *Sexual Abuse: A_Journal of Research and Treatment*, 10, 81-95.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed), Washington, DC: Author.
- Barron, P., Hassiotis, A., & Banes, J. (2002). Offenders with intellectual disability: the size of the problem and therapeutic outcomes. *Journal of Intellectual Disability Research*, 46, 454-463.
- Basquil, M., Nezu, C. M., Nezu, A. M., & Klein, T. L. (2004). Aggression-related hostility bias and social problem- solving deficits in adult males with mental retardation, *American Journal of Mental Retardation*, 109, 255-263.
- Bernet, W., & Dulcan, M. K. (1999). Practice parameters for the assessment and treatment of children, adolescents, and adults with mental retardation and comorbid mental disorders. *Child & Adolescent Psychiatry*, 38 Supplement, 5S-31S.
- Bumby, K. M. (1996). Assessing the cognitive distortions of child molesters and rapists: Development and validation of MOLEST and RAP scales. *Sexual Abuse: A Journal of Research and Treatment*, 8, 37-54.
- Caparulo, F. (1991). Identifying the developmentally disabled sex offenders. *Sexuality and Disability*, 9, 311-322.
- Card, R. D., & Byrne, P. M. (1997, October). The sensitivity and specificity of a newly developed set of DDMR phallometric stimulus materials. Presented at the meeting of the Association for the Treatment of Sexual Abusers, Arlington, VA.
- Day, K. (1994). Male mentally handicapped sex offenders. British Journal of Psychiatry, 165, 630-639.
- Demetral, G. D. (1993). Assessing counterfeit deviance in persons with developmental disabilities: An ecological assessment inventory. *The Habilitative Mental Healthcare Newsletter*, 12, 1-7.
- Demetral, G. D. (1994). Diagrammatic assessment of ecological integration of sex offenders with mental retardation in community residential facilities. *Mental Retardation*, 32, 141-145.
- D'Zurilla, T. J., Nezu, A. M., & Maydeu-Olivares, A. (2002). *The Social Problem Solving Inventory revised (SPSI-R): manual.* North Tonawanda, NY: MHS.

- Edwards, J. P. (1979). *Edwards Assessment of Social-Sexual Skills*. Portland, OR: Ednick Communications.
- Eells, T. D. (1997). Psychotherapy case formulation: History and current status. In T.D. Eells (Ed.), *Handbook of psychotherapy case formulation* (pp. 1-25). New York: Guilford Press.
- Fuchs, C., & Benson, B. A. (1995). Social information processing by aggressive and nonaggressive men with mental retardation. *American Journal on Mental Retardation*, *3*, 244-252.
- Garland, R. J., & Dougher, M. J. (1991). Motivational interventions in the treatment of sex offenders. In W. R. Miller & M. S. Rollnick (Eds.), *Motivational Interviewing: Preparing People to Change Addictive Behavior* (pp. 303-313). New York: Guilford Press.
- Goldfried, M. R., & D'Zurilla, T. J. (1969). A behavior- analytic model for assessing competence. In C. D. Spielberger (Ed.), *Current Topics in Clinical and Community Psychology*, *1*, 151-196. New York: Academic Press.
- Griffiths, D.M, Quinsey, V. L., & Hingsburger, D. (1989). *Changing inappropriate sexual behavior: A community-based approach for persons with developmental disabilities*. Baltimore, MD: Brookes.
- Haaven, J., & Schlank, A. (2001). The challenge of treating the sex offender with developmental disabilities. In A. Schlank (Ed.), *The sexual predator: Vol.2: Legal issues, clinical issues, and special populations* (pp. 13.1-13.19). Kingston, NJ: Civic Research Institute.
- Hall, G. C. N. (1996). *Theory-Based Assessment, Treatment, and Prevention of Sexual Aggression*. New York: Oxford University Press.
- Hare, R. D. (1991). The Revised Psychopathy Checklist. Toronto, Ontario: Multi-Health Systems.
- Hingsburger, D., Griffiths, D., & Quinsey, V. (1991). Detecting counterfeit deviance: Differentiating sexual deviance from sexual inappropriateness. *The Habilitative Mental Health Newsletter*, 10, 51-54.
- Johnson, P. R. (1981). Sexuality Development Index (videotape package). Calgary, Alberta: University of Alberta.
- Jurkowski, E., & Amado, A. N. (1993). Affection, love, intimacy, and sexual relationships. In A. N. Amado (Ed.), Friendships and community connections between people with and without developmental disabilities (pp. 129-152). Baltimore: Brookes.
- Kempton, W., & Kahn, E. (1991). Sexuality and people with intellectual disabilities: A historical perspective. *Sexuality and Disability*, *9*(2), 93-112.
- Lanyon, R. I. (2001). Psychological assessment procedures in sex offending *Professional_Psychology:* Research and Practice, 32, 253-260.
- Lalumiere, M. L., & Eerls, C. M. (1992). Voluntary control of penile response as a function of stimulus duration and instructions. *Behavioral Assessment*, 14, 121-132.

- La Vigna, G. W., & Donnellan, A. (1986). *Alternatives to punishment: Solving behavior problems with non-aversive strategies*. New York: Irvington.
- Lindsay, W. R. (2002). Integration of recent reviews on offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 15, 111-119.
- Lindsay, W. R., Marshall, I., Neilson, C., Quinn, K., & Smith, A. H. (1998a). The treatment of men with a learning disability convicted of exhibitionism. *Research on Developmental Disabilities*, 19, 295-316.
- Lindsay, W. R., Neilson, C. Q., & Morrison, F. (1998). The treatment of six men with learning disability convicted of sex offenses with children. *British Journal of Clinical Psychology*, *37*, 83-98.
- Lindsay, W. R., Olley, S., Baillie, N., & Smith, H. (1999). Treatment of adolescent sex offenders with intellectual disabilities. *Mental Retardation*, *37*, 201-211.
- Lindsay, W. R., Olley, S., Jack, C., Morrison, F., & Smith, A. H. (1998b). The treatment of two stalkers with intellectual disabilities using a cognitive approach. *Journal of Applied Research in Intellectual Disabilities*, 11, 333-334.
- Lund, C. A. (1992). Long term treatment of sexual behavior problems in adolescent and adult developmentally disabled persons. *Annals of Sex Research*, *5*, 5-31.
- Maguire, R. J., Carlisle, J. M., & Young, B. G. (1965). Sexual deviations as conditioned behaviour: A hypothesis. *Behaviour Research and Therapy*, 2, 185-190.
- Marshall, W. L., Anderson, D., & Fernandez, Y. (1999). *Cognitive behavioural treatment of sexual offenders*. West Sussex, UK: John Wiley & Sons.
- Marshall, W. L., & Barbaree, H. E. (1990). An integrated theory of the etiology of sexual offending. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 209-229) New York: Plenum Press.
- Matson, J. L. (1988). The PIMRA manual. Orland Park, IL: International Diagnostic Systems.
- McFall, R. M. (1990). The enhancement of social skills: an information-processing analysis. In W. L. Marshall, D. R. Laws, & H. E. Barbaree, (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp, 311-327), New York: Plenum Press.
- McCurry, C., McClellan, J., Adams, J., Norrei, M., Storck, M., Eisner, A., & Breiger, D. (1998). Sexual behavior associated with low verbal IQ in youth who have severe mental illness. *Mental Retardation*, *36*, 23-30.
- McMurran, M., Egan, V., Richardson, C., & Ahmadi, S. (1999). Social problem-solving in mentally disordered offenders: A brief report. *Criminal Behaviour and Mental Health*, 9, 315-322.
- Murphy, W. D., Coleman, E. M., & Haynes, M. A. (1983). Treatment evaluation issues with the mentally retarded sex offender. In J. G. Greer & I. R. Stuart (Eds.), *The sexual aggressor: Current perspectives on treatment* (pp. 22-41). New York: Van Nostrand Reinhold.

- Nezu, A. M., Nezu, C. M., & Lombardo, E. R. (2004). Cognitive-behavioral case formulation and treatment design: A problem-solving approach. NY: Springer.
- Nezu, C. M., Nezu, A. M., & Dudek, J. A. (1998). A cognitive-behavioral model of assessment and treatment for intellectually disabled sexual offenders, *Cognitive and Behavioral Practice*, *5*, 25-64.
- Nezu, C. M., Nezu, A. M., & Gill-Weiss, M. J. (1992). *Psychopathology in persons with mental retardation: Clinical guidelines to assessment and treatment.* Champaign, IL: Research Press.
- Nezu, C. M., Nezu, A. M., Klein, T., & Johnson, M. C. (in press). Sex offending behavior. In J. A. Mulick & J. W. Jacobson (Eds.), *Handbook of Mental Retardation and Developmental Disabilities*, New York: Kluwer Academic/Publishers.
- Nezu, C. M., Nezu, A. M., Good, W., & Saad, R. (1997). Social Problem Solving Task for Persons with Intellectual Disabilities-Adapted for Sexual Offenders (PST-Sex Offenders; unpublished test and manual). Philadelphia, PA: Allegheny University of the Health Sciences.
- Nezu, C. M., Nezu, A., M., Dudek, J. A., Peacock, M., & Stoll, J. (2005). Social problem-solving correlates of sexual deviancy among child molesters, *Journal of Sexual Aggression* 11, 27-36.
- Nichols, H. R., & Molinder, I. (1996a). *Multiphasic Sex Inventory II*. Tacoma, WA: Nichols and Molinder Assessments
- O' Connor, W. (1996). A problem-solving intervention for sex offenders with an intellectual disability. Journal of Intellectual & Developmental Disability, 21, 219-236.
- O'Connor, W. (1997). Towards an environmental perspective on intervention for problem sexual behavior in people with an intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, 10, 159-175.
- Pitceathly, A. S., & Chapman, J. W. (1985). Sexuality, marriage and parenthood of mentally retarded people. *International Journal for the Advancement of Counseling*, *8*, 173-181.
- Prentky, R. A., & Knight, R. A. (1991). Identifying critical dimensions for discriminating among rapists. *Journal of Consulting and Clinical Psychology*, *59*, 643-661.
- Prentky, R. A., Knight, R. A., & Lee, A. F. S. (1997). Risk factors associated with recidivism among extrafamilial child molesters. *Journal of Consulting and Clinical Psychology*, 65, 141-149.
- Prout, H. T., & Nowak-Drabick, K. M. (2003). Psychotherapy with persons who have mental retardation: An evaluation of effectiveness. *American Journal of Mental Retardation*, 108, 82-93.
- Reiss, S. (1988). *The Reiss Screen for Maladaptive Behavior test manual*. Orland Park, IL: International Diagnostic Systems.
- Reiss, S. (1993). Assessment of psychopathology in persons with mental retardation. In J. L. Matson & R. P. Barrett (Eds), <u>Psychopathology in the mentally retarded (2nd Ed)</u> (pp.17-40). Orlando, FL: Grune & Stratton Inc.

- Reiss, S., & Havercamp, S. (2001). The Reiss Profile of Fundamental Goals and Motivation Sensitivities for Persons with Mental Retardation._Worthington, OH: IDS Publishing.
- Rush, A. J., & Frances, A. (2000). Expert consensus guideline series: Treatment of psychiatric and behavioral problems in mental retardation. *American Journal on Mental Retardation*, 105, 159-228.
- Schilling, R. F., & Schinke S. P. (1989). Mentally retarded sex offenders: Fact, fiction, and treatment. *Journal of Social Work & Human Sexuality*, 7, 33-48.
- Schoen, J., & Hoover, J. H. (1999). Mentally retarded sex offenders. *Journal of Offender Rehabilitation*, 16, 81-90.
- Stermac, L., & Sheridan, P. (1993). The developmentally disabled adolescent sex offender. In W. L. Marshall & H. E. Barbaree (Eds.), The juvenile sex offender (pp. 235-242). NY: Guildford Press.
- Szollos, A. A., & McCabe, M. P. (1995). The sexuality of people with mild intellectual disability: Perceptions of clients and caregivers. *Australia and New Zealand Journal of Developmental Disabilities*, 20, 205-222.
- Tierny, D. W., & McCabe, M. P. (2002). Motivation for behavior change among sex offenders: A review of the literature. *Clinical Psychology Review*, 22, 113-129.
- Timms, S., & Goreczny, A. (2002). Adolescent sex offenders with mental retardation: Literature review and assessment considerations. *Aggression and Violent Behavior*, 7, 1-19.
- Tymchuk, A. (1984). Social Behavior Inventory. Portland, OR: Ednick Communications.
- Wish, J. R., McCombs, K. F., & Edmonson, B. (1980). *The Socio-Sexual Knowledge and Attitude Test: instruction manual.* Wood Dale, IL: Stoelting.
- Wong, S. E., Gaydos, G. R., & Fuqua, R. W. (1982). Operant control of pedophilia: Reducing approaches to children. *Behavior Modification*, *6*, 73-84.
- Woodill, G. (1992). Controlling the sexuality of developmentally disabled persons: Historical perspectives. *Journal on Developmental Disabilities*, 1, 1-14.

Author Contact:

Christine Maguth Nezu, Ph.D., ABPP Drexel University Mail Stop 515 245 N 15th Street Philadelphia, PA 19102-1192 email: Christine.nezu@drexel.edu