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BEHAVIORAL INTERVENTIONS FOR SEXUAL DEVIANCY IN INDIVIDUALS WITH
DEVELOPMENTAL DISORDERS

by

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B.A., Southern Illinois University, 2014

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the
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RESEARCH PAPER APPROVAL

BEHAVIORAL INTERVENTIONS FOR SEXUAL DEVIANCY IN INDIVIDUALS WITH
DEVELOPMENTAL DISORDERS

By

Samuel N. Krus

A Research Paper Submitted in Partial

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in the field of Behavior Analysis and Therapy

Approved by:

Ruth Anne Rehfeldt, Chair

Graduate School
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TITLE: BEHAVIORAL INTERVENTIONS FOR SEXUAL DEVIANCY IN INDIVIDUALS WITH DEVELOPMENTAL DISORDERS

MAJOR PROFESSOR: Dr. Ruth Anne Rehfeldt

Statistical analyses have found a significant proportion of crime is of a sexual nature and that reducing its occurrence is a complex problem that has had various solutions proposed. Therapy programs that focus on the reduction of sexually deviant behavior have been proposed by many clinicians and researchers in the psychological and rehabilitative fields which have shown varying degrees of success. As treatments have been developed across multiple disciplines there have been many paradigms developed around the development and corresponding treatment of sexually deviant behavior. Along with addressing the behavior itself, many programs have sought to address sexual deviancy based on the interaction it produces between the individual and the multiple social systems they are a part of with the goal of understanding development of such behavior from a broader scale outside the individual and preserving individual liberties while treating such individuals. The goal of this review is to summarize the methods of several programs based on a massive online search and to examine the trends among successful treatments as well as propose future directions for the treatment of individuals that engage in sexually deviant behavior.

Keywords: sexual behavior, sexual assault, cognitive behavioral therapy, mode deactivation therapy, problem solving therapy, sexual education, functional analysis

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SEXUAL DEVIANCY AS A CRIME

Over the past 2 decades, there has been a noted increase in attention paid to the problem of sexual deviance as a crime and the methods of reducing the occurrence of such crimes. Accompanying this attention is also a noted increase in the proportion of prison populations that are composed of individuals incarcerated for sexual crimes (Becker, 1994; Becker & Murphy, 1998; Fisher & Beech, 1999; Gordon & Porporino, 1990; McGrath, Cumming, Livingston, & Hoke, 2003; McGrath, Hoke, & Vojtisek, 1998; Prentky, Knight, & Lee, 1997). As of July 2017, individuals incarcerated for sexual offense make up the third largest proportion of incarcerated Americans after those incarcerated for drug offenses and those incarcerated for unlawful weapon use and possession (Federal Bureau of Prisons, 2007). This increased rate of incarceration is not unique to individuals of sex based crime as changes in sentencing policies have led to increased convictions for many forms of crime as well as a general increase in sentence terms for imprisoned individuals (Neal & Rick, 2016). This in turn has contributed to the high rate of prison overpopulation found across the country and calls for alternatives to incarceration (Hamilton, 2014).

Targeting sex offenders as a population to treat outside of prison to reduce overcrowding and strain on penal institutions seems to have great promise given the unique characteristics individuals that commit sexual offences possess compared to other imprisoned individuals. Statistical evidence has found that a significant proportion of registered sex offenders possess any combination of the following characteristics which are considered contributing factors to their sexually deviant behavior: developmental disability (Marotta, 2015); impulse control issues (Mathesius & Lussier, 2014); and a previous history as the victim of sexual, emotional, or physical abuse (Apsche & Ward Bailey, 2003; Mathesius & Lussier, 2014). These characteristics

of sex offenders indicates that behavioral analytic and psychological methods may prove very successful in the reduction of criminal sexual behavior as such procedures have been used to successfully treat individual issues of impulse control (Gavriel-Fried & Ronen, 2015; McKeel & Dixon, 2014), alteration of behavior in individuals with developmental disability (Campbell-Fuller & Craig, 2009; Dufrene, Watson, & Weaver, 2005) and management of emotional responses to previous abuse (Gallegos, Cross, & Pigeon, 2015; Hinton, Pich, Hofmann, Otto, 2013). In addition to possessing characteristics that indicate a high likelihood of reformation if exposed to behavior modification, individuals labeled as sex offenders face greater violation of personal liberties and greater danger in prison settings than many other individuals. Studies have found that individuals incarcerated for sexual offenses are viewed with greater stigma from both prison staff and fellow inmates which produces additional aversive conditions not faced by other prisoners (Ricciardelli & Moir, 2013; Webb, 2013). Prisoners labeled as sex offenders also face a greater risk of violence against them and have been found to be the most victimized group of adult male prisoners in prison populations (Ricciardelli & Spencer, 2014). Often the social structures of the prison environment promote a belief that such individuals are deserving of punishment and thus acts of violence against such individuals is legitimate and acceptable (Stevens, 2013).

Given this greater risk to such individuals in the prison system, prison cannot adequately be deemed a humane punishment and provides further support for a rehabilitative solution rather than a penal one. The issue of the identification and treatment of undesired sexual behavior proves to be one of great complexity across many aspects however. The topic faces not only polarizing opinion but also ambiguity of meaning which greatly muddles objective interactions

with both the individuals themselves and the behaviors they engage in. The following section seeks to clarify some of the terms used in cases of sexual deviancy.

What Is a Sexual Offender? What Is Sexual Deviance?

A wide variety of terms are used to label undesired sexual behavior and these terms fall under several different domains of interest (e.g. legal, psychological, communal) and are often used inconsistently and thus warrant an explanation. A sexual offender is defined as a person that has committed a sexual offense as legally defined by the state (Lanyon, 2001; Nezu, Nezu, Klien & Johnson, 2007). For example, Arizona lists sexual conduct with a minor as defined by “intentionally or knowingly engaging in sexual intercourse or oral sexual contact with any person who is under eighteen years of age” (Arizona Revised Statute 13-1405, 1999). Sexual deviance or sexually deviant interest is a nontechnical term that states interest in sex offending behavior and may be defined by specific behavior such as pedophilia but does not imply a sex offense unless the law is broken (Lanyon, 2001; Nezu et al., 2007). Sexual abuse is generally considered by behaviors that are non-consensual and not mutual. Sexual abuse can involve behaviors that don’t require contact between the perpetrator and the victim such as sexual harassment or indecent exposure or acts that involve physical contact such as sexual assault and rape (Brown & Turk, 1994; Lofthouse et al., 2013).

Factors That Contribute to Sexual Misconduct

Sexual behavior and sexuality as a concept is tied to several arenas of human interaction and the underlying causes of sexual behavior undesired by the surrounding community is greatly debated. Depending on the school of logic the cause of sexually deviant behavior can be anything from a lack of education (Michie, Lindsay, Martin, & Grieve, 2006) to expression of an underlying mental illness (Bass & Apsche, 2013). Despite the different beliefs about how

sexually deviant behavior develops, statistical analyses have found a few similarities across individuals that have engaged in sexual offences that often occur with incidence of deviant sexual behavior. Several studies have found that victims of abuse are more likely to commit sexual abuse. This is especially the case with individuals with an intellectual disability (ID) (Lindblad & Lainpelto, 2011; Swango-Wilson, 2011; Bleil Walters et al., 2013). A lack of opportunity to receive education about healthy sexual behavior and healthy sexual identity development has also been seen in many individuals that engage in sexually deviant behavior. Again, this has also been seen to occur in greater frequency with individuals with ID but it has also been a characteristic found more often in LGBT individuals that have engaged in sexual deviancy (Price, 2003). In terms of personality, individuals that have engaged in sexually abusive behaviors have often displayed impulsivity and an inability to delay sexual gratification (Price, 2003). Studies have also found that most reported individuals that engage in sexual deviancy are males that know their victim (Brown, Stein, & Turk, 1995; Gilby, Wolf, & Goldberg, 1989; McCarthy & Thompson 1997; Brown & Turk, 1993).

Ethical Considerations for Alteration Of Sexual Behavior

The ultimate goal of psychological and behavioral programs are to alter an individual's behavior. Since the nature of such programs require the individual to have power exerted over them by an external force care must be taken not to infringe upon the rights and liberties of the individuals in a programs care. This is especially true for cases such as those described in this review as such individuals are more often placed into such programs by an external force, such as by caregivers or a legal institution, rather than choosing to join such programs of their own accord. Even in cases where individuals possess the ability to opt out of such programs, there may be pressure to engage as a means to avoid more aversive situations such as individuals that

can avoid incarceration by being placed on parole or probation but are required to participate in a community based treatment as part of their sentence (FindLaw, 2017, JRank, 2017). This decreased ability to exert free will can place such individuals under the umbrella term of a vulnerable population which require additional considerations and alterations to treatments and research to ensure the individuals protection. In addition to prisoners or individuals facing imprisonment charges, minors and individuals with ID are also considered to be vulnerable populations based on conditions of being wards of others and inhibited ability to make informed choices (Shivayogi, 2013). In an effort to minimize the risk of exploitation, the governing bodies of therapeutic organizations such as the American Psychological Association (APA) and Behavior Analysis Certification Board (BACB) have established a code of ethics with sections focused on the proper conduct for interactions with such individuals. For example, the BACB compliance code requires behavior analysts to engage in additional procedures before and during treatment of vulnerable individuals that are to receive treatment at the request of a third party (e.g. the court). In such cases the client or their surrogate must be informed of the nature of a treatment and the care of the ultimate client (the individual receiving treatment) is placed above all others regardless of the wishes of a third party (Behavior Analysis Certification Board, 2017).

Additional Considerations for Individuals with Id

The condition of possessing an ID creates additional complications and factors that must be accounted for when addressing the issue of sexual deviance and its treatment. Several studies have found that individuals with IDs are at greater risk of becoming victims of sexual abuse than their typically developing peers (Aderemi & Pillay, 2013; Fyson, 2007; Gürol, Polat, & Oran, 2014; Lumley, Miltenberger, Long, Rapp, & Roberts, 1998; Mahoney & Polling, 2011; Swango-Wilson, 2011). Despite this greater risk of victimization one cannot simply focus on protecting

this population from victimization as individuals with IDs also make up a significant portion of individuals that engage in sexual deviancy with surveys finding between 4% and 40% of individuals with ID have engaged in some form of sexually deviant behavior (Miltenberger et al., 1999; Sex Offender Treatment Services Collaborative- Intellectual disabilities, 2010; Shenk & Brown, 2007) and between 10% and 15% of individuals that engaged in sexual abuse had some form of ID (Wilcox, 2004). Further complicating matters is that one of the most frequently cited perpetrators that individuals with ID find themselves the victims of sexual abuse to are other individuals with ID (Martinello, 2015; Thompson & Brown, 1997). Some studies have also proposed that individuals with ID possess additional factors that can contribute to engaging in sexual deviancy (Lindsay, Steptoe, & Haut, 2011; Phenix & Sreenivasan, 2009; Ward & Mann, 2004). This greater risk of being both victim and perpetrator, along with the greater chance of being denied liberties that their typically developing peers have access to, has placed a special interest on developing and adapting effective strategies for reducing sexually deviant behavior in individuals with ID while still affording them opportunities to express sexuality.

TREATMENT AND REDUCTION OF SEXUAL DEVIANCY

Sexual behavior is expressed in a multitude of ways and the programs developed to alter sexual behavior when it is expressed in undesired ways can be just as numerous. Views of sexuality and sexual behavior shape the form that programs take to treat individuals. Practices that are based strongly in behavioral principles view sexual behavior as a part of a relatively simple system of interaction with the environment and apply general methods used to treat a variety of behavior disorders to such cases (Reyes et al., 2006). Practices that view sexual behavior as the result of one or more complex systems may develop very complex systems of treatment that seek to address both the behavior itself and other factors of the individual's life that are believed to contribute to such behavior (Apsche & Bailey, 2004). The following sections will describe some commonly used programs for the identification and treatment of sexually deviant behavior along with the underlying beliefs of why they work.

Functional Analysis

A functional analysis (FA) is a form of functional behavior assessment in which a subject is systematically presented with antecedents and consequences that mirror what one experiences in one's natural environment but arrangements are made so behavior and its antecedents and consequences are more easily observed. When using this assessment multiple conditions are generally presented to the subject wherein they come in contact with a specific stimulus and are observed for the occurrence of the targeted behavior. Through this assessment the events that precede a targeted behavior, and the result that reinforces the behavior are usually discovered and a program can be developed to modify the behavior based on its function (Cooper, Heron, & Heward, 2006).

A modified form of the FA has been developed for when it has been found that a subject engages in a behavior, such as sexual behavior, because it is in itself reinforcing rather than because it leads to a reinforcing external consequence. The function of this modified FA is to find what antecedent stimuli are most likely to precede the subject engaging in the targeted behavior. As with the original form of the FA, the subject is presented with an antecedent stimulus under different conditions. How this FA differs is that only the antecedent stimuli are altered in each condition (e.g. the subject may be presented with people of different genders or ages in different conditions) and the subject is allowed to engage in the behavior with no external consequence. The different antecedent stimuli are presented multiple times across individual trials and the occurrence stimuli is recorded to determine which stimuli is likely to evoke the target behavior (Dozier, Iwata, & Worsdell, 2011).

Though the use of an FA has been found to accurately determine what stimuli are likely to lead to the targeted sexual behavior of an individual with disabilities it is not in and of itself a form of treatment but rather a tool to facilitate the development of a behavior modification therapy for a subject and evaluate a treatment's effectiveness (Reyes et al., 2006). This form of FA has been successfully used to determine what stimuli evoke such behavior as penile arousal (Reyes et al., 2006), public masturbation (Dozier, Iwata, & Worsdell, 2011), and inappropriate physical and social interactions of a sexual nature (Pritchard et al., 2012). In addition, the latter two studies were able to successfully develop behavioral modification programs to eliminate the targeted sexual behavior in multiple settings (Dozier, Iwata, & Worsdell, 2011; Pritchard et al., 2012)

While providing a useful tool to facilitate behavior modification programs the use of an FA has limitations. In the study conducted by Reyes et al. (2006) 10 adult men with mental

disabilities that were receiving treatment as sex offenders had their penile circumference measured when exposed to appropriate (pictures of adult men and women) and inappropriate (pictures of children) stimuli to determine their arousal to the stimuli. The results of this study found some participants showed decreased change in penile circumference when exposed to the same stimuli over time which indicates a decreased level of arousal with the stimuli and subjects that showed no arousal to any presented stimuli (which was inconsistent with their history as a sex offender). These results indicate that the FA was unable to consistently determine what stimuli would be likely to precede change in penile circumference and determine arousal for said individuals. Additionally, the subjects of all these listed FA studies were males with developmental disabilities so it is unknown what external validity this method would have to women and individuals without disabilities.

Sexual Education Programs

Many have suggested that a lack of accurate sexual knowledge contributes to sexually deviant behaviors and that this is especially the case among individuals with ID (Cantor, Blanchard, Robichaud, & Christensen, 2005; Michie et al., 2006). Based on this view, it is believed that individuals with a lack of knowledge of appropriate sexual and social behavior are more likely to engage in behavior that is sexually deviant as they discover and gain reinforcement from such behavior and are not taught an alternate behavior (appropriate sexual behavior) that can replace the sexually deviant behavior while providing a similar form of reinforcement. In addition to this lack of knowledge is a lack of opportunity to engage in appropriate sexual behavior which is believed to contribute to sexually deviant behavior as the only opportunities to receive reinforcement from sexual gratification are sexually deviant. For example, an individual that does not have access to an environment where they can form

social/sexual relationships with peers of a similar functioning level may develop deviant behaviors such as voyeurism or relations with children of a similar functioning level as these are the only opportunities to engage in and receive reinforcement for sexual behavior that their environment provides for them. As such individuals are not motivated to specifically engage in sexually deviant behavior but instead engage in sexually deviant behavior due to a lack of available alternative behavior this phenomenon has been termed “counterfeit deviance” (Griffiths, Hingsburger, Hoath, & Loannou, 2013). This theory has not received much support from research as many studies have found that rather than possessing less knowledge, many sexual offenders display greater sexual knowledge than their non-offending counterparts (Lindsay, 2004; Lunsky, Frijters, Griffiths, Watson, & Williston, 2007; Michie et al., 2006; Murphy, Coleman, & Haynes, 1983; Talbot & Langdon, 2006).

Despite this, many Authors suggest that juvenile sexual offenders often lack or possess erroneous information about sexual topics and proper social interaction (Becker & Kaplan, 1993; Bourke & Donohue, 1996; Kaplan & Krueger, 2003; Martin & Pruett, 1998; Ryan et al., 1996; Shaw, 2002) and it is often requested that juvenile sex offenders receive some form of sexual education or social skills training as part of their treatment in a rehabilitation program (Brown & Schwartz, 2006; Center for Sex Offender Management, 1999; Hunter et al., 2003; Kaplan & Krueger, 2003; Rich, 2003; Shaw et al., 1999; Worling & Curwen, 2000). Additionally, many studies have found evidence that sexual offender programs that include a sexual education component show a positive effect in decreasing recidivism among its subjects (Alexander, 1999; Craig, Browne, & Stringer, 2003; Gallagher, Wilson, Hirschfield, Coggeshall, & MacKenzie, 1999; Hall, 1995; Hanson et al., 2002). Because of this, many programs have been developed to provide sexual education for juvenile offenders and offenders with ID.

Most institutions develop their own programs for sexual education so there can be a lot of variation between sex education programs. Sexual education programs cover a wide scope of topics. Programs usually focus on teaching appropriate social interaction, accurate understanding of physiology and anatomy, and age appropriate relationships but topics may also include human development, sexual health, different forms of sexual behavior, and societal and cultural views of sex depending on the program (Dwyer & Boyd, 2009).

In addition, multiple teaching formats for sex education have been developed including group, (Dwyer & Boyd, 2009), and one on one between 1 participant and a facilitator (Goodman, Leggett, Weston, Phillips, & Steward, 2008). The group method of sex education is utilized to provide the opportunity for critique and input from peers. This allows participants to explore issues of sexuality and sexual behavior in a safe area that corrects incorrect ideas and prevents the individual from excusing their behavior (Bourke & Donohue, 1996; Goodman et al., 2008). The one on one format, on the other hand, has been found to be useful for applying lessons to a participant's personal experiences. This method allows a participant to talk openly about their own history of sexually offensive behavior one would rather avoid talking about for risk of being punished for it and allows the facilitator to guide the participant in specific aspects of their behavior and the lessons being taught and how the two can be applied to each other. Sexual education programs may use either format or may alternate between formats for different components of the program (Goodman et al., 2008).

A sex education program used by a southern medical university was studied to observe its effects on adolescent males that were incarcerated in a state department of mental health's inpatient facility for children and adolescents. The sex education program was conducted in a group format and focused on six "Key concepts" as described by the *Guidelines for*

Comprehensive Sexuality Education in Kindergarten through 12th grade, 2nd edition (National Guidelines Task Force, 1996). The six concepts in order of group presentation were Human Development; Relationships; Personal Skills, Sexuality, and Society; Sexual Behavior; Sexual Health; and Society and Culture. Each concept and its subtopics were learnt about through weekly sessions with interactive group activities, lectures, and roleplaying. Before and after the training program participants were tested on their knowledge of sexual topics. It was found that of 5 participants, 2 participants had a significantly increased score, 2 participants had scores that were comparable to their original scores, and one person had a lower score than their initial score. Aside from these results no assessments were conducted to measure practical application of skills and appropriate behavior was conducted. The results of this study may indicate that sex education program can increase knowledge of appropriate sexual behavior but further research is needed to assess whether a change in behavior has occurred (Dwyer & Boyd, 2009).

A research study conducted by Craig, Stringer, & Moss (2006) was conducted to assess a program they developed to specifically treat individuals with ID. This program included sexual education as part of a weekly cognitive therapy program. Like Dwyer & Boyd (2009), the sexual education lessons were conducted in a group session and individuals were given specific jobs at each session to make sure all individuals received adequate food and drink to further encourage the development of social skills. In addition to the standard lessons taught in sexual education, subjects were taught about the laws surrounding sexual behavior. Various methods were used to adapt the lessons to suit the needs of individuals with ID such as providing information through various mediums including pictures, drawings, interactive exercises, videos, quizzes, and structured group discussions to emphasize key concepts. Additionally, sessions were kept deliberately flexible and delivered to suit the pace of the subjects and learned information was

reviewed by presenting recaps of information learned in a previous session at the start of the session and summarizing new information presented at the end of the session. After the program ended little change was found in the subjects with only one of 6 displaying some new sexually appropriate interests while the rest continued to show sexually deviant interests. Little change was reported in behavior following the study and while no participants were reconvicted following a 12 month follow up all participants were under 24-hour supervision so it cannot be determined if this lack of conviction was due to alteration of behavior or a lack of opportunity to engage in sexually deviant behavior.

In study conducted by Goodman et al. (2008), a unique topic that participants were taught about were the stages of sexual offending based on programs developed by the Sex Offender Treatment Services Collaborative (SOTSEC-ID) and the four-stage model of offending developed by Finkelhor (1984). This model proposes that there are 4 conditions that must be met that contribute to the engagement of sexually offensive behavior in individuals and specifically focus on the behavior of child sexual abuse and the factors that contribute to it. In the SOTSEC-ID's programs that incorporate this model as part of the sexual education component, participants are taught to understand these factors that contribute to engaging in sexually offensive and abusive behaviors and recognizing when these factors occur in their own lives so they can take responsibility for their actions and behave appropriately.

The first stage of the sexual offending model is called motivation to abuse. In this stage, there must be an establishment of motivation operations (MO's) that increase the likelihood of abusive behavior in the individuals as well as affecting who the target of the abuse will be. If one can assume that sexual gratification is automatically reinforcing then it would make sense that an individual would engage in behaviors and engage with stimuli that maximize the reinforcement

of the sexual gratification. Based on this model it is proposed that characteristics of a child may make them stronger reinforcers than an adult. These characteristics may include similar level of intellectual and emotional development as it allows the ability to more easily form an intimate relationship and connect with such a target and the smaller size of a child compared to the individual as it allows greater control over the target. On the other end of the spectrum, while a child's characteristics may make them highly valuable as a stimulus to gain reinforcement from in the form of sexual interaction and gratification, an adult may have characteristics that act as low-quality MO's to engage in sexual interaction with or the adult may not provide any MO at all for sexual interaction. The characteristics of an adult or the factors of the environment may create 'blockage' that prevents the individual from getting reinforcement from a consensual adult relationship (Finkelhor 1984). Characteristics of an adult such as having a higher degree of emotional and intellectual functioning could require an individual to engage in prerequisite behaviors (courtship, dating, solicitation) that the individual lacks the skill and knowledge to perform to reach the point where they could appropriately engage in sexual behavior with them which then blocks the individual from what would otherwise be an appropriate target for engaging in sexual behavior with. The larger size of an adult also provides the individual with less physical control over an interaction than they would be granted with a child. An additional factor that may particularly affect individuals with ID is their access to appropriate individuals with which to engage in sexual behavior with as such individuals may be at increased risk of isolation and lack opportunities to develop relationships with appropriate targets (Department of Health, 2001). It is characteristics such as these that may increase the likelihood that an individual will engage in sexual behavior with one stimulus (a child) over another (an adult) as the individual has greater access to children to form relationships, requires less prerequisite

behaviors to engage in sexual behavior, and can more easily over power a child than an adult if it comes to that.

Overcoming internal inhibitors is the second condition to be met that contributes to sexually offensive behavior. While an individual may have the motivation to engage in a sexually offensive behavior, it is unlikely to occur if the individual is inhibited by a history of rule governed behavior for alternatives to the sexually offensive behavior as well as a history of punishment for engaging in the sexually offensive behavior and covert behaviors such as emotions and thoughts. As the act of sexually offensive behavior leads to reinforcement from sexual gratification despite also leading to potential punishment in internal forms such as guilt and external forms such as legal action there is potential to engage in the behavior that is strengthened by reinforcement and weakened by punishment and factors that overcome the punishing effect of covert behaviors such as feelings of guilt or rules that lead to rule governed behavior the second condition that contributes to sexual offending is met. Lack of knowledge of a rule that contributes to rule governed behavior such as the law and lack of understanding of the consequences of offending or the perspectives of another can lead to the internal factors such as empathy and guilt being overcome and preventing the internal inhibition of sexually offensive behavior. Lack of knowledge and understanding of such rules may contribute to the overcoming of internal inhibitors for adults with ID (O'Callaghan & Murphy, 2007) but it is considered unlikely that this lack of knowledge is a factor for most men with ID that sexually offend (Thompson & Brown). In addition to failing to follow rules about appropriate sexual behavior, offenders often develop cognitive distortions about their offending or minimize their responsibility for their behavior and the consequences of their offending (Marshall, Anderson, & Fernandez, 1999). These distorted views may allow a subject to 'bend' the rule that governs their

behavior by altering the definition of what the rule is so they can continue to offend without feeling guilt from breaking a rule. This further may undermine their ability to resist engaging in offending behaviors (Salter, 1988) Thus, by weakening internal punishers for behavior the reinforcers for the behavior remain and the likelihood of engaging in the behavior is strengthened and increased.

As mentioned in the previous step there are internal and external inhibitors to engaging in sexually offensive behavior. While internal inhibitors include rules and histories of behavior, the third step consists of overcoming external inhibitors. External inhibitors are environmental factors that allow or prevent the opportunity to engage in sexually offensive behaviors. These factors heavily focus on the target of the sexually offensive behavior and how they are protected from the individual. These include the access the individual has to a target (can the individual come into contact with a target?) and factors that would signal to the individual that they would likely be unable to receive sexual gratification were they to engage in the behavior (is there a supervisor or other person that would prevent the individual from engaging in the behavior?). By encountering or setting up situations where the individual can engage in sexually offensive behavior with a target the individual is able to overcome the external inhibitors.

The final step in the model is known as overcoming victim resistance. This step focuses on the behavior of sexually offending itself and the individual's success in engaging in the behavior with the target. The target's behaviors and characteristics now act as factors that lead to a successful sexual encounter from the individual and in turn the engagement of a sexually offensive behavior. Many factors may affect the targets ability to resist becoming the victim of abuse such as their susceptibility to the reinforcers the individual provides them for interaction such as attention and physical objects. The target's knowledge of abuse prevention behaviors and

the pre-existing power the individual has over the target due to their relationship are also factors. Children that have been taught abduction or abuse prevention strategies are less likely to be the victims of abuse and individuals that are not in control of the target's access to reinforcers and punishment are less likely to be able to elicit desired behavior from the target. It is because of their relative lack of power and access to a repertoire of target preventing behaviors that children and people with ID are at greater risk of becoming targets for sexual abuse (Finkelhor, 1984).

While this model was initially designed to explain the process of sexual abuse of children, the previously mentioned study by Leggett et al. (2008) only had two of their six participants that exhibited sexual behavior towards children. Furthermore, all participants in this study had ID which further separated them from the original population the model was based on. This was done to observe the effectiveness of this form of education when applied to individuals with ID. The education course consisted of 50 education sessions that were conducted weekly and 5 maintenance sessions that were conducted monthly after the education sessions had ended. Each session was 2 hours and began with the participants working to prepare the room by arranging chairs and going over the rules that the group developed which were to be followed during sessions. Following this, participants gave a short description of important events they had experienced the previous week with a focus on interpersonal behaviors and risky situations. Facilitators might also bring up events for discussion that they had heard about from a participant's care workers and probation officers if the participants did not bring them up themselves. Participants were then given time to discuss and explore the events and how they related to the participants sexual offending in a supportive manner while still challenging each other's undesired behaviors. Past behaviors that were discussed were examined by the group in regard to how they related to the stage(s) of sexual offending that they had previously learned

and then participants were introduced to new materials that focused on teaching a new stage of sexual offending or continued to teach about a stage that was being taught in the previous session. As with other programs designed for individuals with ID, information and lessons were presented in a variety of ways such as videos, role-play, picture-prompts, small group discussion, drawings, quizzes and games. Some individuals had trouble staying on task so to further adapt sessions to their needs multiple activities were presented each session which lasted no more than 20 minutes each and a 15-minute break followed by a short period of physical exercise was presented approximately half way through each session. These breaks and exercise sessions were intended to increase a sense of team work and group bonding in addition to ensuring participants could stay on task. An added measure used to adapt lessons to the participants was to simplify language through methods such as changing the names of the stages from 1. motivation to abuse, 2. overcoming internal inhibitors, 3. overcoming external inhibitors, and 4. overcoming victim resistance to 1. Thinking about it, 2. Making excuses, 3. Getting the chance, and 4. Doing it. After being taught about a step, participants were given examples over several sessions of non-sexual behaviors that the 4 stages could also be applied to such as smoking (step one is thinking about smoking, step two is making the excuse that 'one cigarette won't hurt' etc.). Eventually participants were instructed to apply the steps to examples of sexual offending and, following this, were given individual work with a facilitator where they applied the steps to their own most recent instance of sexually offensive behavior which they eventually presented to the rest of the group.

Frequency of sexually offensive behavior before and after the study was not recorded but participant statements of their incidences of sexual offending in regard to the 4 steps were observed. Before the program participants made statements that indicated they were not at fault

for the sexual assault, statements that they would not get in trouble for the assault, or statements that minimized the harm they had caused to their victims. Participants also denied any significant planning to offend despite evidence to the contrary based on their statements. Following the program participants made statements regarding the incidences that indicated that they were responsible for their behavior, statements that they could face consequences for sexually offending, and statements that acknowledged the victim's innocence in the situation and the negative impact the sexually offending behavior had on them. Despite these statements the researchers acknowledged that it is uncertain if the statements made during sessions reflected behavior that occurred outside sessions as they were punished and challenged by the group for making statements that indicated they had done nothing wrong and reinforced and praised for making statements of responsibility for the incident and that these contingencies did not exist outside the program setting. To assist in a change of behavior a relapse prevention plan was developed for each participant that contained goals the participant wanted to achieve, risky situations and beliefs that facilitated sexual offending, and the new beliefs that had been discussed in class. These plans were shared with key workers in the participants life that were then instructed to review them with the participants on a regular basis and at times of great risk. It was discovered that one participant that had shown great progress in altering his statements and beliefs of sexually offending had broken the conditions of his sex offender order by forming a relationship with a mother of young children. Though the participant had not been found to commit any sexual offence this behavior corresponded to the third step of sexual offending by providing himself with access to potential victims. Despite this the results of this study have found that thoughts and beliefs regarding sexually offensive behavior in individuals with ID that offend are broadly similar to those of individuals without ID that also offend. The same can be

said of the factors that contribute to offending. The results of this study also report that, for individuals with ID, there are factors that act more prominently or in addition to the factors faced by individuals without ID such as greater risk of isolation from sexually appropriate partners and lack of skill or knowledge of prerequisite skills required before one can appropriately engage in sexual behavior (Goodman, et al. 2008).

Overall, sexual education as a method of reducing sexually deviant behaviors is inconclusive. This method has predominantly focused on individuals with ID and juveniles that have committed sexual offenses but little research has been conducted on the change of frequency of sexually deviant behavior. The effectiveness of such methods is further obscured by the fact that often times the participants enrolled in such programs are held in highly controlled environments where the opportunity to engage in sexual deviancy is limited. Despite the lack of conclusive evidence on the effectiveness of sex education the format and topics addressed in such programs do have their merits. The component of teaching appropriate sexual behavior to participants does provide alternative behaviors that can replace sexual deviancy and allow for individuals to still gain access to sexual gratification. Finally, the focus on individual responsibility and behavior rather than the manipulation and control of the individual's environment from outside forces also allows participants with ID a greater opportunity to access the liberties of their typically developing peers and brings attention to the unintentional adverse effects that such populations are at risk of from the individuals and organizations that seek to keep them safe. While sexual education has not been determined to be a successful program on its own, it may yet act as a useful component when combined with other programs and the fact that some studies indicate that increased knowledge of sex and its related behaviors do correlate

with a decrease in statements and beliefs that support sexually deviant acts (Pascal & Herbé, 2011) warrants further research of sexual education's use on populations with ID and without.

Cognitive Behavioral Therapy

Cognitive Behavioral Therapy (CBT) is one of the commonly used forms of treatment for typically developing individuals that commit sexual offences (Aos et al. 2006; Hanson et al. 2002; Marshal, 1996; Nicholaichuk, Gordan, Gu, & Wong, 2000; Yates, 2002) and it is used as part of probation programs in many parts of the U.S. and U.K. (Beckett, Beech, Fisher, & Fordham, 1994).

CBT as a general practice is based on social learning theory (Bandura, 1986) and is based on the belief that external and covert behaviors (thoughts, feelings, and cognitive processes) are linked and that external behavior is influenced by covert behavior. The function of CBT is to replace undesired covert behaviors with desired behaviors by assessing the individual's perceptions and skill deficits. CBT also focuses on the development of external behaviors through acquisition of skills such as observation of distorted thoughts, problem solving, perspective taking, skills for appropriate social and sexual behavior and improving relationships, and developing adaptive behaviors for the management of emotions and urges. Other behaviors such as sexual arousal to inappropriate stimuli may also be reduced or extinguished as a component of CBT (Marshall, Anderson, & Fernandez, 1999; Yates, Goguen, Nicholaichuk, Williams, & Long, 2000). Repetition of skills is a strong focus to establish desired behaviors as part of the individual's behavior repertoire and procedures often provide many opportunities for the individual to engage in the desired behavior (Hanson, 1999).

Similar to sexual education programs, CBT programs are designed with the individuals own agency in mind. The skills taught are chosen based on a great deal of research on the factors

that can contribute to sexually deviant behavior and how the individual may receive reinforcement for the new behaviors learned from these skills which may compete with previous undesired behaviors (Yates, 2003). As CBT places a heavy focus on cognitive distortions as a contributor to undesired behavior several models and theories based on covert behavior and cognition have been developed to measure, identify, and alter these covert behaviors in addition to the more easily detected genetic and historical factors (Langdon, Maxted, Murphy, & SOTSEC-ID Group, 2007). Using these cognitive-behavioral models, CBT therapies have targeted cognitive constructs when seeking to alter an individual's sexually deviant behavior such as one's value system (Herman, 1990), affect control, and empathy (Ward, Keenan, & Hudson, 2000). As the focus centers on the abstract and conceptual rather than concrete and physical, very few of the models developed have been able to adequately identify and address all the factors that legitimately contribute to an increased risk of sexual deviance. Despite this, there has been evidence to the credibility of cognitive and covertly behavioral factors contributing to overt sexual deviance with studies finding that models like the Ward and Hudson Offending Pathways model do show a correlation between an individual's goals and strategies (defined as the desires of the individual to either access or avoid the opportunity to commit a sexually deviant act and the form their behavior to carry out this behavior takes) and the frequency of sexually deviant behavior (Langdon et al., 2007).

Dissimilar to other sexual offender treatments, CBT often seeks to address the tendency for some treated individuals to be at greater risk of reoffending as time goes on (Hanson, Steffy, & Gauthier, 1993). To this end, CBT employs the use of follow up programming which is introduced at some point after the initial treatment is completed. Once the goals of the initial treatment have been met and the individual has demonstrated the ability to engage in the desired

skills and behaviors the treatment programs that have previously been utilized will end and a second phase of less involved treatment programs are introduced. This second phase often involves some form of assessment of skills or refresher programming that ensures the individual is still capable of engaging in the desired target behaviors along with some form of supervision in which the individual is monitored to ensure they do not engage in the undesired behavior (Yates, 2003). An additional effect of these follow up programs is that they provide behavioral contingencies that are similar to those that were provided in treatment and provide an avenue in which the desired skills are generalized to a non-treatment setting (Cumming & McGrath, 2000).

The large amount of growth in CBT practitioners and its nature as an interdisciplinary program that facilitates collaboration from a wide variety of backgrounds has proved to be a great boon to CBT as an adaptable and effective vehicle for treatment (Levenson, 2014). Not only has CBT demonstrated itself to be a successful form of therapy for the most apparent aspects of sexual deviancy, that is the reduction of sexually deviant behavior in the individual and the immediate stimuli in the environment that act as motivation for such behaviors, but researchers have also used CBT to address less apparent factors and concerns for sexual deviancy that occur on the sociological, psychological, ethical, and legal levels (Beech & Hamilton-Giachritsis, 2005; Glaser, 2010; Prescott & Levenson, 2010; Ward, 2010). With this the conceptions of sexual deviancy and the individuals that commit such acts have been expanded to incorporate the individual as a victim to be treated as well as a perpetrator to be altered. With a greater understanding of how trauma inflicted on some individuals affects their own emitted behavior, CBT has been able to develop and incorporate treatment models such as Trauma Informed Care (TIC) and the modification of group climate in treatment to maximize treatment effectiveness. These changes in conception have allowed for CBT to gain greater success in use

for special populations that require special protection as well as treatment. In turn, CBT has been able to develop programs to treat men with ID (Murphy, Powell, Guzman, & Hays, 2007) and preadolescent children (Carpentier, Silovsky, & Chaffin, 2006).

In a pilot study conducted in the south-east of England (Murphy et al., 2007), participants with ID had been admitted to the study for engaging in sexually abusive behavior were placed in 1 of 2 treatment groups. Participants entered into the first treatment group were measured on various scales of knowledge and attitudes towards sex and sexually deviant behavior and any instance of sexually abusive behavior that occurred prior to the program, during the program, and the 6 months following the program was logged. During the program sessions participants were taught basic information about sex and appropriate sexual behavior as part of a sexual education component of the program. After completing the topics taught as part of the sex education component, participants were encouraged to self-disclose about their own sexually abusive behavior and the factors that surrounded them. Topics that were discussed included descriptions of participants illegal sexual behavior, the distress they felt when talking about their illegal sexual behavior and cognitive distortions participants used to cope with the distress, their own experiences of being victims, perspective taking of their victims, and cause of the participants own sexual behavior. The methods of the second group were conducted in a similar manner with similar topics being discussed. All topics of sexual education and self-disclosure of past sexual behavior were adapted to allow for as many sessions as participants needed to fully understand them.

The results of this study showed initial promise as only 1 of 8 engaged in sexually abusive behavior during both groups. The behaviors this participant engaged in were non-contact behavior including public masturbation and indecent exposure. In the 6 months following the

program no participants had been convicted of committing a sexual offense but 3 participants, including the participant that had engaged in sexually abusive behavior during the programs, had engaged in sexually abusive behavior in the form of nonconsensual sexual touching through clothing, public masturbation, and verbal sexual harassment. It is of note that all participants that had continued to engage in sexually abusive behavior during and after the program had had diagnoses that placed them on the autistic spectrum which indicates that the program received may need further adaptation to achieve greater effectiveness with this population or an alternative treatment may need to be developed all together. Additionally, assessment of participants found that participants showed greater sexual knowledge and empathy for victims following the program.

To assess the impact CBT had on some individuals that went through CBT to modify sexually abusive behavior, a follow up interview was conducted with 16 men with intellectual disabilities after 2 months of completing a CBT program (Hays, Murphy, Langdon, Rose, & Reed 2007). The majority of the subjects reported that they would like to attend additional sessions but, with the exception of the rule of confidentiality, when asked about any individual lesson or rule less than half of the individuals were able to recall the rule asked about.

CBT and Its Use with Teen and Child Populations

CBT programs have also been uniquely adapted to treat the population of preadolescent individuals that engage in sexual deviance as it is commonly believed that sexually deviant behavior in childhood becomes increasingly difficult to alter as they age and some studies indicate that individuals that display Sexual Behavior Problems (SBP) in childhood may have an increased chance of engaging in sexual offenses in adulthood (Burton, 2000; Carpentier et al., 2006; Zolondek, Abel, Northey, & Jordan, 2001). Although current studies do not accurately

portray the risk of childhood SPD leading to adult sexual offense, this problem has been deemed important enough for some state child welfare systems to have developed tracking systems for registering and handling such children and some states include such children in sex offender registries (children Safety Act, 2005)

A comparison study by Carpentier et al. (2006) of the individual effectiveness of CBT and Play Therapy (PT) on children that displayed SBP showed highly promising results in favor of CBT. The participants for the study were selected from various child health and care and law enforcement centers and admitted into the program upon meeting criteria such as displaying clinically significant SBP. Upon being admitted into the program, participants were placed at random within a CBT or PT treatment group.

The CBT condition focused on behavior modification and psychoeducational principles. Participants were engaged in 12 highly structured sessions where they were educated in topics such as learning concrete sexual behavior rules, behavior self-control techniques, sex education, and identifying inappropriate sexual behavior. This program was specifically developed for children rather than being adapted from programs designed for adult sex offenders that have been used in previous treatment programs (Araji, 1997). Additionally, the caregivers of the participants were educated in appropriate and inappropriate childhood sexual behavior and techniques to manage inappropriate sexual behavior such as minimizing opportunities for SBP to occur. A third group that did not display SBP but instead other behavioral problems such as ADHD and oppositional defiant disorder also engaged in this form of CBT therapy

The comparative PT program was less structured than the CBT program and instead focused on client-centered and psychodynamic play therapy principles. In this condition participants engaged in 12 sessions that had a different form of play activity for each. While the CBT

program was directly lead by therapist the PT was minimally directed, instead therapists focused on giving reflections of what participants said, probing into feelings, and interpreting patterns of play. During play, a theme that was similar to a lesson taught in the CBT program was introduced for discussion which the participant would engage in with their care giver as the therapist observed and assisted the care giver. Participants from all groups had reports given following 1 and 2 years of treatment to provide information on whether participants had engaged in any sexual offenses.

The results of the study found that 2% of participants in the CBT had been reported for committing a sexual offense in a 2-year span following treatment which was significantly lower than the 10% of participants in the PT group reported to have committed a sexual offence. The incidences of sexual offense by the third behavioral disorder group closely matched that of the SBP-CBT group which indicated that the CBT program may be effective in reducing sexual offences in individuals with non-sexual behavior disorders as well. Overall participants that engaged in this short-term form of CBT displayed very low incidence of sexual offence following a 2- year period after treatment thus supporting both this form of CBT and the use of caregiver education and involvement as a part of treatment.

The results of this study mirror those of previous studies focused on CBT programs for children with SBP (Araji, 1997; Cohen & Mannarino, 1996; Cohen & Mannarino, 1997; Pithers, Gray, Busconi, & Houchens, 1998) with children that go under various forms of CBT displaying a marked decrease in SBP post treatment which some studies found were maintained in follow up studies (Bonner & Fahey, 1998; Bonner, Walker, & Berliner 1993; Bonner, Walker, & Berliner, 1999). An additional unique aspect of this study was that the gender of the sampled participants was relatively even with just over 60% of participants being male. Analysis of

correlation between demographics found that gender had no significant effect on SBP or risk of engaging in sexual offense. These results indicate that females may be a risk population for sexual offending that currently has received relatively little focus and may warrant further study on rates of sexual offense committed and unique challenges to treatment faced by such a population. Based on the results of this study and previous, it appears that CBT programs are generally effective in reducing SBP and usually showed a greater effect than comparative programs.

While several studies have found that CBT in its multiple form have generally shown success as treatments for reduction and removal of sexually deviant behaviors in teens and children, little research has been conducted on CBT effectiveness on specific behaviors as opposed to sexually deviant behaviors as a whole (Anstiss, 2003; Eastman, 2004; Friendship, Mann, & Beech, 2003; Geer, Becker, Gray, & Krauss, 2001; Looman, Dickie, & Abracen, 2005; Marin & Bell, 2003; McGrath, Cumming, Hoke, & Bonn-Miller, 2007; Newbauer & Blanks, 2001; Reitzel & Carbonell, 2006; Righthand & Welch, 2004; Schweitzer & Dwyer, 2003; Sullivan, Sullivan, & Hopkins, 2006; Webster, 2005). Additionally, there has been little determination of which model of CBT and accompanying secondary components works most effectively for which targeted behavior (Print & O'Callaghan, 2004; Worling, 2004). In an attempt to assess the individual effectiveness of individual models of CBT and the specific behaviors they are used to treat, Ikomi, Harris-Wyatt, Doucet, & Rodney (2009) had conducted a state-wide survey of treatments used by providers across the Southwest. The result of the study confirmed that CBT of some form was by far the most popularly used treatment with 133 of 223 appropriate responses citing CBT as the form of therapy used. CBT with no additional component listed (e.g. relapse prevention, social skills) was reported as having an average

success rate of 87.31% based on 16 reports while CBT with relapse prevention had a rate of 84.53% across 15 reports and CBT with social skills had a rate of 76.75% across 2 reports. Of the cases reported the most commonly targeted behaviors in descending proportions were indecency with a child involving sexual contact (39%), indecency with a child involving no contact (31%), aggravated sexual assault (14%), sexual assault (14%); and incest (1%).

It should be noted that while the reported answers of the survey indicate that CBT is most commonly used the exact proportion of treatment providers that use CBT could not be determined due to significant number of providers stating they used group therapy which is not a specific therapy program but a way to administer a therapy program. As such it is unknown if these providers used CBT or some other form of therapy that was administered to individuals as a group rather than individually. Additional confusion about CBT components is that Group CBT programs reported an average success rate of 86.67% but no CBT programs were specifically reported to use individual therapy so comparisons of the effectiveness of group versus individual therapy could not be drawn. Other reports indicated that group based CBT with experiential therapy and CBT with family therapy were highly successful based on an average success rate of 90% and 95% but these results were drawn from a single report each so the generalizability of the results is highly suspect. Given the methods used for collection of data, definitive recidivism rates could not be determined. The general results of this study align with the view that CBT is overall a highly successful treatment but there are indications that there is a component of 'best fit' for treatment and individual matching that is not currently being addressed.

CBT Derived Programs

CBT as a therapy has proven to have a treatment process that is highly flexible and easily altered while still maintaining its core characteristics. When this is paired with its status as the most commonly used form of treatment for sexually deviant behavior it is easy to understand how the base ideas of CBT have branched into several adaptations and modified treatment programs that may be found today in any number of treatment facilities or organizations one may encounter. As the need for effective treatment for none typical populations and the desire to see larger changes increases so too does the forms that CBT takes to fill these niches. As a result of this CBT principles can be found in highly specialized programs that address issues of population and environment that rarely occur but are none the less important, in newly established therapies branched away from CBT and developed their own principles, and even as components of hybrid therapies based on the principles of several underlying disciplines.

While there have been several fully established therapies that have been derived from CBT that there are still several more that are being developed and being piloted. One such therapy is the Thought Change System (TCS) that expands upon standard CBT and incorporates components of the Case Conceptualization Method (Apsche, Evile, & Murphy, 2004). TCS was developed for use in treating sexually deviant arousal and anti-social behavior in aggressive offenders that also possess a personality disorder. To this end, TCS takes the aspects of detecting and altering cognition and cognitive distortions from CBT and expands upon that premise through the addition of developing transitional cognitions to replace undesired cognitions before replacing those with desired cognitions in turn and providing education and training in altering cognitions that contribute to other non-sexual behavior.

The program uses a structured system to identify and analyze undesired cognitions in an in-depth manner such as requiring a daily record of negative thoughts and teaching how

cognitions contribute to several systems of behavior outside of sexual offenses such as violence and drug abuse. The program also teaches about healthy behavior as being on a continuum that changes with the situation and the system of mental health and psychiatric medication during treatment. The issue of accompanying personality disorders that individuals undergoing this treatment are also addressed in several ways. In addition to exploring and treating deficits in skills such as social competency, TCS seeks to identify and treat deficits in self-esteem and the effects of frequent depression. TCS also addresses the effects of PTSD within the population of individuals that offend and how they contribute of undesired cognitions and behaviors. The case conception method incorporated into TCS is designed to identify the multisystem components of each participant that contribute to their behavior and identify how accompanying personality issues may impede treatment (Beck, 1996).

In the pilot study of TCS all 10 participants were selected from the participant population of the Behavior Study Program (BSP) at the Pines Residential Treatment Center in which TCS was developed. The participants were of various ages and ethnic backgrounds and were admitted into the center for displaying behavior such as flashing, fondling, vaginal penetration, and anal penetration. Participants underwent an approximately 16-week TCS program along with ongoing Individual and family therapy. Additional therapeutic services were also provided as needed.

The results of the study found that after 12 months of treatment, participant assessments indicated a lower prevalence of negative overt behaviors, negative internal cognitions and behaviors, and undesired behaviors that characterized the participants accompanying personality disorders. Participants also showed a decrease in beliefs that supported aggression and the victimization of others as well as beliefs that supported the desire to engage in an appropriate intimate relationship in which individuals hold equal amounts of power. The findings of this

study do show promise for this therapy as participants showed observed decreases of overt undesired behavior reported increases of desired cognitions and covert behavior. Additionally, participants that found desired changes in this therapy had previously failed to achieve those changes when administered treatments at other facilities that had not used this method. Additional research is still required as the sample size for the study was small and details of participants history with previous treatment was limited. Despite this, the methods and results of this study provide further evidence in the link between issues in non-sexual arenas of an individual's life and the prevalence of sexually deviant behavior. This focus on treatment outside the sole issue of sexual behavior will explored further in the following CBT derived therapies.

Problem Solving Therapy

Problem solving therapy (PST) is a modified form of cognitive behavior therapy (CBT) focuses on teaching problem solving skills to the subject to modify behavior. There are two major processes that PST focuses on in treatment known as problem orientation and problem solving. Proper problem orientation is a process of motivation in the subject that involves the factors that affect an individual's behavior when confronted with a problem. The cognitive component of this problem orientation addresses factors such as the individuals thought about the problems such as their assumptions and expectations about the problem faced and the individuals own ability to behave in an effective manner to solve the problem. This orientation can be positive or negative which respectively facilitate or inhibit problem solving behavior. With a positive problem orientation, an individual is able to effectively analyze a problem and their own thoughts about it; e.g. what is the problem, what caused the problem, can the subject solve the problem, etc.; while an individual with a negative problem orientation would

ineffectively analyze a problem due to inaccurately identifying or failing to observe details of the problem that lead to effective analysis and solving of the problem (Nezu & Nezu, 2001).

The behavioral component of problem orientation addresses behavioral styles of the subject and identifies 2 patterns of maladaptive behavior that inhibit effective problem solving. The first style is known as avoidance and consist of procrastination, passivity, and inaction with the individual engaging in behavior to avoid interacting with the problem. The second maladaptive pattern of behavior is known as impulsiveness or carelessness and is characterized by ineffective interaction with the problem that seeks to solve it but results in failure. This results in many unsuccessful attempts to solve the problem and is associated with subjects that have a lower tolerance to aversive thoughts and feelings (Nezu & Nezu, 2001).

The second major process addressed in PST is known as “problem solving proper” and involves effective application of 4 tasks and their corresponding goals for effectively resolving problems. The 4 tasks of “problem solving proper” are problem definition and formulation, generation of alternatives, decision making, and solution implementation. The goal of problem definition and formulation is to accurately understand the nature of the problem and develop realistic objectives in solving it. To succeed in generating alternatives the subject must develop a wide array of possible solutions to the problem without becoming too focused solving the problem a specific way or specific details of the problem. Decision making involves analysis of the potential solution developed with the previous goal in order to determine which solutions are most effective and likely to solve the problem. Finally, solution implementation and verification is achieved by and carrying out a chosen solution and analyzing it afterwards to determine its effects on the problem if it was effective or how it could be altered to be more effective (Nezu & Nezu 2001).

While no studies have been currently conducted as of yet to use PST solely to reduce unwanted sexual behavior, survey data of 124 incarcerated child molesters has found that they scored lower in positive problem orientation and rational problem solving and higher in negative problem orientation, avoidance and impulsive carelessness when compared to non-sex offenders of a matching age. Additionally, scores of avoidance problem solving strategies positively correlated with sexual aggression and scores of negative problem orientation and impulsivity/carelessness positively correlated with sexual deviancy. These scores indicate that a lack of problem solving skills may contribute to the engagement of sexually deviant behavior (Nezu, Nezu, Dudek, Peacock, & Stoll, 2005)

A modified form of PST adapted to treat sex offenders with ID has been proposed by researchers for the use in various rehabilitation programs (Nezu, Greenberg, & Nezu, 2006; Nezu, Fiore, & Nezu, 2006). In order to adapt PST to be used with individuals with ID that have sexually offended, individuals would be taught to use the 4 “problem solving proper” skills when they encounter problems such as finding themselves in situations in which they would likely commit a sexual offense so one could engage in effective behavior without avoiding situations that would be beneficial and avoid engaging in impulsive action that lead to committing a sexual offense (Nezu, Fiore, & Nezu, 2006).

One such program is Project STOP. This program multiple component, cognitive model to provide assessment and treatment for sex offenders with ID. participants are provided with a variety of ABA/behavioral therapy based treatments such as masturbatory conditioning and CBT based programs such as PST that they are given based on a personalized plan developed for their individual behavior and functioning level. Data was collected from the records of 25 participants that were actively engaged in treatment and were referred for various forms of sexually deviancy

including exhibitionism, stalking, sexual threat, child molestation, child rape, adult rape, and other sexual assault. The observed participants were also found to have a wide range of diagnoses in addition to ID among them including dysthymia, voyeurism, generalized anxiety disorder, oppositional disorder, paraphilia, schizophrenia, pedophilia, and various personality disorders including dependent, antisocial, passive, narcissistic, and nonspecific. These participants were found to have an increase in motivation and frequency of engagement in adaptive behavior. Most of the participants showed strong trends in improvement for clinical target behaviors but the reported changes were not statistically significant for the group as a whole. Recidivism rates for the participants of Project stop were low as only 1 participant committed another sexual offense between the years of 2002-2005 and 3 participants being reincarcerated for probation violations over a 12-year span between 1993-2005 (Nezu, Greenberg, & Nezu, 2006). These results indicate that the methods used by Project Stop are effective in reducing targeted sexually deviant behavior but it is uncertain the effects of individuals treatments as participants are treated using a multi-component program.

Mode Deactivation Therapy

Mode deactivation therapy is a multi-disciplinary program derived from the principles of cognitive behavior therapy (CBT), functional analytic behavioral therapy (FAP), acceptance and commitment therapy (ACT), mindfulness, and dialectical behavior therapy (DBT) (Apsche, Bass, & Backlund 2012). The main goal of MDT is to restructure the beliefs of an individual having them examine their perceptions of their environment and analyzing how the results of their behaviors either increase or decrease the likelihood of them occurring in the future (Beck, 1996) While this program had initially been developed for theoretical studies of how the mind works(Alford & Beck 1997; Beck, 1996), there has been recent research to use MDT as a

method to decrease sexual aggressive behavior in individuals who's cases are made complicated by accompanying multi-axial diagnoses and/or a history of abuse (Apsche & Bailey, 2004; Apsche, Bass, & Backlund, 2012; Apsche, Bass, & Houston, 2008; Apsche, Bass, & Murphy, 2004; Apsche & Ward, 2003; Apsche & Ward Bailey 2004; Apsche, Ward, & Evile, 2003a; Apsche, Ward, & Evile, 2003b).

The process and rationale of MDT is demonstrated in the 3-part theoretical case analysis of Apsche and Ward Bailey (2003; 2004a; 2004b). Based on the experience of Apsche & Bailey (2003), many adolescents that have a history of abuse develop survival coping strategies that take the form of personality traits and/or patterns of behaviors. From this display of personality traits and behaviors is where an individual receives a diagnosis of having a variety of disorders such as anti-social personality disorder and obsessive-compulsive disorder. As with CBT, it is believed that these overt traits and behaviors are caused by covert thoughts but these thoughts are not linked to any specific mental disorder, that is, the great variety of mental disorders and maladaptive behavior of various individuals could be caused by the same thought (Bass & Apsche, 2013). Based on this belief, MDT proposes to focus on an individual's thoughts rather than one's disorder or behavior because when the thoughts are altered so too are an individual's expression of a disorder and behavior.

MDT also contends that an individual's behavior is based on reinforcement contingencies which is borrowed from the principles of FAP (Kohlenberg & Tsai, 1993). Based on this belief an individual's thoughts and perceptions are based on reinforcement for past contingencies. For an individual with a history of abuse this would mean that beliefs and the accompanying behaviors that proved successful in an abusive environment would have developed a strong history of reinforcement even if they are considered maladaptive and undesired by society. From

this, behaviors such as aggression and beliefs that others are to blame for one's actions are developed and persist outside of the abusive environment which then require action and alteration by legal and rehabilitative entities.

These beliefs that develop from a history of reinforcement do not exist independently of each other but are instead believed to form an interconnected series of beliefs and perceptions that lead to corresponding thoughts and behaviors. This system of interconnected beliefs, motivations, and accompanying behaviors are known as modes (Beck, 1996) which forms the bases for an individual's characteristics such as their common patterns of behavior, their motivations, their emotional responses to stimuli and accompanying behavior in reaction to said emotions, and other aspects that would be considered the makeup of one's personality. Modes develop in response to an individual's environment and the problem that can arise with a mode is it can generalize to environments and contingencies outside the one in which it developed leading to the thoughts and accompanying behaviors to occur in situations in which they are maladaptive rather than adaptive. From this perspective, the problem of abused individuals that have engage in undesired behavior is three-fold: a series of perceptions and beliefs have developed that has led to a pattern of thoughts and behavior which prove highly adaptive in one series of contingencies and then generalized to contingencies in which the behavior is maladaptive; The beliefs and perceptions both act as reinforcement for the pattern of behavior and block external stimuli from acting as a punisher for said behaviors and they are maintained; and as the present behavior is reinforced and outside stimuli are block the ability to develop new behaviors is inhibited. MDT seeks alter this undesired overt behavior by disrupting the process of an undesired mode that contribute to them and are triggered by the environment. MDT also

remedies the nature of these modes which make them resistant to change through a process of Validation-Clarification-Redirection (VCR) (Apsche, Bass, & Backlund, 2012).

The process begins with validation as a method to ease participants into the therapeutic process and borrows many techniques adapted from DBT such as radical acceptance and relaxation. A stance of radical acceptance for the individual's behavior eases the initial process as it avoids setting the therapist into a position of opposition with the individual they are attempting to treat. Based on the tenants of MDT an individual that has developed maladaptive mode has developed it in response to an environment of consistent opposition (e.g. from the abuse they consistently faced and adapted to in the past) and the behavior of said mode has generalized to several environments, including the therapeutic environment that the therapist tries to establish. To create a dynamic of rapport between the therapist and client an attitude of radical acceptance is adopted in which an individual's beliefs are not challenged but instead examined. Participants are even encouraged to examine the ways in which their perceptions are true and adaptive. Through this method an individual that had developed obsessive or addictive behaviors can look at their history of previously being in an environment where danger could appear suddenly and unexpectedly and identify and receive validation for the ways in which such beliefs and behaviors actually allowed them to react quickly to sudden danger or how drug use helped to alleviate emotional distress in that environment so the individual could do what they needed to in order to succeed. By avoiding a stance of opposition, a therapist is less likely to act as a stimulus that encourage the undesired behavior which was itself designed to react in response to opposition (Apsche & Bailey, 2003).

The next step after validation is clarification which occurs in during belief examination. While the therapist provides feedback that confirms the participant's views were reasonable

given the context, the therapist also suggests that these perceptions may not hold true in every context and how past events may have skewed the perceptions of present events. Imagery and relaxation exercises are to reduce the stimulus control that external stimuli have on undesired covert behavior (the symptoms of the individuals' disorder and emotional responses). Individuals are taught to examine their perceptions of external stimuli and identify internal stimuli through that can influence perceptions and behavior through a method called balance training that facilitate the phase of redirection.

By reducing the control that internal stimuli have over behavior and teaching participants to recognized their emotions an individual is now able to think critically about their internal and external environments. The participant is able to manage emotions and focus on the idea that their perceptions may not match their environment. With this in mind, the participant is now able to identify inconsistencies between the perceptions they hold and the environment they currently face. From this point the external stimuli in the environment can now be accurately perceived and new behaviors can be established that are adaptive to the contingencies faced.

The format that therapy takes for an individual is uniquely designed for them based on around the Cases conceptualization method and mastery system (Apsche & Ward, 2003). Participants in a program have a workbook developed for them that takes into account the individuals history and beliefs and teaches them at a rate that accommodates them. Participants are also introduced to easy challenges that initially provide success easily and frequently to quickly develop a history of reinforcement before facing a more difficult task. Through this method an individual is taught to recognize the external stimuli of the environment and the internal stimuli of their modes and how to understand how these factors provide motivation that act as the function of their behavior as well as the form that their behavior takes.

MDT was developed as a melding of components from multiple therapies across multiple disciplines designed to address complex problems that accompany the treatment of some individuals. The complex nature of MDT can make it difficult to validate as it has several components that work independently and in conjunction which inhibits the ability to measure and determine what causes behavior change, to what do degree, and why behavior change occurred. In addition, the cross-discipline components from which MDT is derived were themselves developed based on different, and sometimes conflicting, paradigms of how and why behavior occurs. This raises questions such as whether behavior comes from and is separate from the thoughts that compose our “mind” and behavior changes as we “think” of ways to be more successful in our environment or whether thoughts themselves a form of behavior shaped by the environment as well as the relationship between behavior influencing other behavior (thoughts influencing overt behavior). Regardless of the debates and conflicts of ideologies, studies of MDT as a whole and as a series of components have found success as a complicated program to achieve desired changes in complicated issues of anxiety (Apsche & Bass, 2006; Apsche, Bass, & Siv, 2006), physical aggression (Apsche, Bass, & Houston, 2007), and sexual deviance (Apsche, Bass, Jennings, Murphy, Hunter, & Siv, 2005).

Over its course of research and development, several comparison studies have been conducted between MDT and its forerunner CBT as a treatment for specialized populations. The reasoning behind such comparison studies has been to determine if the widely used CBT is the most effective method for treatment in all contexts and such comparisons demonstrate the importance of continued research and development even after the success of a method has been supported by research. As MDT was developed as an extension of CBT both programs share many similarities in the method and goals of treatment, especially in forms of CBT adapted for

clients with histories that complicated their treatment (Apsche, Bass, & Murphy, 2004). Both programs focus on establishing a good client-therapist relationship that works to empower clients to manage their own behavior but the difference occurs in the view of client perspective. While CBT seeks to change thinking on the basis that undesired thoughts are distortions that are not accurate MDT views these thoughts as being not only true but essential to the clients previous health and safety. With this belief, the goal of MDT is not to change the way one thinks but to examine and understand the context of their environment and determine which thoughts and behaviors will be most successful in that context. The importance placed on the individual perspective in MDT in turn places importance on things not addressed in CBT such as learning what stimuli triggers undesired thoughts and behaviors, anxiety reduction, addressing trauma from the past. It is based on this view that MDT incorporates additional components not found in CBT to address issues such as how to treat a noncompliant client that resists treatment (Apsche, Bass, & Murphy, 2004).

Studies between MDT and CBT found indication that participants received greater benefit from MDT than CBT in reduction of elicited undesired sexual behavior and recidivism (Apsche et al. 2005). Several additional benefits for MDT over CBT have been reported for this specialized populations such as participant reports of MDT being less aversive than CBT and the effectiveness of MDT as a general method for treating and addressing individual factors of multiple different accompanying disorders which in the past had required the development of individual treatments to address (Apsche, Bass, & Murphy, 2004; Apsche & Ward, 2003).

In an early comparison between MDT and CBT (Apsche & Ward, 2003), 14 adolescent participants who were admitted to a residential treatment center for sexual offences were selected for the study based on their lack of history with CBT or MDT Treatment. The offenses that

participants had been reported for included flashing, fondling, vaginal and anal penetration, or a combination of the previous and the number of victims reported varied from 1-13 per participant (Apsche & Ward, 2003). Results of the study found that participants that had taken part in the MDT scored as posing a low risk to community safety after treatment in comparison to the CBT group which posed a moderately high level of risk to the community after treatment. Participants also showed characteristics that indicated they were less likely to offend such as lower internal motivations to offend, a greater understanding of the impact of sexual assault, and increased empathy. Participant behavior reflected these assessments as the MDT group showed greater adherence to the rules of the treatment center and had fewer occurrences of aggressive and destructive behavior. Additionally, Participants in the MDT group participated and behaved appropriately during therapy sessions on a higher average than the CBT group.

Participants in the MDT also displayed a greater desired change in various other aspects outside the focus of sexually deviant behavior. Reports for non sexual undesired behavior and symptoms of disorder such as physical aggression, withdrawn behaviors, and depressive attitudes were noted to be lower in the MDT in comparison to the CBT by a small but statistically significant amount. Finally behaviors and characteristics associated with a history as victims of trauma and symptoms of the participant's individual disorders showed a significantly larger desired change in MDT compared to CBT. Both groups were assessed to have similar levels of fear and anxiety reactions that are symptomatic of Posttraumatic Stress Disorder (PTSD). Despite this, MDT participants displayed fewer overt symptoms of PTSD and/or other disorders and demonstrated coping skills of greater effectiveness and functional behavior of greater frequency than those displayed by the CBT participants.

In a more recent comparison study (Apsche et al. 2005), a three-way comparison study was conducted to assess the effects of MDT, CBT, and Social Skills Training (SST) on Teens with psychiatric disorders. This study was conducted using a much larger population selected from the residential treatment facility where the study took place. All participants were children and young adults admitted for treatment of aggression and/or sexual aggression and displaced various disorders including PTSD, Conduct Disorder, Oppositional Defiant Disorder (ODD), Mixed Personality disorder, Borderline Personality Disorder, Narcissistic Personality Disorder, and Dependent Personality Disorder. After admittance into the study, participants were randomly placed in one of 3 conditions. These groups were the previously described MDT program, a modified CBT program, and an SST program

The CBT condition used a form of CBT specifically designed for youth with personality disorders and psychosexual disturbance that displayed high levels of violence or aggression. The program consisted of a previously published treatment curriculum and included a workbook called “Thought Change” (Apsche, 1999; Apsche, Evile, & Murphy, 2004). The curriculum required participants record negative thoughts on a daily basis. Participants were also required to learn about cognitive distortions, the link between beliefs and patterns of aggressive behavior and sexual offenses, and mental health and substance abuse issues. Finally, participants were trained in skills for taking responsibility for actions, developing victim empathy, cognitive restructuring, mood management, and proper mental health maintenance.

The SST program focused on identifying, developing, and reinforcing desired behaviors using many behavioral analytic techniques (Henggeler, Schoenwald, Borduin, Rowland and Cunningham, 1998). Participants in this group were taught alternative behavior to engage in and to identify contingencies in the environment which were practiced through methods such as

modeling and roleplaying. Reinforcement desired behaviors was provided through shaping and fading procedures and participants were individually evaluated based on their performance.

Measurements of success were based on the frequency of reports of physical and sexual Aggression found in daily behavior reports and behavior incident reports conducted by the treatment facility. Based on these parameters it was found that all participants benefited from their therapy programs but the greatest desired results came from participants in the MDT group. Participants in the MDT condition showed the greatest decrease in physical and sexual aggression between baseline and post-treatment measurements. Statistical analysis also found that MDT was the only treatment that showed statistically significant reduction in rates of sexual aggression from baseline to post-treatment. Additionally, statistical comparison of the change in all three conditions found that while CBT had Greater reduction in aggression than SST the difference was not statistically significant which indicated that both CBT and SST had roughly the same level of effectiveness while the results indicate that MDT is the most effective method. The results of this study indicate that MDT may be better at treating teens with psychological disorders for a variety of issues including sexual deviancy.

MDT has also seen its own forms of modification from the standard through experimentation in the format of the therapy program. An example of this is Mode Deactivation Family Therapy which tries to examine family interactions and understand them as a process that influence the behavior of all members (Apsche & Bass, 2006; Apsche & Ward, 2003). With this view, not only is the child treated for behavior change as a client but the whole family is treated for change as the client's environment. As MDT proposes that an individual's modes develop based on the environment it is common that an individual's family and home life provide the greatest basis on which an individual develops their modes. People treated with MDT are often

victims of an unsafe environment that necessitated the need to develop aggressive modes for success and if this environment is one's home life then special considerations must be taken in order to effectively treat the client as both they and their environment need changing. MDT Family Therapy addresses this through a multistep process similar to single client MDT (Apsche, Bass, & Houston, 2007). The process begins by assessing the basic struggles the family faces that cause them fear and anxiety. After this, the therapist seeks to understand the individual modes and beliefs of each family member and their collective beliefs and mode to understand how each individual's modes and beliefs interacts with those of their family members as a process. The family based format of MDT also uses the Validation-Clarification-Redirection method of the standard except that the family members do not only have their individual beliefs validated as having truths within them but are also shown how the beliefs of others within the family have truths within them as well. From this understanding family members are taught to find compromise between their beliefs and develop new beliefs based on this compromise. The same process is conducted with collective family beliefs and family members are taught to recognize how some family beliefs come into direct conflict with others and develop new family beliefs that cohesively integrate these conflicting beliefs. It is through this method that the family is treated both as individual clients and with the family dynamic as a whole as a client to change both the individual's interaction with their environment and the environment as a whole.

This alternative take on MDT is also finding success as a treatment based on the results of research studies (Apsche, Bass, & Houston, 2008). In comparison treatments between Family MDT and a standard treatment procedure in an outpatient setting it was suggested by the data that MDT was more effective in reducing various undesired behaviors than TAU and had a lower recidivism rate over a 2-year period following pose treatment. The reports of sexually deviant

behavior in the Family MDT treated adolescents was reduced to 0 reports following treatment and was maintained over a 2 year follow up period while the TAU group was had a recidivism rate of 50% in the 2-year follow up. Reports of out of referrals for out of home placement, family arguments, and physical and verbal aggression in the treated adolescent was also reduced and maintained to a much greater degree than the TAU group. No reports of aggression committed by family members of the adolescent were recorded so the effectiveness of family MDT in altering the behavior of individual family members is not as well understood. As MDT achieves further modifications and diversity of forms new issues such as the treatment for incestuous behavior without splitting up a family may be addressed.

While CBT was shown to produce desired results in all of these comparisons, MDT was consistently found to be more effective in achieve desired change. The additional results of some studies (Apsche et al. 2005; Apsche & Ward, 2003) also indicate that participants may find greater appeal and validity from MDT treatments as evidenced by their behavior during treatment sessions. The ideology of this form of therapy holds that undesired behaviors like sexually deviant behaviors may not be something to be treated directly but rather part of a group off behaviors t that are symptoms of an underlying set established contingencies which instead must be examined and treated. This belief creates a less individual focused view of the problem and expands the area of examination to the environment and history of a client unlike the views used by BAT and sexual education.

It is worth noting that MDT was developed specifically to treat a special population, that being teens and adults with one or more diagnoses of personality and anxiety disorders (Apsche, Ward, & Evile, 2003b). This sets this program apart from many other therapies which are commonly designed to treat a more general population and then adapted to better suit a special

population. This unique history of development may be why MDT is found to be so effective with its targeted population as its paradigms were developed directly based on the issues faced by this population while adapted programs are based on paradigms that are not focused on a special population and thus as not as readily equipped to address such issues.

What is certain is that this greater appeal and effectiveness of treatment can prove to be very important in terms of finding a practical treatment method. With issues of conduct disorder having a prevalence of 6% to 16% in males under the age of 18 and being one of the most frequently reported problems in mental health programs (Kazdin & Weisz, 2003) there is a need for programs designed for clients that engage in uncooperative behavior resist treatment protocol. The need for addressing conduct disorder is further illustrated by its high prevalence in incarcerated youth where rates as high as 91% of the population (Boesky, 2002). Further problems may lie ahead for such individuals as studies indicate that 80% of youths with conduct disorder are likely to meet criteria for psychiatric disorders in the future (Kazdin & Weisz, 2003). The development of factors that both complicate and cause resistance to treatment certainly pose a problem to be addressed within the rehabilitative communities. Overall studies indicate that CBT proves a generally effective method but by no means acts as a panacea, instead it may act as a base to which effective treatment can be developed from for the treatment of individuals with behavioral systems made complicated by uncommon history and biology.

CONCLUSION

When seeking to develop a program for reducing sexually deviant behavior, there are many factors to be taken into account in order to lead the development. Sex-offending behavior is generally believed not to have a single cause but is the result of a combination of risk factors (Marshall, Anderson, & Fernandez, 1999). These factors include both overt and covert behavioral factors and environmental factors of both the present and the past that have led to the development of a behavioral pattern that is now problematic (Marques, Day, Nelson, & West, 1994; Prentky, Knight, & Lee, 1997; Seghorn, Prentky, & Boucher, 1987).

Individual characteristics such as developmental and intellectual ability and personal environment must also be taken into account when developing a program as some cases may require only relatively simple methods such as those used by Dozier, Iwata, & Worsdell (2011) to reduce sexual behavior and in an individual with little autonomy and a highly controlled environment. On the other hand, typically developing individuals or those that live in environments that have little control may require more complex treatments as there are additional factors that contribute to sexual deviancy not found in other cases (Aos et al. 2006; Apsche & Ward, 2003). Given the success of multidisciplinary programs such as CBT and its derivatives, it is likely that an effective intervention would require multiple components from multiple disciplines.

IMPLICATIONS FOR PRACTICE

Through the analysis and translation of multiple treatments and ideologies, this review brings to light many proposals for clinicians to interact with their clients, with their fields, and with the fields of others. The best form of treatment is generally one that is conducted on multiple levels and as practitioners, the acumen of treatment synthesis must be recognized. As multiple professionals seek to find the best treatment for individuals their goal to each other should be understanding and cooperation as their goal to the individual should be the end of sexual deviancy. In the analysis of more mentalistic practices, many of the cognitive aspects of therapies like CBT and MDT could be translated into behavioral language. For example, thoughts are already described as a form of covert verbal behavior in behavior analysis and beliefs could be considered to be thoughts with a history of reinforcement. Verbal behavior can also act as a stimulus for an individual where it appears in the form of another person speaking or the individuals own thoughts. As with any stimulus, the introduced stimulus of a thought can act as a motivating operation for behavior so in this way it can be argue that the CBT believe that behavior can be caused by thoughts is true. Based on this, one could in theory study how the reinforcement/punishment process of thoughts occur in an individual and develop a method to alter the occurrence of stimulus in an individual's internal environment (thoughts in their mind) and the interaction the individual has to these stimuli. Similar methods are already being used in programs such as Acceptance and Commitment therapy in which an individual it trained to examine and recognize one's thoughts as being merely thoughts which do not need to influence behavior (Hayes, 1999). Such methods could be viewed as decreasing the stimulus control a thought has on a specific behavior. Integration of programs from differing ideologies can be conducted with the translation of term and may lead to the development of new programs and

ideologies that ask questions and find solutions to a problem that were previously unable to be examined due to limitations in the ideologies found in the component fields of study.

Successful programs must also acknowledge the lower quality of life that individuals with ID are at risk of and provided opportunity to engage in appropriate sexual behavior (Ward & Mann, 2004). Programs that focus solely on the reduction of sexually deviant behavior without providing opportunities to engage in alternative sexual behavior are unlikely to be successful as sexual gratification is innately reinforcing to humans so it is likely to be sought by individuals through whatever means are available to them when the appropriate MO's are presented (Cooper, Heron, & Heward, 2006). Furthermore, programs to at seek to be an advocate for individuals with ID must work to provide them with opportunities they would be warranted if they did not have ID including the opportunity to express themselves in a healthy sexual manner. To this end, some individuals seek to promote programs developed around instilling choice in participants. Such programs have found that allowing choice in programs has led to increased participation in programs, better performance in emitting desired behaviors, and less reported discomfort when exposed to aversive situations, e.g. participants found therapy less aversive when allowed to choose some aspect of its administration (Bannerman, Sheldon, Sherman, & Harchik, 1990). Such results correspond to some aspects of the more successful programs such as CBT and supports the idea of successful program development as being a collaborative process with the participant.

Along with the instillation of choice comes the promotion of self-advocacy and preservation of liberties. As stated by the Developmental Disabilities Assistance and Bill of Rights Act 2000 (200), individuals with ID are guaranteed the same basic rights as their typically developing peers. This includes the rights to sexual expression and in order to maintain these

rights, behavior alteration should be sought in lieu of elimination. The ultimate goal of treatment should be the individual engaging in appropriate sexual behavior and considerations to the individual's desires and their environment should be made. It must always be remembered that when addressing an issue of behavioral correction, especially a taboo topic like sexual behavior, that the individual is not a problem to be fixed but a person that has a problem to be assisted with.

REFERENCES

- Aderemi, T. J., & Pillay, B. J. (2013). Sexual abstinence and HIV knowledge in school-going adolescents with intellectual disabilities and non-disabled adolescents in Nigeria. *Journal of Child and Adolescent Mental Health*, 161-174. doi:10.2989/17280583.2013.823867
- Alexander, M. A. (1999). Sexual offender treatment efficacy revisited. *Sexual Abuse: A Journal of Research and Treatment*, 101-116. doi:10.1007/BF02658841
- Alford, B. A., & Beck, A. T. (1997). *The Integrative power of cognitive therapy*. New York: Guilford Press.
- Anstiss, B. (2003). Just how effective is correctional treatment at reducing re-offending? *New Zealand Journal of Psychology*, 84-91. Retrieved from <http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=7&sid=0910cca8-a816-4108-ad55-96daaf461eba%40sessionmgr104&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=2004-10726-004&db=psyh>
- Aos, S., Miller, M., & Drake, E. (2006). *Evidence-based adult corrections programs: What works and what does not*. Olympia: Washington State Institute for Public Policy.
- Apsche, J. A. (1999). *Thought Change Workbook*. Portsmouth: Alternative Behavior service.
- Apsche, J. A., & Bass, C. K. (2006a). A review and empirical comparison of three treatments for adolescent males with conduct and personality disorder: mode deactivation therapy, cognitive behavior therapy and social skills training. *International Journal of Behavioral Consultation and Therapy*, 382-398. doi:10.1037/h0100792
- Apsche, J. A., & Bass, C. K. (2006b). A treatment study of suicidal adolescent with personality disorder or traits: Mode deactivation therapy as compared to treatment as usual. *International Journal of Behavioral Consultation and Therapy*, 215-223. doi:10.1037/h0100777
- Apsche, J. A., & Ward Bailey, S. R. (2003). Mode deactivation therapy: a theoretical case analysis (part I). *The Behavior Analyst Today*, 68-77. doi:10.1037/h0100023
- Apsche, J. A., & Ward Bailey, S. R. (2004a). Mode deactivation therapy a theoretical case analysis (part II). *Behavior Analysis: Research and Practice*, 395-434. doi:10.1037/h0100125
- Apsche, J. A., & Ward Bailey, S. R. (2004b). Mode deactivation therapy a theoretical case analysis (part III). *The Behavior Analyst Today*, 314-332. doi:10.1037/h0100038
- Apsche, J. A., & Ward, S. R. (2003). Mode deactivation therapy and cognitive behavioral therapy: A description of treatment results for Adolescents with personality beliefs, sexual offending and aggressive behaviors. *Behavior Analysis: Research and Practice*, 460-470. doi:10.1037/h0100003

- Apsche, J. A., Bass, C. K., & Backlund, B. (2012). Mediation analysis of mode deactivation therapy, (MDT). *Behavior Analysis: Research and Practice*, 2-10. doi:10.1037/h0100723
- Apsche, J. A., Bass, C. K., & Houston, M. (2007). Family mdt: Vs. treatment as usual in a community setting. *The International Journal of Behavioral Consultation and Therapy*, 145-153. doi:10.1037/h0100168
- Apsche, J. A., Bass, C. K., & Houston, M. A. (2008). Family mode deactivation therapy as a manualized cognitive behavioral therapy treatment. *International Journal of Behavioral Consultation and Therapy*, 264-277. doi:10.1037/h0100848
- Apsche, J. A., Bass, C. K., & Murphy, C. J. (2004). An empirical comparison of cognitive behavior therapy (CBT) and mode deactivation therapy (MDT) with adolescent males with conduct disorder and/or personality traits and sexually reactive behaviors. *The Behavior Analyst Today*, 359-371. doi:10.1037/h0100043
- Apsche, J. A., Bass, C. K., & Siv, A. (2006). A treatment study of mode deactivation therapy in an out patient community setting. *International Journal of Behavior Consultation and Therapy*, 277-285. doi:10.1037/h0100769
- Apsche, J. A., Bass, C. K., Jennings, J. L., Murphy, C. J., Hunter, L. A., & Siv, A. M. (2005). Empirical comparison of three treatments for adolescent males with physical and sexual aggression: Mode deactivation therapy, cognitive behavior therapy and social skills training. *International Journal of Behavior and Consultation Therapy*, 101-113. doi:10.1037/h0100738
- Apsche, J. A., Evile, M. M., & Murphy, C. (2004). The thought change system: An empirically based cognitive behavior therapy for male juvenile sex offenders. A pilot study. *Behavior Analysis Today*, 101-107. doi:10.1037/h0100136
- Apsche, J. A., Ward, S. R., & Evile, M. M. (2003a). Mode Deactivation Therapy (MDT): Case conceptualization. *Behavior Analysis: Research and Practice*, 47-58. doi:10.1037/h0100010
- Apsche, J. A., Ward, S. R., & Evile, M. M. (2003b). Mode Deactivation; a functionally based treatment, theoretical construct. *Behavior Analysis: Research and Practice*, 455-459. doi:10.1037/h0100002
- Apsche, J., Bass, C. K., & Backlund, B. (2012). Mediation analysis of mode deactivation therapy, (MDT). *Behavior Analysis: Research and Practice*, 2-10. doi:10.1037/h0100723
- Araji, S. k. (1997). *Sexually aggressive children: Coming to understand them*. Thousand Oaks: Sage.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood cliffs: Prentice-Hall.
- Bannerman, D. J., Sheldon, J. B., Sherman, J. A., & Harchik, A. E. (1990). Balancing the right to habilitation with the right to personal liberties: The rights of people with developmental

- disabilities to eat too many doughnuts and take a nap. *Journal of Applied Behavior Analysis*, 79-89. doi:10.1901/jaba.1990.23-79
- Bass, C. K., & Apsche, J. A. (2013). Mediation analysis of mode deactivation therapy (reanalysis and interpretation). *International Journal of Behavioral Consultation and Therapy*, 1-6. doi:10.1037/h0100967
- Beck, A. (1996). Beyond belief: a theory of modes, personality, and psychopathology. *Frontiers of Cognitive Therapy*, 1-25. doi:10.1017/S0954579413000692.
- Beck, A. T. (1996). Beyond belief; A theory of modes, personality, and psychopathology. In P. M. Salkovskis, *Frontiers of cognitive therapy* (pp. 1-25). New York: Guilford Press.
- Becker, J. V. (1994). Offenders: Characteristics and treatment. *The Future of Children*, 176-197. doi:10.2307/1602530
- Becker, J. V., & Kaplan, M. S. (1993). Cognitive behavioral treatment in the juvenile sex offender. In H. E. Barbaree, W. L. Marshall, & S. M. Hudson, *The juvenile sex offender* (pp. 264-277). New York: The Guilford Press.
- Becker, J. V., & Murphy, W. (1998). What we know and do not know about assessing and treating sex offenders. *Psychology, Public Policy, and Law*, 116-137. doi:10.1037//1076-8971.4.1-2.116
- Beckett, R., Beech, A., Fisher, D., & Fordham, A. S. (1994). *Community-based treatment for sex offenders: An evaluation of seven treatment programmes*. London: Home Office.
- Beech, A. R., & Hamilton-Giachritsis, C. E. (2005). Relationship between therapeutic climate and treatment outcome in group-based sexual offender treatment programs. *Sexual Abuse: A Journal of Research and Treatment*, 127-140. doi:10.1177/107906320501700204
- Behavior Analysis Certification Board. (2017, September 9). *Professional and Ethical Compliance Code*. Retrieved from BACB Web site: <https://bacb.com/ethics-code/>
- Bleil Walters, J., Hughes, T. L., Sutton, L. R., Marshall, S. N., Crothers, L. M., Lehman, C., & ... Huang, A. (2013). Maltreatment and depression in adolescent sexual offenders with an autism spectrum disorder. *Journal of Child Sexual Abuse*, 72-89. doi:10.1080/10538712.2013.735357
- Boesky, L. M. (2002). *Juvenile offenders with mental health disorders: Who are they and what do we do with them?* Lanham: American Correctional Association.
- Bonner, B. L., & Fahey, W. E. (1998). Children with aggressive sexual behavior. In N. N. Singh, & A. S. Winton, *Comprehensive clinical psychology: Special population* (pp. 453-466). Oxford: Elsevier Science.

- Bonner, B. L., Walker, C. E., & Berliner, L. (1993). *Children with sexual behavior problems: Assessment and treatment*. Washington: Administration of Children, Youth, and Families DHHS.
- Bonner, B. L., Walker, C. E., & Berliner, L. (1999). *Children with sexual behavior problems: Assessment and treatment*. Washington: Administration of Children, Youth, and Families, DHHS.
- Bourke, M. L., & Donohue, B. (1996). Assessment and treatment of juvenile sex offenders: an empirical review. *Journal of Child Sexual Abuse*, 47-70. doi:10.1300/J070v05n01_03
- Brown, H., & Turk, V. (1994). Sexual abuse in adulthood: Ongoing risks for people with learning disabilities. *Child Abuse Review*, 26-35. doi:10.1002/car.2380030106
- Brown, H., Stein, J., & Turk, V. (1995). The sexual abuse of adults with learning disabilities: Report of a second two-year incidence study. *Mental Handicap Research*, 3-24. doi:10.1111/j.1468-3148.1995.tb00139.x
- Brown, S. M., & Schwartz, C. (2006). Promoting healthy sexuality in sexually abusive youth. In R. E. Longo, & D. S. Prescott, *Current perspectives: Working with sexually aggressive youth and youth with sexual behavior problems* (pp. 193-214). Holyoke: NEARI Press.
- Buchanan, A., & Wilkins, R. (1991). Sexual abuse of the mentally handicapped: Difficulties in establishing prevalence. *Psychiatric Bulletin*, 601-605. doi:10.1192/pb.15.10.601
- Burton, D. L. (2000). Were adolescent sexual offenders children with sexual behavior problems? *Sexual Abuse: Journal of Research & Treatment*, 37-48. doi:10.1177/107906320001200105
- Campbell-Full, N., & Craig, L. (2009). The use of olfactory aversion and directed masturbation in modifying deviant sexual interest: A case study. *Journal of Sexual aggression*, 179-191. doi:10.1080/13552600902759556
- Cantor, J. M., Blanchard, R., Robichaud, L. K., & Christensen, B. K. (2005). Quantitative reanalysis of aggregate data on IQ in sexual offenders. *Psychological Bulletin*, 555-568. doi:10.1037/0033-2909.131.4.555
- Carpentier, M. Y., Silvosky, J. F., & Chaffin, M. (2006). Randomized trial of treatment for children with sexual behavior problems: Ten-year follow-up. *Journal of Counseling and Clinical Psychology*, 482-488. doi:10.1037/0022-006X.74.3.482
- Center for Sex Offender Management. (1999). *Understanding juvenile sexual offending behavior: Emerging research, treatment approaches, and management practices*. Silver Springs: Center for Sex Offender Management.
- Cohen, J. A., & Mannarino, A. P. (1996). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42-50. doi:10.1097/00004583-199601000-00011

- Cohen, J. A., & Mannarino, A. P. (1997). A treatment study for sexually abused preschool children: Outcome during a one-year follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1228-1235. doi:10.1097/00004583-199709000-00015
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis*. Upper Saddle River: Pearson Education, Inc.
- Craig, A. L., Stringer, I., & Moss, T. (2006). Treating sexual offenders with learning disabilities in the community a critical review. *International Journal of Offender Therapy and Comparative Criminology*, 369-390. doi:10.1177/0306624X05283529
- Craig, L. A., Browne, K. D., & Stringer, I. (2003). Treatment and sexual offense recidivism. *Trauma, Violence, & Abuse: A Review Journal*, 70-89. doi:10.1177/1524838002238946
- Cumming, G. F., & McGrath, R. J. (2000). External supervision. In D. R. Laws, S. M. Hudson, & T. Ward, *Remaking relapse prevention with sex offenders: A sourcebook* (pp. 236-253). Thousand Oaks: Sage.
- Department of Health. (2001). *Valuing people: A new strategy for learning disability for the 21st century*. London: DoH Publications.
- Developmental Disabilities Assistance and Bill of Rights Act 2000, 42 U.S.C. § 15001 (2000)
- Dozier, C. L., Iwata, B. A., & Worsdell, A. (2011). Assessment and treatment of foot-shoe fetish displayed by a man with autism. *Journal of Applied Behavior Analysis*, 133-137. doi:10.1901/jaba.2011.44-133
- Dufrene, B. A., Watson, T. S., & Weaver, A. (2005). Response blocking with guided compliance and reinforcement for a habilitative replacement behavior: Effects on public masturbation and on-task behavior. *Child & Family Behavior Therapy*, 73-84. doi:10.1300/J019v27n04_04
- Dwyer, G. R., & Boyd, M. S. (2009). Sex education for male adolescent sex offenders in a group setting led by general psychiatry residents: A literature review and example in practice. *American Journal of Sexuality Education*, 208-224. doi:10.1080/15546120903408925
- Eastman, B. J. (2004). Assessing the efficacy of treatment for adolescent sex offenders: A cross-over longitudinal study. *The Prison Journal*, 472-485. doi:10.1177/0032885504269346
- Federal Bureau of Prisons. (2007, July 27). *Inmate Offences: statistics BOP*. Retrieved from Federal Bureau of Prisons : https://www.bop.gov/about/statistics/statistics_inmate_offenses.jsp
- FindLaw. (2017, September 9). *Probation FAQ: FindLaw*. Retrieved from FindLaw Web site: <http://criminal.findlaw.com/criminal-procedure/probation-faq.html>
- Finkelhor, D. (1984). *Child sexual abuse: A new theory and research*. New York: Free Press.
- Fisher, D., & Beech, A. R. (1999). Current practice in Britain with sexual offenders. *Journal of Interpersonal Violence*, 240-256. doi:10.1177/088626099014003003

- Force., N. G. (2017, July 11). *Guidelines for comprehensive sexuality education, grades kindergarten through 12th grade, second edition*. Retrieved from Sexuality Information and Education Counsel of the United States:
www.siecus.org/school/sex.ed/guidelines/guide0000.html
- Friendship, C., Mann, R. E., & Beech, A. R. (2003). Evaluation of a national prison-based treatment program for sexual offenders in England and Wales. *Journal of Interpersonal Violence*, 744-759. doi:10.1177/0886260503253236
- Fyson, R. (2007). Young people with learning disabilities who sexually harm others: the role of criminal justice within a multi-agency response. *British Journal of Learning Disabilities*, 181-186. doi:10.1111/j.1468-3156.2007.00457.x
- Gallagher, C. A., Wilson, D. B., Hirschfield, P., Coggeshall, M. B., & MacKenzie, D. L. (1999). Quantitative review of the effects of sex offender treatment on sexual reoffending. *Corrections Management Quarterly*, 19-29. Retrieved from
<http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=6&sid=0c3d9bf4-3783-43f7-9cfb-37cbe8ce5564%40sessionmgr102&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=SM179268&db=sih>
- Gallegos, A. M., Cross, W., & Pigeon, W. R. (2015). Mindfulness-based stress reduction for veterans exposed to military sexual trauma: Rationale and implementation considerations. *Military Medicine*, 648-689. doi:10.7205/MILMED-D-14-00448
- Gavriel-Fried, B., & Ronen, T. (2015). Contribution of positivity ratio and self-control to reduced gambling severity among adolescents. *Health & Social work*, 209-216. doi:10.1093/hsw/hlv042
- Geer, T. M., Becker, J. V., Gray, S. R., & Krauss, D. (2001). Predictors of treatment completion in a correctional sex offender treatment program. *International Journal of Offender Therapy and Comparative Criminology*, 302-313. doi:10.1177/0306624X01453003
- Gilby, R., Wolf, L., & Goldberg, B. (1989). Mentally retarded adolescent sex offenders: A survey and pilot study. *Canadian Journal of Psychiatry*, 542-548. doi:10.1177/070674378903400611
- Glaser, B. (2010). Sex offender programmes: New technology coping with old ethics. *Journal of Sexual Aggression*, 261-274. doi:10.1080/13552600.2010.483139
- Goodman, W., Leggett, J., Weston, C., Phillips, S., & Steward, J. (2008). Group treatment for men with learning disabilities who are at risk of sexually offending: Themes arising from the four-stage model of offending. *British Journal of Learning Disabilities*, 249-255. doi:10.1111/j.1468-3156.2008.00497.x
- Gordon, A., & Porporino, F. J. (1990). *Managing the treatment of sexual offenders: A Canadian perspective*. Ottawa: Correctional Service of Canada.

- Griffiths, D., Hingsburger, D., Hoath, J., & Loannou, S. (2013). 'Counterfeit deviance' revisited. *Journal of Applied Research in Intellectual Disabilities*, 471-480. doi:10.1111/jar.12034.
- Gürol, A., Polat, S., & Oran, T. (2014). Views of mothers having children with intellectual disability regarding sexual education: A qualitative study. *Sexuality and Disability*, 123-133. doi:10.1007/s11195-014-9338-8
- Hall, G. C. (1995). Sexual offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology*, 802-809. doi:10.1037/0022-006X.63.5.802
- Hamilton, M. (2014). Prison-by-default: Challenging the federal sentencing policy's presumption of incarceration. *Houston Law Review*, 1271-1334. Retrieved from <http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=1&sid=16a5a409-17b6-4ad6-a703-cc935c40a0db%40sessionmgr104&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=96250950&db=a9h>
- Hanson, R. K. (1999). Working with sex offenders: A personal view. *Journal of Sexual Aggression*, 81-93. doi:10.1080/13552609908413286
- Hanson, R. K., Gordon, A., Harris, A. J., Marques, J. K., Murphy, W., Quinsey, V. L., & Seto, M. C. (2002). First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. *Sexual Abuse; A Journal of Research and Treatment*, 169-194. doi:10.1177/107906320201400207
- Hanson, R. K., Steffy, R. A., & Gauthier, R. (1993). Long-term recidivism of child molesters. *Journal of Consulting and Clinical Psychology*, 646-652. doi:10.1037/0022-006X.61.4.646
- Hayes, S. C. (1999). *Acceptance and Commitment Therapy: An Experiential Approach to Behavior Change*. New York: Guilford Press.
- Hays, S. J., Murphy, G. H., Langdon, P., Rose, D., & Reed, T. (2007). Group treatment for men with intellectual disability and sexually abusive behavior: Service user views. *Journal of Intellectual & Developmental Disability*, 106-116. doi:10.1080/13668250701413715
- Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behavior in children and adolescents*. New York: Guilford Press.
- Herman, J. L. (1990). Sex offenders; a feminist perspective. In W. L. Marshall, D. R. Laws, & H. E. Barbaree, *Handbook of sexual assault issues, theories and treatment of the offender* (pp. 117-193). New York: Plenum.
- Hinton, D. E., Pich, V., Hofmann, S. G., & Otto, M. W. (2013). Acceptance and mindfulness techniques as applied to refugee and ethnic minority populations with PTSD: Examples

- from 'Culturally Adapted CBT'. *Cognitive and Behavioral Practice*, 33-46.
doi:10.1016/j.cbpra.2011.09.001
- Hunter, J. A., Figueredo, A. J., Malamuth, N. M., & Becker, J. V. (2003). Juvenile sex offenders: Toward the development of a typology. *Sexual Abuse: A Journal of Research and Treatment*, 27-48. doi:10.1023/A:1020663723593
- Ikomi, P. A., Harris-Wyatt, G., Doucet, G., & Rodney, H. E. (2009). Treatment for Juveniles Who Sexually Offend in a Southwestern State. *Journal of Child Sexual Abuse*, 594-610. doi:10.1080/10926770903307914
- JRank. (2017, September 9). *Rehabilitation - Correctional Programs In The United States*. Retrieved from JRank Free Encyclopedias Web Site: Rehabilitation - Correctional Programs In The United States
- Kaplan, M. S., & Krueger, R. B. (2003). Adolescent sexual offenders. In R. Rosner, *Principles and practice of forensic psychiatry* (pp. 455-462). London: Arnold.
- Kazdin, A. E., & Weisz, J. R. (2003). *Evidenced based psychotherapies for children and adolescents*. New York: Guilford Press.
- Kohlenberg, R. J., & Tsai, M. (1993). Functional analytic psychotherapy: A behavioral approach to intensive treatment. In W. O'Donohue, & L. Krasner, *Theories of behavior therapy: Exploring behavior change* (pp. 638-640). Washington, DC: American Psychological Association.
- Langdon, P. E., Maxted, H., Murphy, G. H., & group, S.-I. (2007). An exploratory evaluation of the ward and hudson offending pathways model with sex offenders who have an intellectual disability. *Journal of Intellectual & Developmental Disability*, 94-105. doi:10.1080/13668250701364686
- Lanyon, R. I. (2001). Psychological assessment procedures in sex offending. *Professional Psychology; Research and Practice*, 253-260. doi:10.1037/0735-7028.32.3.253
- Laws, D. R., & Marshall, W. L. (2003). A brief history of Behavioral and cognitive behavioral approaches to sexual offenders: part 1. early developments. *Sexual Abuse: A Journal of Research and Treatment*, 75-92. doi:10.1177/107906320301500201
- Levenson, J. (2014). Incorporating trauma-informed care into evidence-based sex offender treatment. *Journal of Sexual Aggression*, 9-22. doi:10.1080/13552600.2013.861523
- Lindblad, F., & Lainpelto, K. (2011). Sexual abuse allegations by children with neuropsychiatric disorders. *Journal of Child Sexual Abuse*, 182-195. doi:10.1080/10538712.2011.554339
- Lindsay, & R., W. (2004, March). Working with learning disability sexual offenders. *Workshop at the Dividsion of Forensice Psychology 13th Annual Conference*. Liecester, UK.

- Lindsay, W., Steptoe, L., & Haut, F. (2011). The sexual and physical abuse histories of offenders with intellectual disability. *Journal of Intellectual Disability Research*, 326-331. doi:10.1111/j.1365-2788.2011.01428.x
- Lofthouse, R. E., Lindsay, W. R., Totsika, V., Hastings, R. P., Boer, D. P., & Haaven, J. L. (2013). Prospective dynamic assessment of risk of sexual reoffending in individuals with an intellectual disability and a history of sexual offending behaviour. *Journal of Applied Research of Intellectual Disabilities*, 394-403. doi:10.1111/jar.12029
- Looman, J., Dickie, I., & Abracen, J. (2005). Responsivity issues in the treatment of sexual offenders. *Trauma, Violence, & Abuse*, 330-353. doi:10.1177/1524838005280857
- Lumley, V. A., Miltenberger, R. G., Long, E. S., Rapp, J. T., & Roberts, J. A. (1998). Evaluation of a sexual abuse prevention program for adults with mental retardation. *Journal of Applied Behavior Analysis*, 91-101. doi:10.1901/jaba.1998.31-91
- Lunsky, Y., Frijters, J., Griffiths, D. M., Watson, S. L., & Williston, S. (2007). Sexual knowledge and attitudes of men with intellectual disability who sexually offend. *Journal of Intellectual & Developmental Disability*, 74-81. doi:10.1080/13668250701408004
- Mahoney, A., & Poling, A. (2011). Sexual abuse prevention for people with severe developmental disabilities. *Journal of Developmental and Physical Disabilities*, 369-376.
- Mallet, P., & Herbé, D. (2011). Does knowledge about sexuality prevent adolescents from developing rape-supportive beliefs? *The Journal of Sex Research*, 372-380. doi:10.1080/00224491003794048
- Marin, T. M., & Bell, D. L. (2003). Navy sex offender treatment: Promoting community Safety. *Corrections Today*, 84-86. Retrieved from <http://eds.a.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=4&sid=f1e604db-d7fc-49ab-a892-30b6e9e94996%40sessionmgr4008&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c210ZQ%3d%3d#AN=11614005&db=f5h>
- Marotta, P. L. (2015). A systematic review of behavioral health interventions for sex offenders with intellectual disabilities. *Sexual Abuse: a Journal of Research and Treatment*, 148-185. doi:10.1177/1079063215569546
- Marques, J. K., Day, D. M., Nelson, C., & West, M. A. (1994). Effects of cognitive-behavioral treatment on sex offender recidivism: Preliminary results of a longitudinal Study. *Criminal Justice and Behavior*, 28-54. doi:10.1177/0093854894021001004
- Marshall, W. L. (1996). Assessment, treatment and theorizing about sex offenders; Developments during the past twenty years. *Criminal Justice and Behavior*, 162-199. doi:10.1177/0093854896023001011
- Marshall, W. L., Anderson, D., & Fernandez, Y. (1999). *Cognitive behavioural treatment of sexual offenders*. England: John Wiley & Sons Ltd.

- Marshall, W. L., Anderson, D., & Y., F. (1999). *Cognitive behavioural treatment of sexual offenders*. Toronto: John Wiley & Sons.
- Martin, E. F., & Pruett, M. K. (1998). The juvenile sex offender and the juvenile justice system. *The American Criminal Law Review*, 279-332. Retrieved from http://ic.galegroup.com.proxy.lib.siu.edu/ic/ovic/AcademicJournalsDetailsPage/AcademicJournalsDetailsWindow?disableHighlighting=false&displayGroupName=Journals¤tPage=&scanId=&query=&docIndex=&source=&prodId=OVIC&search_within_results=&p=OVIC&mode=view&
- Martinello, E. (2015). Reviewing risk factors of individuals with intellectual disabilities as perpetrators of sexually abusive behaviors. *Sexuality and Disability*, 269-278. doi:10.1007/s11195-014-9365-5
- Mathesius, J. L. (2014). The successful onset of sex offending: determining the correlates of actual and official onset of sex offending. *Journal of Criminal Justice*, 134-144. doi:10.1016/j.jcrimjus.2013.09.004
- McCarthy, M., & Thompson, D. (1997). A prevalence study of sexual abuse of adults with intellectual disabilities referred for sex education. *Journal of Applied Research in Intellectual Disabilities*, 105-124. doi:10.1111/j.1468-3148.1997.tb00012.x
- McGrath, R. J., Cumming, G. F., Hoke, S. E., & Bonn-Miller, M. O. (2007). Outcomes in a community sex offender treatment program: A comparison between polygraphed and matched non-polygraphed offenders. *Sexual Abuse: A Journal of Research and Treatment*, 381-393. doi:10.1007/s11194-007-9058-z
- McGrath, R. J., Cumming, G., Livingston, J. A., & Hoke, S. E. (2003). Outcome of a treatment program for adult sex offenders: From prison to community. *Journal of Interpersonal Violence*, 3-17. doi:10.1177/0886260502238537
- McGrath, R. J., Hoke, S. E., & Vojtisek, J. E. (1998). Cognitive-behavioural treatment of sex offenders. *Criminal Justice and Behaviour*, 203-225. doi:10.1177/0093854898025002004
- Mckeel, A. N., & Dixon, M. R. (2014). Furthering a behavior analytic account of self-control using relational frame theory. *Behavioral Development Bulletin*, 111-118. doi:10.1037/h0100581
- Michie, A. M., Lindsay, W. R., Martin, V., & Grieve, A. (2006). A test of counterfeit deviance: A comparison of sexual Knowledge in groups of sex offenders with intellectual disability and controls. *Sexual Abuse: A Journal of Research and Treatment*, 271-278. doi:10.1007/s11194-006-9019-y
- Miltenberger, R. G., Roberts, J. A., Ellingson, S., Galensky, T., Rapp, J. T., Long, E. S., & Lumley, V. A. (1999). Training and generalization of sexual abuse prevention skills for women with mental retardation. *Journal of Applied Behavior Analysis*, 385-388. doi:10.1901/jaba.1999.32-385

- Murphy, G. H., Sinclair, N., Hays, S. J., Heaton, K., Powell, S., Langdon, P., . . . SOTSEC-ID. (2010). Effectiveness of group cognitive-behavioural treatment for men with intellectual disabilities at risk of sexual offending. *Journal of Applied Research in Intellectual Disabilities*, 537-551. doi:10.1111/j.1468-3148.2010.00560.x
- Murphy, G., Powell, S., Guzman, A., & Hays, S. (2007). Cognitive-behavioural treatment for men with intellectual disabilities and sexually abusive behaviour: A pilot study. *Journal of Intellectual Disability Research*, 902-912. doi:10.1111/j.1365-2788.2007.00990.
- Murphy, W. D., Coleman, E. M., & Haynes, M. R. (1983). Treatment and evaluation issues with the mentally retarded sex offender. In J. G. Greer, & I. R. Stuart, *The sexual aggressor: Current prospective on treatment* (pp. 22-41). New York: Van Nostrand Reinhold Company.
- Neal, D., & Rick, A. (2016). The prison boom and sentencing policy. *Journal of Legal Studies*, 1-41. doi:10.1086/684310
- Newbauer, J. F., & Blanks, J. W. (2001). Group work with adolescent sexual offenders. *Journal of Individual Psychology*, 37-50.
doi:http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=10&sid=66aa2953-ddf5-44d3-96d3-1a39e74b5931%40sessionmgr101&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=2001-17072-004&db=psyh
- Nezu, A. M., & Nezu, C. M. (2001). Problem solving therapy. *Journal of Psychotherapy Integration*, 187-205. doi:10.1023/A:1016653407338
- Nezu, C. M., Fiore, A. A., & Nezu, A. M. (2006). Problem solving treatment for intellectually disabled sex offenders. *International Journal of Behavioral Consultation and Therapy*, 266-276. doi:10.1037/h0100781
- Nezu, C. M., Greenberg, J., & Nezu, A. M. (2006). Project STOP cognitive behavioral assessment and treatment for sex offenders with intellectual disability. *Journal of Forensic Psychology Practice*, 87-103. doi:10.1300/J158v06n03_06
- Nezu, C. M., Nezu, A. M., Dudek, J. A., Peacock, M. A., & Stoll, J. G. (2005). Social problem-solving correlates of sexual deviancy and aggression among adult child molesters. *Journal of Sexual Aggression*, 27-36. doi:10.1080/13552600512331329540
- Nezu, C. M., Nezu, A. M., Klien, T., & Johnson, M. C. (2007). Sex offending behavior. In J. A. Mulick, & W. J. Jacobson, *Handbook of intellectual and developmental disabilities* (pp. 635-655). New York: Springer US.
- Nicholaichuk, T. P., Gordon, A., Gu, D., & Wong, S. (2000). Outcome of an institutional sexual offender treatment program: A comparison between treated and matched untreated offenders. *Sexual Abuse: A Journal of Research and Treatment*, 139-153. doi:10.1177/107906320001200205

- Peckham, & G., N. (2007). The vulnerability and sexual abuse of people with learning disabilities. *British Journal of Learning Disabilities*, 131-137. doi:10.1111/j.1468-3156.2006.00428.x
- Phenix, A., & Sreenivasan, S. (2009). A practical guide for the evaluation of sexual recidivism risk in mentally retarded sex offenders. *Journal of the American Academy of Psychiatry and the Law*, 509-525. Retrieved from <http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=3&sid=0c3d9bf4-3783-43f7-9cfb-37cbe8ce5564%40sessionmgr102&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=000273435400008&db=edswss>
- Pithers, W. D., Gray, A., Busconi, A., & Houchens, P. (1998). Children with sexual behavior problems: Identification of five distinct child types and related treatment considerations. *Child Maltreatment*, 384-406. doi:10.1177/1077559598003004010
- Prentky, R. A., & Burgess, A. W. (1990). Rehabilitation of child molesters: A cost-benefit analysis. *American Journal of Orthopsychiatry*, 108-117. doi:10.1037/h0079197
- Prentky, R. A., Knight, R. A., & Lee, A. F. (1997). Risk factors associated with Recidivism among extrafamilial child molesters. *Journal of Consulting and Clinical Psychology*, 141-149. doi:10.1037/0022-006X.65.1.141
- Prescott, D. S., & Levenson, J. S. (2010). Sex offender treatment is not punishment. *Journal of Sexual Aggression*, 275-285. doi:10.1080/13552600.2010.483819
- Price, D. (2003). A developmental perspective of treatment for sexually vulnerable youth. *Sexual Addiction & Compulsivity*, 225-245. doi:10.1080/713775412
- Print, B., & O'Callaghan, D. (2004). Essentials of an effective treatment program for sexually abusive adolescents: Offense specific treatment tasks. In G. O'Reilly, W. L. Marshall, A. Carr, & R. C. Beckett, *The handbook of clinical intervention with young people who sexually abuse* (pp. 237-274). New York: Brunner-Routledge.
- Pritchard, D., Graham, N., Ikin, A., Penney, H., Kovacs, L., Mercer, D., . . . Mace, F. C. (2011). Managing sexually harmful behavior in a residential special school. *British Journal of Learning Disabilities*, 302-309. doi:10.1111/j.1468-3156.2011.00712.x
- Reitzel, L. R., & Carbonell, J. L. (2006). The effectiveness of sexual offender treatment for juveniles as measures of recidivism: A meta-analysis. *Sexual Abuse: A Journal of Research and Treatment*, 401-421. doi:10.1007/s11194-006-9031-2
- Reyes, J. R., R., V. T., Slowman, K. N., Hall, A., Reed, R., Jansen, G., . . . Stoutimore, M. (2006). Assessment of deviant arousal in adult male sex offenders with developmental disabilities. *Journal of Applied Behavior Analysis*, 173-188. doi:10.1901/jaba.2006.46-0

- Ricciardelli, R., & Moir, M. (2013). Stigmatized among the stigmatized: Sex offenders in Canadian Penitentiaries. *Canadian Journal of Criminology and Criminal Justice*, 353-385. doi:10.3138/cjccj.2012.E22
- Ricciardelli, R., & Spencer, D. (2014). Exposing 'sex' offenders: Precarity, abjection and violence in the Canadian federal prison system. *British Journal of Criminology*, 428-448. doi:10.1093/bjc/azu012
- Rich, P. (2003). *Understanding, assessing, and rehabilitating juvenile sexual offender*. Hoboken: John Wiley & Sons, Inc.
- Righthand, S., & Welch, C. (2004). Characteristics of youth who sexually offend. *Journal of Child Sexual Abuse*, 15-32. doi:10.1300/J070v13n03_02
- Ryan, G., Miyoshi, T. J., Metzner, J. L., Krugman, R. D., & Fryer, G. E. (1996). Trends in a national sample of sexually abusive youths. *Journal of the American Academy of Child & Adolescent Psychiatry*, 17-25. doi:10.1097/00004583-199601000-00008
- Salter, A. C. (1988). *Treating child sex offenders and victims*. Newbury Park: Sage.
- Schweitzer, R., & Dwyer, J. (. (2003). Sex crime recidivism: Evaluation of a sexual offender treatment program. *Journal of Interpersonal Violence*, 1292-1310. doi:10.1177/0886260503256658
- 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*, 262-267. doi:10.1097/00004583-198703000-00025
- Sexual conduct with a minor; classification, 13-1405 (Arizona Revised Statute Title 1999).
- Shaw, J. A. (1999). Practice parameters for the assessment and treatment of children and adolescents who are sexually abusive to others. *Journal of the American Academy of Child and Adolescent Psychiatry*, 558-768. doi:10.1016/S0890-8567(99)80004-5
- Shaw, J. A. (2002). Sexually aggressive youth. In D. H. Schetky, & E. P. Bendek, *Principles and practice of child and adolescent forensic psychiatry* (pp. 279-287). Washington, DC: American Psychiatric Publishing, Inc.
- Shenk, C., & Brown, A. (2007). Cognitive-behavioral treatment of an adolescent sexual offender with an intellectual disability. *Clinical Case studies*, 307-324. doi:10.1177/1534650106288235
- Shivayogi, P. (2013). Vulnerable population and methods for their safeguard. *Perspectives in Clinical Research*, 53-57. doi:10.4103/2229-3485.106389
- Stevens, D. J. (2013). Caging sex offenders. *Value Inquiry Book Series*, 93-111. Retrieved from <http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=3&sid=260a1ba6-4acf-4a47-b8c5->

63179a7a9375%40sessionmgr103&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=97535877&db=a9h

- Sullivan, J. P., Sullivan, M. B., & Hopkins, E. (2006). Family centered treatment: A unique alternative. *Corrections Today*, 78-80. Retrieved from <http://eds.b.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=5&sid=260a1ba6-4acf-4a47-b8c5-63179a7a9375%40sessionmgr103&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=510588327&db=ofs>
- Swango-Wilson, A. (2011). Meaningful sex education programs for individuals with intellectual/developmental disabilities. *Sexuality and Disability*, 113-118. doi:10.1007/s11195-010-9168-2
- Talbot, T. J., & Langdon, P. E. (2006). A revised sexual knowledge assessment tool for people with intellectual disabilities; Is sexual knowledge related to sexual offending behavior. *Journal of intellectual disability research*, 523-531. doi:10.1111/j.1365-2788.2006.00801.x
- Thompson, D., & Brown, H. (1997). Men with intellectual disabilities who sexually abuse: A review of the literature. *Journal of Applied Research in Intellectual Disabilities*, 140-158. doi:10.1111/j.1468-3148.1997.tb00014.x
- Turk, V., & Brown, H. (1993). The sexual abuse of adults with learning disabilities: Results of a two-year incidence survey. *Journal of Applied Research in Intellectual Disabilities*, 193-216. doi:10.1111/j.1468-3148.1993.tb00053.x
- Ward, T. (2010). Punishment or therapy? The ethics of sexual offending treatment. *Journal of Sexual Aggression*, 286-295. doi:10.1080/13552600.2010.483822
- Ward, T., & Mann, R. (2004). Good lives and the rehabilitation of offenders: A positive approach to treatment for sexual offenders. In L. P. A., & J. S., *Positive psychology in practice* (pp. 598-616). New Jersey: Wiley.
- Ward, T., Keenan, T., & Hudson, S. M. (2000). Understanding cognitive, affective and intimacy deficits in sexual offenders: A developmental perspective. *Aggression and Violent Behavior*, 41-62. doi:10.1016/S1359-1789(98)00025-1
- Webb, L. (2013). The procedural due process rights of the stigmatized prisoners. *University of Pennsylvania Journal of Constitutional Law*, 1055-1094. Retrieved from <http://eds.a.ebscohost.com.proxy.lib.siu.edu/eds/detail/detail?vid=3&sid=a746f940-ce2c-4731-868d-5a7213380729%40sessionmgr4009&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=edslex62881975&db=edslex>
- Webster, S. D. (2005). Pathways to sexual offense recidivism following treatment: An examination of the Ward and Hudson self-regulating model of relapse. *Journal of Interpersonal Violence*, 1175-1196. doi:10.1177/0886260505278532

- Wilcox, D. T. (2004). Treatment of intellectually disabled individuals who have committed sexual offences: A review of the literature. *Journal of Sexual Aggression*, 85-100. doi:10.1080/13552600410001670955
- Worling, J. R. (2004). Essentials of a good intervention programme for sexually abusive juveniles: Offense related treatment tasks. In G. O'Reilly, W. L. Marshal, A. Carr, & R. C. Beckett, *The handbook of clinical intervention with young people who sexually abuse* (pp. 275–296). New York: Brunner-Routledge.
- Worling, J. R., & Curwen, T. (2000). Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction. *Child Abuse and Neglect*, 965-982. doi:10.1016/S0145-2134(00)00147-2
- Yates, P. M. (2002). What works: Effective intervention with sex offenders. In H. E. Allen, *What works: Risk reduction interventions for special needs offenders* (pp. 115-163). md: American Correctional Association.
- Yates, P. M. (2003). Treatment of adult sexual offenders: A therapeutic cognitive-behavioural model of intervention. *Journal of Child Sexual Abuse*, 195-232. doi:10.1300/J070v12n03_08
- Yates, P. M., Goguen, B. C., Nicholaichuk, T. P., Williams, S. M., & Long, C. A. (2000). *National sex offender programs*. Ottawa: Correctional Services of Canada.
- Zolondek, S. C., Abel, G. G., Northey, W. F., & Jordan, A. D. (2001). The self-reported behaviors of juvenile sexual offenders. *Journal of Interpersonal Violence*, 73-85. doi:10.1177/088626001016001005

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