# Problem Solving Treatment for Intellectually Disabled Sex Offenders

# Christine Maguth Nezu, Alicia A. Fiore & Arthur M. Nezu

## Abstract

Over the past thirty years, Problem Solving Therapy (PST) has been shown to be an effective treatment for many different problems and patient populations (Nezu, 2004). Among its many clinical applications, PST interventions were developed for persons with intellectually disabilities (ID), where improving problem-solving skills led to adaptive behavioral improvements (Nezu, Nezu, & Arean 1991). This article provides a rationale and description of the potential benefits of including PST as a treatment for ID sex offenders. Recommendations regarding future research directions are offered.

Keywords: Problem Solving Therapy, (PST), Intellectually Disabled, (ID).

## Introduction

Among the many adaptations of Problem Solving Therapy (PST; Nezu, 2004), interventions were developed for intellectually disabled (ID) populations, where improving problem-solving skills led to improvements in psychological and adaptive functioning (Nezu, Nezu, & Arean 1991), and decreases in challenging social behavior. Our clinical experience in providing cognitive behavior therapy (CBT) to sex offenders with intellectual disabilities (ID) and a growing body of literature suggest that PST may potentially serve as an integral part of a multi-component treatment plan for this population.

## Sex Offending Defined

We define a sex offender as an individual who has committed a sex offense or engaged in sex offending behavior (Lanyon, 2001; Nezu, Nezu, Klein, & Johnson, in press). The term sex offending is a psycholegal one that encompasses a broad set of behaviors, such as nonconsensual sexual conduct with an adult or sexual behavior with a minor (Lanyon, 2001; Nezu, et al., in press). Many individuals identified as sex offenders are also characterized as having deviant sexual interests or diagnosed with specific paraphilias, such as pedophilia or voyeurism. However, having these interests is different from committing a sex offense; some individuals with paraphilias and other deviant sexual interests may never actually engage in sex offending behavior. Likewise, it is possible for some individuals to commit a sex offense in the absence of deviant sexual interests or a diagnosed paraphilia. There is a significant degree of heterogeneity among individuals who commit sex offenses. Individuals who commit such offenses vary across age, race, gender, socioeconomic status, offending history, and a plethora of other variables. Further adding to the heterogeneity of the sex offending population is the ubiquitous presence of additional, comorbid disorders. Individuals identified as sex offenders may also be diagnosed with other medical or psychiatric diagnoses, including mood, anxiety, or personality disorders, brain injury, physical disabilities, impulse control disorders, sexual dysfunction, developmental disabilities, including mental retardation, or any combination of these (Nezu, et al., in press).

# Sex Offenders with Intellectual Disabilities (ID)

Individuals who commit sex offenses and are also diagnosed with ID represent a subset of all offenders, and constitute an estimated 10 to 15% of the population of sex offenders who

come to the attention of the courts (Murphy, Coleman & Haynes, 1983). The prevalence rate is even higher, reaching over 40%, when individuals with borderline intellectual functioning are included (Nezu, Nezu & Dudek, 1998).

#### Vulnerability Factors for Sex Offending

It is generally accepted that sex-offending behavior does not have a single cause but is the result of a general vulnerability that is a combination of risk factors (Marshall, Anderson, & Fernandez, 1999). Various behavioral and cognitive pathways made up of these risk factors interact to affect an individual's unique vulnerability for engaging in sex offending behavior. Marshall et al., (1999) describe vulnerability as an individual's attitudes, beliefs, cognitions, behavior patterns and emotions, and stress the importance of the role of learning in the development and maintenance of these factors. Deficits or deviance in any one, or a combination, of these areas can increase one's vulnerability, and thus one's risk, for committing a sex offense (Nezu, et al., in press).

The empirical literature provides support for several factors as possible determinants of vulnerability in the general sex offending population. Some of these factors consist of static factors such as individual characteristics, living alone (Marques, Day, Nelson, & West, 1994), abusive early environments (Seghorn, Prentky, & Boucher, 1987) and past behavioral patterns of sex offending with a range of victims (Prentky, Knight, & Lee, 1997). Other risk factors consist of dynamic or treatable characteristics, such as deviant sexual preferences (Hanson, & Bussiere, 1998), social incompetence (Marshall, Earls, Segal, & Drake, 1983), poor stress management (Marques, et al., 1994; Marshall et al., 1983), cognitive distortions (Ward, Hudson, & Marshall, 1995), avoidance (Prentky, & Knight, 1991), psychopathy (Rice, Chaplin, Harris, & Couts, 1994), lack of motivation, non adherence to treatment (Marshall et al., 1999), and poor problemsolving ability (McMurran, Egan, Richardson, & Ahmadi, 1999; Nezu, Nezu, Dudek, Peacock, & Stoll, 2005).

With specific regard to problem solving ability, we investigated the association between various social problem-solving skill components and self-reported sex-offending deviance among a recruited sample of incarcerated child molesters (Nezu et al., 2005). The results provided robust support that self-reported sexual deviance was associated with an impulsive and careless problem-solving style.

#### Vulnerability in Intellectually Disabled Sex Offenders

Although the empirical literature that provides evidence for the presence of vulnerability factors in ID offenders is much less available than for non-disabled offenders, many authors have indicated that similar vulnerability factors exist for ID sex offenders. In general, these vulnerabilities can be categorized into two types: deviance and deficits. Deviance theories suggest that sex offending behavior is a result of deviant sexual desires learned through conditioning (Marshall et al., 1999; Nezu et. al., in press). Although the scientific support demonstrating the relation of sexually deviant, masturbatory-linked fantasies and sexually deviant behavior is less available for the ID offender population, our own clinical experience suggests that this may represent one important causal factor, and support does exist for non-disabled offender populations (Maguire, Carlisle, & Young, 1965; Prentky & Knight, 1991).

Deviant cognitions have also been linked with risk for sex offending, and have been observed in both intellectually disabled and non-disabled sex offenders (Nezu, et al., 1998). For

example, many offenders tend to distort and minimize their own behavior as well as the intentions and consequences on their victims.

Vulnerability factors categorized as deficits concern factors related to a lack of skills, rather than deviant behavioral or cognitive conditioning. These include poor interpersonal skills, poor coping skills, social incompetence, and poor problem solving. These deficits appear to be quite similar in both ID and non-ID sex offender populations (Marshall, 1999; Murphy, Coleman, & Haynes, 1983; Nezu, et al., in press). For example, one study reported that specific deficits observed in ID sex offenders included sexual naiveté, poor impulse control, and lack of relationship skills (Day, 1994).

#### Unique Vulnerability Factors

Sex offenders with ID also face additional problems and unique vulnerabilities related to their disability. These individuals may have a significant history of developmental factors contributing to their risk for sex offending. In some cases, factors that contributed to the disability (e.g. abuse or neglect) may also serve as risk factors. For example, we reported elsewhere (Nezu et al., in press) that ID sex offenders may misinterpret socio-sexual cues in their environment, experience deficits in their ability to identify and interpret negative affect or distress, experience deficits in their ability to effectively and appropriately express emotions, as well as experience deficits in social problem solving skills (Nezu, et al., 1998). Finally, persons with ID tend to have less access to resources and services needed to address and remediate such problems.

It may be particularly important for individuals with ID disabilities to have access to training opportunities that will help them cope with the additional, unique set of vulnerability factors they confront. The lives of ID individuals, including their sexual expression, have been controlled by society throughout history. For example, persons with developmental disabilities such as mental retardation have been stereotyped either as innocent, naïve individuals with no sexual desires (Szollos & McCabe, 1995; Zuker-Weiss, 1994) or as promiscuous, criminal individuals with uncontrollable sexual desires (Lumley & Scotti, 2001; Kempton & Kahn, 1991; Szollos & McCabe, 1995). Social stigma, fears, inaccurate perceptions or negative attitudes towards sexuality in this population have led society to often isolate ID individuals, restrict their sexual behavior, and avoid education about sexuality and intimacy. These factors, in turn, often lead to deficits in sexual knowledge, decreased access to sexual expression, and negative emotions such as anger, frustration, confusion, sadness, and loneliness. As we have previously reported (Nezu et al., 1998), the unique social and environmental factors that contribute to sex offending vulnerability include social stigma and rejection, limited opportunities for social and sexual education, and limited opportunities for learning and participation in adaptive sexual activities. Moreover, ID individuals may have an increased vulnerability due to history of institutionalization and increased likelihood of experiencing sexual victimization themselves (Nezu, et al., 1998). Such problems often require complex and effective solutions. One way to reduce these unique vulnerabilities may be to specifically direct treatment at increasing individuals' abilities to more effectively cope with the problems they face.

#### Problem Solving

Problem solving is the cognitive-behavioral process by which individuals attempt to find effective or adaptive solutions to specific problems encountered in their everyday lives (D'Zurilla & Nezu, 1999; D'Zurilla & Nezu, in press). This process incorporates overt, purposeful, and conscious efforts to change one's reactions to a problem, to change the problem or situation itself,

or both, depending on the nature of the problem (e.g. controllable vs. uncontrollable) (Nezu, 2004). In this sense, the goals of problem solving can include changing a problem that may be under one's control (e.g. standing up to a boss who is making unreasonable demands) or increasing coping skills where a problem is not under one's control (e.g. reacting to social or sexual rejection). A problem, or problematic situation, is defined as a present or anticipated task or event that necessitates an effective or adaptive response, but for which there is no such response immediately available or apparent due to existing obstacles or barriers (D'Zurilla & Nezu, 2001; Nezu 2004). The origin of the demands of a particular problem may lie in the environment (e.g. external barriers to a goal), within the individual being confronted with the problem (e.g. inability to reach a personal goal) or between individuals (e.g. conflicting goals) (Nezu, 2004). The obstacles to an effective or adaptive response, and thus goal attainment, can include uncertainty, ambiguity, lack of resources, novelty of the problem, conflicting demands or skills deficits (Nezu, 2004).

Regarding the causal chain leading to sex offending, problems may be causally linked to internal origins (e.g., deviant thoughts, emotional arousal, learned reactions), or external stressors (e.g., interpersonal problems, lack of training opportunities, life changes), or a combination of both. Moreover, a problem can be a single event (e.g., getting fired from work), a series of related events (e.g., repeated social rejections), or a chronic situation (e.g., social stigmatization; loneliness). The demand in the problematic situation may originate in the environment (e.g., restrictions at a group residence, arguments with supervisors; access to potential victims) or within the person (e.g., viewing a child as seductive; deviant arousal; lack of personal control). A solution, in this model, is defined as any coping response designed to alter the nature of the situation so that it is no longer problematic, one's maladaptive negative reaction to it, or both (Nezu, Nezu & Perri, 1989). However, not all solutions are effective. According to this definition many destructive or harmful behaviors are viewed as ill-fated solutions, such as substance abuse, withdrawal, or coercive acts toward others. However, an effective solution is one that not only achieves the goal, but also leads to positive consequences and minimal negative consequences. For example, for individual facing an overprotective family, focusing on personal goals and current obstacles toward independence is likely to yield a better problem solution that focusing on exaggerated or inaccurate thoughts of persecution or the family's perceived intention to victimize him. Within a problem-solving conceptualization, sex-offending deviance and behavior reflect a limited and destructive solution to the perpetrator's problems. As such, the solution may provide some relief to an immediate problem (e.g., psychological distress, threats to self-esteem, or sexual tension), but also leads to significant negative consequences for both the victim and offender.

Problem-solving ability is best conceived as comprising a series of specific and interacting cognitive-emotional skills rather than a single, unitary ability. We believe that effective problem solving requires several component processes, each of which makes a distinct contribution toward effective problem resolution. These include (1) problem orientation (e.g., the way one perceives problems, acknowledges and understands their emotional reactions to problems, and assesses their own ability to solve problems), (2) behavioral response styles (e.g., general styles or tendencies regarding the ways one reacts to problems), and (3) rational problem-solving skills (e.g., the extent to which people can accurately define a problem, brainstorm creative solutions, make cost-benefit decisions, implement solutions, and monitor their performance). Each of these problem solving components are discussed below.

#### Problem orientation

Social problem-solving ability has, as one component, the psychological set or

orientation that affects the manner in which people notice, understand, think about, or react to problems in general. With regard to sex offending behavior, common reactions when an offender is exposed to conflict or disappointment include anger, fears of becoming emotionally vulnerable, denial of problems, and grandiose reactions, which may serve to counteract vulnerability. We refer to this general perceptual set as one's problem orientation. This component differs from the other problem-solving component processes, in that it is a motivational process, whereas the other problem-solving processes consist of specific skills and abilities that enable a person to solve a particular problem effectively. It is a set of orienting responses that represent the immediate cognitive-affective reactions of a person when first confronted with a problem. Where a positive problem orientation has been associated with optimism and an attitude of challenge when facing a problem, a negative orientation has been found to lead to negative affect (e.g., depression, anger, anxiety), impulsive behavior (e.g., aggression) and avoidance motivation (e.g., denial of problems) which can disrupt further problem-solving attempts. The orientation component of problem-solving includes five specific variables: problem recognition (the ability to accurately recognize problems when they occur), problem attribution (the ability to accurately identify the source of the problem verses the pervasive view that problems are always caused by oneself or others), problem appraisal (the ability to view problems as a challenge rather than a threat), and personal control beliefs (and ability to tolerate negative affect and understand their emotional reactions as part of identifying problems; (Nezu, Nezu, Friedman, Houts, & Faddis, 1999).

## Behavioral response styles

Our definition of problem solving includes a second major component, which concerns the general tendencies, or styles with which people approach their management of life problems. Research has indicated that there are two maladaptive styles that characterize a wide range of mood and behavior disorders. First, an impulsive-careless style is marked by impulsive, hurried, and careless attempts at problem resolution. This may serve as a particular vulnerability among offenders (Nezu, D'Zurilla, & Nezu, in press). Second, an avoidant style is characterized by procrastination, denial, passivity, and dependency. Each of these problem-solving styles can influence the effectiveness of one's problem orientation as well as all other component skill areas of the problem-solving process listed in the next section.

# Rational problem solving skills

Finally, our definition of problem solving emphasizes the importance of behaviors that are required to direct toward changing the nature of the situation so that it is no longer problematic. Identification of such effective and appropriate solutions or coping efforts is achieved through specific problem-solving tasks, known as rational problem-solving skills. These involve a group of specific skills or goal directed tasks that enable a person to solve a particular problem successfully and can be defined as the rational, planful, systematic, and skillful application of various effective problem-solving principles and techniques. Each task makes a distinct contribution toward the discovery of an adaptive solution or coping response in a problem-solving situation.

Problem definition and formulation refers to the extent to which a person can use feelings as cues, gather all the facts, separate facts from assumptions, and develop goals. Generation of alternatives refers to the ability to withhold judgment and brainstorm creative solutions. Decision-making refers to the ability to estimate the likelihood that a solution will actually achieve desired goals, evaluate one's ability to successfully carry out or implement a given solution, and to weigh personal and social consequences of various alternative solutions. Finally, solution implementation and verification refers to an individual correctly evaluating his ability to possess or acquire the requisite skills and willingness to carry out the most effective solutions, self-monitor, and self-reinforce. Thus, this process requires both behavioral enactment and self-monitoring.

Associated with a conceptual model of social problem solving is a specific clinical intervention -- problem-solving therapy (PST). PST has been applied successfully to people experiencing a wide variety of psychological and emotional difficulties (Nezu, 2004; Nezu, Nezu, & Arean, 1991). The treatment employs techniques designed to initially target each specific problem-solving component and strategies to help patients practice their new skills, based upon problem-solving components, with real life examples.

#### Problem Solving Treatment for ID Sex Offenders

There are no group studies to date that specifically examine the efficacy of PST for the treatment of sex offending behavior in ID individuals. However, one study we conducted in 1991 (Nezu, et al., 1991) was a randomized intervention trial that combined PST, adapted for the dually diagnosed individuals, with assertiveness training. Participants included 28 individuals with a diagnosis of mild mental retardation and a concurrent psychiatric diagnosis, each of whom exhibited maladaptive social behaviors, such as uncontrolled anger, aggressive interpersonal behavior and or destructive behavior. After 10 sessions of assertiveness training and PST, participants showed significant improvements in adaptive functioning, reduction in aggression, and decrease in psychological symptoms and distress. The results of this study suggest that PST may be helpful to offenders who possess similar behavior problems.

One important consideration when adapting PST as an intervention for individuals with developmental disabilities is to optimally tailor the intervention to the intellectual level of the patients receiving treatment. A full description of such guidelines for adapting CBT strategies such as PST can be found in Nezu, Nezu & Gill-Weiss (1992). These include incorporating strategies to maintain attention, using individuals with ID as teaching models, repetition of sessions, using many concrete examples, and including specific reinforcement for newly learned skills. When such adaptations are used, we have found that individuals diagnosed with mental retardation in even the moderate range of functioning may benefit. Our collective experience suggest that the best way to assess an individual's ability to respond to PST is to provide a brief trial of the intervention for several sessions, using the guidelines indicated above, and a evaluate the presence of any improvement.

Although there are no studies that have evaluated the efficacy of PST as a stand alone intervention for sex offending behaviors, effective programs can be identified that incorporated cognitive and behavioral techniques, including aspects of PST, for reducing behavioral problems in ID sex offenders (Nezu, et. al., in press). For example, Lindsay reported a successful series of CBT studies of group therapy for aggression and anger in developmentally disabled offenders (Lindsay, Neilson, & Morrison, 1998; Lindsay, Olley, Jack, Morrison, & Smith, 1998; Lindsay, Marshall, Neilson, Quinn, & Smith, 1998; Lindsay, Olley, Baillie & Smith, 1999). Lindsay's investigations consisted of open trials of treatments designed to reduce problems such as child molestation, stalking, and exhibitionism. Griffiths and colleagues (1989) provided a description of an effective CBT program that included covert sensitization to decrease deviant arousal, behavioral techniques such as masturbatory reconditioning to increase arousal to appropriate stimuli, sex education, and social problem solving skills training.

Lund (1992) reported good outcomes for a multi-component residential treatment program. Individual counseling included anger management, discussion of sexually inappropriate behavior, cognitive restructuring, processing their own abuse (when appropriate), victim empathy, and problem solving.

As a clinical demonstration of CBT for sex offending, we developed Project STOP, an outpatient program that provided assessment and treatment for men diagnosed with mental retardation and coexisting sex-offending problems (see Nezu, et. al., in press for a full description of the project). Sex offending behaviors included stalking, incest, molestation, rape, other sexual assault, paraphilia, and sexual threat. Patients were treated using various cognitive behavioral strategies and techniques, including PST, in individual, group, and/or family therapy formats.

It is important to note that Project STOP was developed using a broadly defined, CBT approach that evaluated many areas of patient vulnerability including deviant sexual arousal, a functional analysis of current behavioral incidents, deviant cognitive patterns, social and information processing deficits (including problem-solving ability), and coexisting psychological, behavioral, and emotional disorders such as anger, aggressive behavior, depression, anxiety and personality disorders. Consistent with suggestions of previous authors, each individual's treatment was individually designed by integrating assessment data and constructing an individualized case formulation approach to treatment (Nezu, et al., in press; Nezu, Nezu & Lombardo, 2004; Plaud, Plaud, Kolstoe, & Orvedal, 2000). Each individual's treatment contained multiple components such as PST and other skills training, contingency management, and procedures to decrease deviant arousal, dependent upon their unique areas of vulnerability. As such, some individuals were prescribed PST as a primary treatment, and others received PST as an adjunctive therapy approach. The results of a program evaluation we conducted of the 25 men in the program over a 3-year period showed significant improvements in treatment targets in individual patients and a low recidivism rate of 4%.

Taken together, we consider the converging literature regarding CBT for sex offending, CBT for persons with ID and aggressive problems, and PST for persons with ID and dual diagnoses, as a strong rationale for the potential use of PST as part of a multi-component treatment for reducing risk in sex offending populations.

# A Clinical Case Example of PST with an Intellectually Disabled Sex Offender

The following clinical case example of "David", a 36-year-old African American man diagnosed with mental retardation illustrates how problem solving can be identified as a vulnerability factor for sex offending behavior and targeted for treatment in order to decrease sex-offending risk.

David was referred by his group residence for aggression and inappropriate sexual behavior, specifically, the sexual molestation of a young boy. He had a significant history of being severely neglected, abused, and institutionalized, as well as of engaging in illegal, aggressive, sexually inappropriate and sexually aggressive behaviors from a young age. At intake, David was prescribed sterile medroxyprogesterone acetate (Depo-Provera) by his physician. The behavioral assessment revealed that David displayed a fair degree of social and adaptive interpersonal skills at his residence as well as functional work skills.

A multimodal, multimatrix assessment resulted in an idiographic case formulation that identified several unique vulnerability factors. Intellectual testing showed that David was functioning in the moderate range of mental retardation, although his adaptive functioning was quite higher. David demonstrated through phallometric assessment measures an absence of deviant arousal, being primarily attracted to adult females. A long history of abuse and neglect, and the way in which he had processed these past traumatic life events, served as significant vulnerability factors. For example, David had interpreted these events as his own fault, and developed negative schemas about his self worth. When teased or criticized by others, especially those who were physically smaller or more vulnerable (i.e., children), feelings of fear and anger led to uncontrollable urges to hurt others. Once aroused, these urges often became sexualized. This sequence of events was functionally related to David's past offenses. Assessment of problem solving factors revealed that David had significant deficits in all rational problem solving skills, as well as an impulsive and careless response style. He viewed himself as being easily overwhelmed by problems and ineffective at solving them, and experienced pronounced symptoms of acute anxiety, anger, and sadness when confronting a problem. He also lacked related skills, such as assertiveness. As a result, David avoided problems such as finding ways to manage his anger when criticized, sexual urges, and even adaptive attraction to peers.

A case formulation that identified these vulnerability factors and the relationships between them pointed to problem solving skills deficits as a primary treatment target, as problem solving was not only a core factor in itself but also appeared to influence the other factors. Intellectual deficits and early victimization likely contributed to David's deficits in social problem solving. In turn, David was unable to utilize effective problem solving to cope with his past abuse as well as current distress, including feelings of anger, anxiety and depression. Due to his past abuse and his inability to solve problems, David experienced intense fear and anxiety during times of any physical arousal. In addition, David's impulsivity and inability to rationally solve problems contributed to his inappropriate expression of fear and intense anger.

A major focus of David's treatment plan included problem-solving skills training, adapted for his intellectual level. Problem-solving skills components were broken down into concrete training modules and presented with many examples and frequent role-play situations, with supportive feedback. The sessions were aimed at inhibiting impulsive behavior and generating alternative, adaptive solutions to provocative situations (e.g. sexual arousal). As a result, he demonstrated significant improvements in his willingness to think about alternative ways to manage such feeling. Additionally, a focus directly on solving his day-to-day problems also resulted in improved anger management and affect labeling. Finally, David was able to decrease feelings of anxiety and hopelessness and develop more accurate understanding of his own past abuse and neglect.

## Conclusions

This article sought to provide a rationale and description of the potential benefits and applicability of PST as part of a multi-component treatment for ID sex offenders. This population has many risk factors in common with the general sex offending population, as well as many additional deficits and vulnerabilities. In some individual offenders, deficits in problem solving skills may stand alone as a dynamic vulnerability factor for sex offending risk, but are most often linked to other deficits or deviant characteristics. However, no studies exist that assess the specific benefits of including PST as one of several important treatment components. There is a need for research that specifically addresses the problem-solving deficits that are functionally operative in sex offending behavior for ID offenders, as well as the use of PST as an effective treatment for the population.

## References

Day, K. (1994) Male mentally handicapped sex offenders. *British Journal of Psychiatry*, *165*, 630-639.

- D'Zurilla, T. J., & Nezu, A. M. (2001). Problem-solving therapies. In K. S. Dobson (Ed.), *The* handbook of cognitive-behavioral therapies (2<sup>nd</sup> ed.; pp. 211-245). New York: Guilford.
- D'Zurilla, T. J., & Nezu, A. M. (in press). *Problem-solving therapy: A positive approach to clinical intervention* (3rd ed.). New York: Springer.
- Griffiths, D.M, Quinsey, V. L., & Hingsburger, D. (1989). Changing inappropriate sexual behavior: A community-based approach for persons with developmental disabilities. Baltimore, MD: Paul H. Brookes Publishing.
- Groth, A. N., Burgess, A. W., & Holstrom, L. L. (1977). Rape: Power, anger, and sexuality. *American Journal of Psychiatry*, 134, 1239-1243.
- Hanson, R.K., & Bussiere, M.T. (1998). Predicting relapse: A meta-analysis of sex offender recidivism studies. *Journal of Consulting and Clinical psychology*, 66, 348-362.
- 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.
- Lindsay, W. R. (2002). Integration of recent reviews on offenders with intellectua disabilities. *Journal of Applied Research in Intellectual Disabilities, 2002, 15*, 111-119.
- Lindsay, W. R., Marshall, I., Neilson, C., Quinn, K. & Smith, A. H. (1998). 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 wit learning disability convicted of sex offenses with children. *British Journal of Clinical Psychology*, 37, 83-98.
- Lumley, V.A. & Scotti, J.R. (2001). Supporting the sexuality of adults with mental retardation: Current status and future directions. *Journal of Positive Behavior Interventions*, *3*(2), 109-119.
- Lund, C. A. (1992). Long term treatment of sexual behavior problems in adolescent and adult developmental 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. *Behavior Research and Therapy*, *2*, 185-190.
- Marques, J. D., Day, D. M., Nelson, C., & West, M. A. (1994). Effects of cognitivebehavioral treatment on sex offender recidivism: Preliminary results of a longitudinal study. *Criminal Justice and Behavior*, 21, 28-54.
- Marshall, W. L., Anderson, D., and Fernandez, Y. (1999). *Cognitive behavioural treatment of sexual offenders*. West Sussex, England: John Wiley & Sons, (pp 93-110).

- Marshall, W.L., Earls, C.M., Segal, Z.V., & Drake, J. (1983). A behavioral program for the assessment and treatment of sexual aggressors. In K.Craig and R. McMahon (Eds.), *Advances in clinical beahvior therapy* (pp.148-174). New York: Brunner/Mazel.
- 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, C. M., D'Zurilla, T. J., & Nezu, A. M. (in press). Problem-solving therapy: Theory, practice, and application to sex offenders. In McMurran & J. Maguire (Eds.), Social problem-solving and offenders: Evidence, evaluation and evolution. Chichester, UK: Wiley.
- Nezu, A.M. (2004). Problem Solving and Behavior Therapy Revisited. *Behavior Therapy*, 35, 1-33.
- Nezu, A. M., Nezu, C. M., Houts, P. S., Friedman, S. H., & Faddis, S. (1999). Relevance of problem-solving therapy to psychosocial oncology. *Journal of Psychosocial Oncology*, 16, 5-26.
- Nezu, A. M., Nezu, C. M., & Lombardo, E. R. (2004). Cognitive-behavioral case formulation and treatment design: A problem-solving approach. New York: Springer. Currently under translation into Japanese to be published by Seiwa Shoten Publishers, Tokyo, Japan.
- Nezu, A. M., Nezu, C. M., & Perri, M. G. (1989). Problem-solving therapy for depression: Theory, research, and clinical guidelines. New York: Wiley.
- Nezu, C. M., Nezu, A. M., & Arean, P. (1991). Assertiveness and problem-solving therapy for persons with mental retardation and dual diagnosis. *Research in Developmental Disabilities*, 12, 371-386.
- 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., Dudek, J. A., Peacock, M., & Stoll, J. (2005). Problem-solving correlates of sexual deviancy among child molesters, *Journal of Sexual* Aggression 11(1).
- 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 Nezu, C. M., D'Zurilla, T. J., & Nezu, A. M. (in press). Problem-solving therapy: Theory, practice, and application to sex offenders. In M. McMurran & J. McGuire (Eds.), *Social*

*problem solving and offenders: Evidence, evaluation and evolution*.Chichester, UK: Wiley.

- Plaud, J. J., Plaud, D M., Kolstoe, P. D., & Orvedal, M. S. (2000). Behavioral treatment of sexually offending behavior. *Mental Health Aspects in Developmental Disabilities*, 3, 54-61.
- 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.
- Rice, M.E., Chaplin, T.C., Harris, G.T., & Couts, J. (1994). Empathy for the victim and sexual arousal among rapists and nonrapists. *Journal of Interpersonal Violence*, *9*, 435-449.
- Seghorn, T.K., Prentky, R.A., & Boucher, R.J. (1987). Childhood sexual abuse in the lives of sexually aggressive offenders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, 262-267.
- 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(3), 205-222.
- Ward, T., Hudson, S. M., & Marshall, W. L. (1995). Cognitive distortions and affective deficits in sexual offenders: A cognitive deconstructionist interpretation. *Sexual Abuse: Journal* of Research & Treatment, 7, 67-83.
- Zuker-Weiss, R. (1994) Sex, mental retardation and ethics. *International Journal of Adolescent Medicine and Health, 7(3),* 193-197.

# **Author Contact Information:**

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