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Ashley Sitkin
The Use of Dialectical
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ABSTRACT

Youth within the U.S. juvenile justice system are among the most traumatized. There is a need for trauma sensitive treatment in order to address the mental health needs of traumatized, delinquent youth and prevent re-traumatization within the juvenile justice system. Dialectical behavior therapy (DBT) is a promising treatment for juvenile delinquents with trauma histories. This thesis posits that DBT for delinquent youth supports rehabilitation through the mechanism of mindfulness by targeting posttraumatic stress reactions, which in turn may reduce anti-social behaviors. A review of the literature appears to support the hypothesis that through decreased experiential avoidance and enhanced emotional regulation skills, delinquent youth learn life-long skills that lead to improved social relationships, long-term behavioral change, and ultimately the likelihood of reduced recidivism. Implications for practice and policy across the social service and juvenile justice disciplines are discussed, including a working model from the Massachusetts Department of Youth Services (DYS) that has implemented DBT with juvenile delinquents in both short-term and long-term treatment.

THE USE OF DIALECTICAL BEHAVIOR THERAPY FOR TREATING JUVENILE DELINQUENTS: HOW MINDFULNESS MEDIATES TRAUMA SYMPTOMATOLOGY AND REDUCES ANTI-SOCIAL BEHAVIOR

A project based upon an independent investigation, submitted in partial fulfillment of the requirements for the degree of Master of Social Work.

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CHAPTER I

INTRODUCTION

"Our nation's delinquent children are among the most traumatized," (Abram, Teplin, Charles, Longworth, McClelland, & Dulcan, 2004, p. 409). Recent researchers report that traumatic stress plays a role in juvenile offending and responses to rehabilitation (Newman, 2002). Prevalence rates for Post Traumatic Stress Disorder (PTSD) within the juvenile justice population range from 3%-65%, which is up to 8 times higher than youth in the general population in the United States (McMackin, Leisen, Cusack, LaFratta, & Litwin, 2002; Wolpaw, Ford, Newman, Davis, & Briere, 2005). Although PTSD and trauma are highly prevalent within this population, assessment of trauma and its psychological consequences have often been ignored by the juvenile justice system (Cocozza & Skowyra, 2000; Newman, 2002; Trupin, Stewart, Beach, & Boesky, 2002; Waxman & Collins, 2004). Moreover, the detention experience can result in re-traumatization and/or re-victimization of youth with PTSD (e.g., isolation, restraints, handcuffing, searches, staff insensitivity, loss of privacy, etc.) (Abram et al., 2004).

There is a need for trauma sensitive treatment in order to address the mental health needs of traumatized youth and prevent re-traumatization within the juvenile justice system (Abram et al., 2004; Hennessey et al., 2004). Dialectical behavior therapy (DBT) is a promising treatment for juvenile delinquents with trauma histories and has already been adapted to adolescent inpatient, outpatient, and residential treatment settings (Lovelle, 2008; Miller 1999; Miller, Rathus, & Linehan, 2007; O'Brien, Larson, &

Murrell, 2008; Trupin et al., 2002). The modification of DBT with adolescents has been shown to reduce suicidal behavior, emotional dysregulation, dropout from treatment, psychiatric hospitalization, substance abuse, anger, and interpersonal difficulties (American Pyschiatric Association [APA], 2004; Miller, 1999). Given the evidence of DBT's efficacy with multi-problem adult patients and the promising preliminary research from DBT clinical trials with suicidal and delinquent adolescents (Miller et al., 2007; O'Brien et al., 2008; Trupin et al., 2002; Woodbury, Roy, & Indik, 2008), there is ample empirical support for the utilization of DBT within the juvenile justice system for treating trauma. Moreover, the core mindfulness skills within DBT target post-traumatic stress reactions by decreasing experiential avoidance (e.g. suppression, dissociation, selfinjurious behavior, etc.) and strengthening emotional regulation skills (Batten, Orsillo, & Walser, 2005; Follette, Palm, & Pearson, 2006; Greenwald, 2002; Lovelle, 2008; Wagner, Rathus, Miller, 2006). In the following literature review I will examine whether there might be a relationship between mindfulness and reduction of trauma symptomatology within the treatment of juvenile delinquents and the implications for practice and policy across the social service and juvenile justice disciplines.

CHAPTER II

LITERATURE REVIEW

Trauma, Delinquency, and Post-Traumatic Stress Disorder

The link between trauma and delinquency within the juvenile justice population has been confirmed by more than two dozen studies over the past four decades (Maschi, Bradley, & Morgen, 2008). Researchers point to a strong relationship between juvenile delinquency and childhood victimization (Finkelhor, Paschall, & Hashima, 2001; Finkelhor & Hashima, 2001; Maschi et al., 2008; Newman, 2002; Smith & Thornberry, 1995; Widom & Maxfield, 2001). The delinquency rate found in abused children ranges from 10% to 45% (Finkelhor et al., 2001). However, it is likely that these numbers are underestimated since many episodes of both child abuse and juvenile delinquency go unreported (Finkelhor et al., 2001). Moreover, child abuse and neglect have been found to increase the risk of future delinquency in youth and subsequent adult criminality (Widom & Maxfield, 2001). Authors of a longitudinal study that followed 1575 cases from childhood into early adulthood reported that being physically and/or sexually abused or neglected as a child increased the likelihood of arrest as a juvenile by 59%, as an adult by 28%, and for a violent crime by 30% (Widom, 1989; Widom & Maxfield, 2001). This evidence does not imply that trauma causes delinquency, but that the two are significantly related.

Delinquent adolescents who have experienced maltreatment are at a greater risk of having PTSD compared to non-delinquent adolescents (Abram et al., 2004; Brosky & Lally, 2004; Cauffman, Feldman, Waterman, & Steiner, 1998; McMackin et al., 2002a; Steiner, Garcia, & Matthews, 1997). The most frequently reported traumatic events

within the juvenile delinquent population that contribute to the development of traumarelated psychopathology include childhood physical and sexual abuse, neglect, poverty, and witnessing intrafamilial and community-related violence (Abram et al., 2004; Baer & Maschi, 2003; Cauffman et al., 1998; Foy et al., 1996; Hughes, 1998; Steiner et al., 1997). In addition, the traumatic impact of the inner-city environment puts youth from ethnic minorities at particular risk of falling victim to PTSD (Arroyo, 2001; Brosky & Lally, 2004; Finkelohor & Hashima, 2001; Foy et al., 1996; Jenkins & Bell, 1997), which underscores the significant racial and ethnic disparities among confined delinquents within the juvenile justice system. Of the incarcerated juvenile subjects with PTSD in four studies, 81% of the participants were of African American and Hispanic backgrounds (Arroyo, 2001). Moreover, in a large sample study of inner-city delinquent youth (n=898), more than half (56.8%) were exposed to traumatic events six or more times. Witnessing violence was found to be the most common trauma (63.5% of the females and 74.9% of the males), which was correlated with high rates of community violence in the inner city (Abram et al., 2004).

The rates of PTSD within the juvenile delinquent population vary significantly depending on the type of sample (e.g., urban, suburban, minority, gender), the measure used, and the time frame assessed (Abram et al., 2004). Authors of a large-scale study that examined the prevalence of trauma and PTSD within an urban juvenile detention center concluded that 11.2% of the entire male and female detainee sample had PTSD for the past year (Abram et al., 2004). However, throughout the literature, some researchers differentiate PTSD rates based on gender. A few smaller (i.e., n < 232) studies have measured PTSD rates among male juvenile delinquents with researchers reporting 4.8%

in secure placement (Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002), 24.2% among male juveniles in secure custody (Burton, Foy, Bwanausi, Johnson, & Moore, 1994), 32.3% among incarcerated male youth (Steiner et al., 1997), and 65% among male juvenile sex offenders (McMackin et al., 2002a). Therefore, reported rates amongst male juvenile offenders vary between 4.8% and 65%.

Few researchers have specifically examined PTSD among female juvenile offenders (Hennessey, Ford, Mahoney, Ko, & Siegfried, 2004). However, some have reported that female juvenile delinquents experience higher rates of trauma symptomatology, mental health problems, and psychosocial stressors when compared to males (Brosky & Lally, 2004; Cruise, Marsee, Dandreaux, & DePrato, 2007; Grisso, 1999; Hennessey et al., 2004; Stewart & Trupin, 2003; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Delinquent females are six times more likely to develop PTSD than the general population and 50% more likely to exhibit current symptoms of PTSD than male juvenile delinquents (Cauffman et al., 1998). Some researchers suggest that being a victim of violence is more likely to lead to mental health problems than witnessing violence (Boney-McCoy & Finkelhor, 1995). Since delinquent males are more likely than females to report having witnessed a violent event and delinquent females are more likely to mention being a victim of violence, it would follow that females experience higher rates of PTSD (Cauffman et al., 1998).

Exposure to a potentially traumatic event is a risk factor for the development of several mental health disorders, of which PTSD is just one possibility (Boney-McCoy & Finkelhor, 1995; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). There is a high co-morbidity of both conduct disorders and substance abuse with PTSD (Burket &

Myers, 1995). One of the most comprehensive mental health prevalence studies to date found that over 60% of delinquent youth, in a sample of 1400, met criteria for three or more diagnoses; disruptive disorders (46.5%) such as conduct disorder were most common followed by substance use disorders (46.2%) and anxiety disorders (34.4%) (Shufelt & Cocozza, 2006). Unfortunately, the authors did not break down the anxiety disorders. Clearly, anxiety and PTSD are closely related. Although this investigation is beyond the scope of co-morbid pathology, it is important to consider partial PTSD and co-occurring disorders when assessing juvenile delinquents who have trauma histories (Arroyo, 2001; Newman, 2002).

Emotional Dysregulation and Experiential Avoidance

In order to understand how mindfulness can be used to treat trauma in juvenile delinquents, it is important to first consider the biological basis of PTSD. The biology of trauma can be explained as "a failure of the natural physiological activation and hormonal secretions to organize an effective response to threat" (van der Kolk, 2006, p. 6). Threat activates the symphathetic and parasympathetic nervous systems and the adrenal glands secrete large amounts of adrenaline in response to perceived danger (Lovelle, 2008; van der Kolk, 2006). Surges in adrenaline can lead to biochemical shifts in certain neurotransmitters which impact adolescents' ability to cope with life stressors, handle intense emotions (some of which may occur during treatment), and control impulses (Lovelle, 2008; van der Kolk, 2006; van der Kolk & Fisler, 1994; Yehuda, 2000). Instead of utilizing affect states as signals to attend to incoming information, individuals with PTSD go immediately from stimulus to response without psychologically assessing the meaning of what is happening. As a result, they freeze, or

alternatively, overreact and intimidate others in response to minor irritations (van der kolk, 1994). This inability to identify and distinguish between emotions and bodily sensations is a clinical phenomenon called alexythymia (Batten et al., 2005; van der Kolk, 2006). It is plausible that alexythymia lies at the core of affect dysregulation in traumatized youth.

Given that early trauma impairs affect regulation in delinquent youth, it is likely that affect dysregulation is a contributing factor to the development and maintenance of juvenile delinquency in traumatized youth (Baer & Maschi, 2003; Maschi et al., 2008). Affect regulation is an "individual's capacity to control and tolerate strong affect, without resorting to avoidance strategies such as dissociation, substance abuse, or external tension-reducing behavior" (Briere, 2002, p.180). According to general strain theory, negative affect, such as anger, mediates the relationship between trauma exposure and delinquency (Agnew, 1992). Negative affect can be conceptualized as an individual's maladaptive affective response to negative life experiences (Agnew, 1992). Juvenile offenders have problems with affect labeling and tend to label affect more often as anger rather than fear or sadness (Baer & Maschi, 2003). However, researchers have reported that youth who experience stressful life events and have been exposed to violence have been found to report higher levels of anger and aggression (Aseltine, Gore, & Gordon, 2000; Berton & Stabb, 1996; Jenkins & Bell, 1997). Subsequently, this results in the underutilization of other affective responses and a narrowing in the range of problem solving strategies (Garrison & Stolberg, 1983). The inability to modulate emotions such as anger increases the risk of antisocial behavior and may give rise to a range of

maladaptive, self-destructive behaviors that represent attempts at affect management (Snyder, Schrepferman, & St. Peter, 1997; van der kolk & Fisler, 1994).

When traumatized adolescents lose their capacity to gauge and modulate their own emotions, they may subsequently engage in avoidance and escapist behaviors as a way to avoid stimuli that elicit unpleasant emotions and memories (Berceli & Napoli, 2006; Lovelle, 2008; van der Kolk, 2006). Experiential avoidance occurs when a person does not remain in contact with particular private experiences-bodily sensations, emotions, thoughts, memories, behavioral predispositions-and makes attempts to alter the form or frequency of these events and the contexts from which they originate (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Some examples of avoidance behaviors include efforts to suppress intrusive thoughts, dissociation, self-injury, removal of oneself from situations that trigger negative emotions, substance use, and emotional numbing (Follete et al., 2006; Follete, Palm, & Hall, 2004).

While some forms of avoidance may initially serve an adaptive function by providing short-term relief from negative internal states, repeated efforts to avoid or eliminate emotional responses, thoughts, and memories to trauma can become pathological (Follete et al., 2004). Thereby, experiential avoidance can be viewed as a contributory factor in the development and maintenance of PTSD because it leads to emotional numbing which delays the necessary working through of affect-laden traumatic memories (Follette et al., 2006; Orsillo & Batten, 2005). For example, PTSD in juvenile delinquents has been significantly linked with dissociation (Steiner et al., 1997). Dissociation is described as the isolation of experience or memory from conscious awareness (Spiegel & Cardena, 1990). A small sample study of both male and female

juvenile delinquents on probation (n=65), found a positive correlation between self reported trauma and self-reported dissociation (r=.42, p=.00); no difference in dissociative scores of males versus females was obtained (Carrion & Steiner, 2000). *An Overview of Dialectical Behavior Therapy (DBT) with Adolescents*

Dialectical behavior therapy (DBT) is a treatment program that was developed by Marcia Linehan in 1993 for chronically suicidal adults diagnosed with Borderline Personality Disorder (BPD). Dialectical behavior therapy is based on a biosocial theory that views BPD as a dysfunction of the emotion regulation system (Wagner et al., 2006). In numerous evaluations of DBT, researchers have reported efficacy across multiple treatment settings and age and gender groups (Lovelle, 2008; Miller 1999; Miller, Rathus, & Linehan, 2007; O'Brien, Larson, & Murrell, 2008; Trupin et al., 2002). Researchers have also reported that the skills taught in DBT are applicable to individuals with PTSD who have difficulties with emotion regulation but do not meet criteria for BDP (Batten, Orsillo, & Walser, 2005). Based on research and a need for an empirically based treatment for at risk teens, Miller et al. (1997) adapted DBT for multi-problem, suicidal and nonsuicidal self-injurious adolescents (Miller, 1999).

Dialectical behavior therapy can be conceptualized as a cognitive-behavioral version of Eastern contemplative traditions. The mindfulness component of DBT is often associated with the formal practice of mindfulness meditation that lies at the heart of Buddhism (Shapiro, Carlson, Astin, & Freedman, 2006; Wagner et al., 2006). However, mindfulness is more than meditation; it is a practice of "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, p. 4). Mindfulness is aimed at developing an "observer perspective" which enables an

individual to notice and accept internal experiences (e.g., thoughts, emotions, physical sensations) while still retaining control of one's personal behavior (Batten et al., 2005).

Dialectical behavior therapy skills training covers four basic areas: core mindfulness skills, interpersonal effective skills, emotional regulation skills and distress tolerances skills. Mindfulness skills are interwoven throughout DBT and present in all modalities of treatment (Wagner et al., 2006). Moreover, the most import dialectic in DBT-balancing change and acceptance-is achieved through mindfulness (Batten et al., 2005). More specifically, mindfulness and distress tolerance skills are acceptance based modules whereas emotion regulation and interpersonal effectiveness skills are change-oriented modules (APA, 2004). Although all four skill sets are effective with trauma survivors, the two most beneficial modules for treating trauma are the core mindfulness and distress tolerance skills (Batten et al., 2005).

The core mindfulness skills are most beneficial for individuals who have chronic problems with experiential avoidance and are unable to modulate their autonomic arousal (Batten et al., 2005; Sykes Willie, 2004). Core mindfulness is the mechanism for moving from emotional dysregulation to emotional regulation (Batten et al., 2005). Mindfulness treats emotional dysregulation by teaching adolescents to observe and label their feelings and notice the connected action urges (e.g., self-injury, suicidal ideation, substance use, etc.) (Wagner et al., 2006). Mindfulness exercises in DBT are intended to help youth generalize mindfulness as a life skill (Follette, 2006; Trupin et al., 2002).

Distress tolerance builds directly on mindfulness skills (Wagner et al., 2006).

Distress tolerance skills address the impulsivity in high-risk, dangerous behaviors common amongst juvenile delinquents and helps them resist impulsive decisions. These

skills teach adolescents how to distract and soothe themselves as a way to avoid making hasty decisions and engaging in reckless behavior. In addition, distress tolerance skills help adolescents observe their thoughts, emotions, and behaviors with nonjudgmental acceptance (Wagner et al., 2006).

Emotion regulation skills address extreme emotional sensitivity by identifying and labeling emotions, learning how to increase positive emotions, and reducing vulnerability to negative emotions. These skills build upon mindfulness because they teach nonjudgmental observation of one's current emotion. Lastly, the interpersonal effectiveness skills address adolescents' difficulties in maintaining consistent and fulfilling relationships. The skill of "walking the middle path" addresses imbalanced thinking and dialectical dilemmas among family members. Interpersonal effectiveness skills draw upon mindfulness skills by teaching how to non-judgmentally observe one's own thoughts and emotions and the thoughts and emotions of the other with whom one is interacting (Wagner et al., 2006).

Dialectical behavior therapy with adolescents is a multi-faceted approach and is delivered through various treatment modalities including individual therapy, group skills training, behavior management, and family therapy. The DBT modifications for adolescents include shortening the treatment length, simplifying the language, reducing the number of skills taught, including family members, and adding an optional follow-up patient consultation graduate group (Wagner et al., 2006). DBT treatment strategies focus on teaching adolescents the skills needed to manage their emotions and destructive behaviors in order to return safely to the community (APA, 2004).

Mindfulness and Trauma: Why DBT is a Good Fit for Juvenile Delinquents

When one processes traumatic memories mindfully by focusing on the present moment, one can increase psychological flexibility, develop emotion regulation skills, and reduce experiential avoidance (Batten et al., 2005; Follette et al., 2006). It is hypothesized that mindfulness is effective in treating traumatized youth because it intervenes with the underlying neurological and physiological processes that perpetuate PTSD. It has been posited that mindfulness can mitigate all three classes of PTSD symptoms-reexperiencing, avoidance, and arousal-by decreasing re-experiencing to allow observation of avoidance and arousal (Batten et al., 2005; Willard, 2010). Moreover, mindfulness improves the effectiveness of exposure inherent in PTSD treatment through increasing patients' ability to contact stimuli to which the exposure is occurring without engaging in avoidance strategies (Baer, 2003; Follette, 2006; Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006). In order to keep old trauma from intruding into the present, patients need to deal with the internal residues of the past by learning to focus their attention on their internal experience, while interweaving and conjoining cognitive, emotional, and sensorimotor elements of their traumatic experience (van der Kolk, 2006). When one experiences trauma, the reactions from the event are stored in the body and remain stuck in the non-verbal, non-conscious subcortical regions of the brain (Sykes Wylie, 2004; van der Kolk, 1994). Therefore, it is imperative that both the mind and body receive attention to successfully recover from PTSD symptoms (Levine, 1997; Scaer, 2005; van der Kolk, 2006).

The closest mainstream protocolized therapeutic technique that involves mindfulness of both the mind and body is currently DBT (van der Kolk, 2006). For

therapy to be effective it seems more useful to focus on the patient's physical self-experience and increase their self-awareness, rather than focusing exclusively on the meaning that people make of their past (van der Kolk, 2006). Traumatized individuals need to learn that it is safe to have feelings and sensations; they need to learn to tell the difference between a sensation and an emotion (van der Kolk, 2006). Moreover, mindfulness practices can encourage the nonverbal processing of trauma that can be too painful to put into words at first (Willard, 2010). Neither cognitive behavior therapy nor psychodynamic therapeutic techniques pay sufficient attention to the experience and interpretation of disturbed physical sensations and preprogrammed physical action patterns found in traumatized patients (van der Kolk, 2006).

The use of mindfulness or the so-called "third wave" approaches with children and adolescents is still in its infancy, which presents challenges for the mental health field. Given DBT's nascency and lack of fidelity with populations of youth, clinical science is walking into territory viewed as "less empirical" to practitioners and scientists who are committed to the experimental approach. Moreover, there are various conceptualizations of mindfulness across the mental health field and no single tested modern scientific definition of mindfulness yet exists, which leaves room for debate, controversy, and resistance to implementing mindfulness-based treatments with youth through a bottom-up, processes oriented approach (Hayes & Greco, 2008). Another challenge for clinicians and researchers involves learning how to adapt mindfulness methods in an age-appropriate manner. In addition, there are challenges in assessing mindfulness using self-report with youth due to the variance of children and adolescents' reports of their internal experiences (Hayes & Greco, 2008; O'Brien et al., 2008).

Although it is important to be guided by empirical evidence, it is equally as important to remember that mindfulness-based approaches with youth require creativity (O'Brien et al., 2008). The most engaging DBT mindfulness exercises for adolescents include exercises that are brief (1-5 minutes), that engage multiple sensory systems (e.g., listening, tasting, smelling), or that involve moment (e.g., yoga, dance, exercise). Some examples of engaging mindfulness exercises for adolescents include observing bubbles, walking mindfully, and listening to music (Wagner et al., 2006).

How to Adapt DBT for the Juvenile Justice Population: A Working State Model

The Department of Youth Services (DYS) of Massachusetts began adapting DBT in 1999 to teach juvenile delinquent youth coping skills that would reduce their risks of re-offending. The DBT skills that are being taught by DYS are in accordance with the intent of Marsha Linehan's original 1993 DBT manual. However, DYS' approach differs from the traditional use of DBT for adults in that the adaptations are for adolescents who are in juvenile justice settings; the skill modules are relevant to the issues and challenges that the youth encounter such as waiting for court dates, trying to earn privileges within the program, and dealing with frustrations of being away from family (Massachusetts Department of Youth Services [DYS], 2009).

The state has five different types of care and uses different DBT modules for each due to time and the potential capacity of the youth in these settings to use each module (personal communication David Burton, April 12, 2010). The five different types of care include: Detention, Assessment, Secure (i.e., locked facility for high needs youth), Staff Secure (i.e., unlocked facility in which security is maintained by staff in a group home), and Community Support. Typically, in DBT, the four skill sets-mindfulness, distress

However, in DYS' model, mindfulness and distress tolerance skills are the focus of Assessment and Detention programs because the skills focus on stabilization and help youth cope immediately. Emotion regulation and interpersonal effectiveness modules, on the other hand, are prioritized in the longer-term treatment programs because social skills require more buy-in and voluntary effort from the youth. Ultimately, youth in Detention and Assessment have exposure to the latter two modules but are not typically in the program long enough to learn the entire set of skills (DYS, 2009).

Dialectical behavior therapy is also used as a behavior management tool in DYS to increase skill development in DYS youth, to improve relationships between the youth and staff, to create a positive, pro-social learning environment, and to reduce room confinement and restraints. Six DBT management tools are utilized on the units: distress tolerance plans, behavior chain analysis's, diary cards, strength based behavior management systems, DBT coaching protocol for conflict resolution, and weekly skill groups with homework assistance by group workers. While no empirically analyzed outcome data yet exists, the use of DBT in different DYS residential programs has yielded preliminary reports of success for youth, including reduced restraints, improved behaviors and self confidence, less time-outs, increased hope, and more positive points on behavioral level systems (DYS, 2009)

The skills groups are comprised of 8 to 10 youth with 2 group leaders, one of whom must be a clinician trained in DBT. Due to the nature of residents graduating from programs at different times, the DBT groups are open to new members on a continuing basis. The groups meet two times per week. The first group of the week introduces a

new skill and gives homework assignments. The second group focuses on the homework and integration of the newly learned skill. In addition, short relaxation exercises such as breathing, listening to music, muscle relaxation, and guided imagery are conducted at the end of some groups. DBT skills are applied to conflict resolution, reducing substance abuse, regulating emotional states, and positive goal setting. In addition, youth are asked to apply DBT skills to their relapse prevention planning in order to replace anti-social behaviors and assist in their reintegration into the community following DYS placement (not part of the original DBT approach) (DYS, 2009).

DYS includes the families of committed youth in treatment in an effort to help them understand the DBT skills their children are being taught. Three approaches have been utilized to familiarize families with the DBT protocol. First, the youth are asked to explain the skills within the family sessions or at monthly treatment meetings. Second, DBT skill info groups are offered to families in either the program or in the community. Lastly, a DYS family intervention specialist meets with the family in their home and teaches them the skills if their child is leaving the program (DYS, 2009).

Barriers and Strategies to the Implementation of DBT

Despite the popularity of DBT and substantial empirical evidence of its efficacy across different populations and settings, there remain several barriers to implementing DBT within the public sector (Swenson, Torrey, & Koerner, 2002). According to a national survey of adolescent DBT programs nationwide, the most common barriers to implementation fell into two categories: getting a program started and challenges to carrying out effective treatment (Miller et al., 2007). More specifically, public mental health authorities, administrators, program leaders, practitioners and their clinical

supervisors, and consumers all play a role in the systemic implementation of DBT (Goldman et al., 2001; Swenson et al., 2002). Therefore, it is helpful to examine the barriers to implementation of DBT through a top down analysis. If implementation barriers are not addressed, they can interfere with delivering effective treatment (Miller et al., 2007).

A few researchers discuss the critical role that informed and committed policy-makers play in promoting evidenced-based practices (Goldman et al., 2001; Swenson et al., 2002). Public mental health authorities wield tremendous influence and decision-making power related to the allocation of public funding for mental health treatment. In the case of DBT, it is paramount that these influential figures understand the need for DBT, prioritize it, and support it through effective policy making and funding (Swenson et al., 2002). Given that the budgets for mental health systems are decreasing, the implementation of DBT can fail if mental health authorities cannot solve funding problems to cover program costs (Goldman et al., 2001; Swenson et al., 2002).

Policy makers and administrators need the tools to shift funding from old ways of practice to new ways (Goldman et al., 2001). In addition, administrators and policy makers need accurate information about the costs of providing evidence-based treatments (Goldman et al., 2001). Information about DBT's cost savings and efficacy data can be useful in persuading government agencies and administrators to pay for the treatment. In fact, the costs of not doing DBT (e.g., hospitalization) are often greater than the costs of doing DBT for multi-problem suicidal adolescents (Miller et al., 2007). Increased collaboration and better planning amongst federal, state, and local agencies responsible

for financing mental health treatment could lead to incentives for implementing and maintaining evidenced-based practices like DBT (Goldman et al., 2001).

In order for a DBT program to succeed, internal administrative support is also essential. Some administrators may be reluctant to support a DBT program because of the assumption that it is a highly time-intensive program (e.g., therapist consultation team and phone consultation) and that it requires many resources related to staffing and training (Miller et al., 2007). It is helpful to orient administrators to how a DBT program could fit within their own organizational goals. Providing workshops to educate administrators about the population and treatment can help increase comfort level (Miller et al., 2007). In addition to administrators, program leaders play a key role in the implementation of DBT. Program leaders encounter staffing barriers related to high turn over rates and the resources required to recruit, train, and retain staff to work with challenging populations (Swenson et al., 2002). For example, it has been reported that the training of staff in DBT within the Massachusetts DYS has been costly (personal communication David Burton, April 12, 2010). Moreover, the erosion on resources of state mental health programs makes it difficult to retain a skilled workforce, which is critical to providing state-of-the-art, evidence based treatments (Goldman et al., 2001; Miller et al., 2007). The DBT consultation team is the mechanism within the treatment model that addresses burnout and therefore should be prioritized and strengthened in each program (Swenson et al., 2002). Moreover, internal organizational and operational barriers can arise for program leaders as they attempt to structure DBT within an agency. Therefore, program leaders should be adept in managing training funds optimally and selecting competent DBT staff (Swenson et al., 2002). Furthermore, ongoing continuity

of program leadership is important to ensure the system-wide implementation of evidence-based practices like DBT (Goldman et al., 2001). In addition, since no valid DBT fidelity measure has been developed, program leaders should hire DBT experts to ensure program fidelity. Financial resources, support, and time must be allotted for research and program evaluations (Swenson et al., 2002); it is important to collect outcome data through the collection of pre- and post-treatment measures (Miller et al., 2007).

Problems with getting the staff to "buy into" DBT can create additional barriers to implementation (Miller et al., 2007). Within the Massachusetts DYS model, resistance by the direct care staff has been challenging because DBT does not seem to directly relate to the youths' crimes. Moreover, since line staff are involved in maintaining security, this makes the movement towards establishing a therapeutic alliance with youth potentially challenging for many facilities. In addition, according to some researchers, clinicians face barriers in becoming effective DBT therapists because facilitating DBT requires a significant role redefinition and acquisition of new skills such as giving homework, teaching skills groups, coaching clients, and utilizing the consultation team for support and advice. Furthermore, access to DBT training and supervision for clinicians is limited (Swenson et al., 2002; Wagner et al., 2006). Therefore, adequate staff training in DBT and a variety of evidence based CBT interventions is crucial (Miller et al., 2007; Trupin et al., 2002). Lastly, staff "champions," practitioners who introduce a behavioral innovation into their treatment setting, can be valuable assets by training their colleagues on the new intervention and ensuring that each clinician has accurately learned the procedure (Quinn & Shera, 2009).

Consumers of DBT also face common barriers during the implementation of DBT. In utilizing DBT with adolescents, there are specific challenges related to family and provider involvement, confidentiality, and treatment length. Caregiver support and participation in DBT is crucial for an adolescent's successful transition into the community and ability to generalize the skills learned in the DBT program. It is paramount that family members, providers and parole officers (within the context of the juvenile justice system) are included in the treatment to ensure that the skills will be reinforced upon discharge (Trupin et al., 2002; Wagner et al., 2006). In addition, an adolescent might also be hesitant to trust his/her DBT therapist, if confidentiality is not adhered to. Therefore, it is important that both the adolescent and caregivers understand when a therapist is legally obligated to break confidentiality and when an adolescent's confidentiality can otherwise be upheld (Wagner et al., 2006). Also, length of participation in DBT might be another challenge for some juvenile delinquents. Since DBT typically occurs over a period of several months, early graduation, elopement from treatment, and state mandated relocations within residential treatment can bring a youth's participation to a premature end. However, most of these situations can be planned for and followed up on accordingly (Lovelle, 2008). Lastly, DBT requires a significant commitment from youth in regards to treatment goals. The prospect of entering a treatment that targets problem behaviors and identifies the goal of developing a life worth living can be frightening and induce mood swings, outbursts, flashbacks, and other experiences particularly related to one's trauma history (Lovelle, 2008; Swenson et al., 2002).

CHAPTER III

CONCLUSION

The juvenile correctional systems in many states have become adolescent mental health systems (Grisso, 1999). Mental health interventions must go beyond addressing externalizing behaviors for which youth have been detained (Arroyo, 2001). Given the high prevalence rates of trauma and other chronic social problems within the juvenile justice population, improving mental health services for juvenile delinquents is in the interest of public safety (Abram et al., 2004; Grisso, 1999). Although trauma exposure among juvenile offenders has been linked to their criminal behavior, few protocols have been developed to specifically treat posttraumatic sequelae in juvenile delinquents (McMackin, Leisen, Sattler, Krinsely, & Riggs, 2002). By drawing upon a trauma perspective to understand the dynamics driving juvenile delinquency, prevention and early intervention efforts can be modified, re-traumatization within the juvenile justice system can be reduced, and anti-social behavior amongst juvenile delinquents can be curtailed (Abram et al., 2004; Greenwald, 2002).

Outcome studies have found that cognitive-behavioral approaches are more effective at reducing recidivism, which has given rise to intervention programs designed to treat delinquent youth (Baer & Maschi, 2003; McMackin et al., 2002b). Despite the lack of firmly established efficacy with adolescents, the use of DBT within detention facilities and residential treatment programs for treating trauma in delinquent youth seems the most salient treatment available. The research in this literature review supports the notion that juvenile justice systems across the United States could benefit greatly from implementing DBT to treat the high rates of trauma found within the juvenile justice

populations. Given the high prevalence of minority youth within the juvenile justice system (Arroyo, 2001), further research regarding the implementation of DBT and culturally-sensitive adaptations with minority delinquent youth is recommended.

It can be argued that DBT for adolescents supports rehabilitation through the mechanism of mindfulness by targeting posttraumatic stress reactions, which in turn may reduce anti-social behaviors in delinquent youth. A review of the literature appears to support the hypothesis that through decreased experiential avoidance and enhanced emotional regulation skills, delinquent youth learn life-long skills that lead to improved social relationships, long-term behavioral change, and ultimately the likelihood of reduced recidivism. Further research is needed to examine the long-term outcomes utilizing DBT within the juvenile justice population and the possibility of a casual relationship between mindfulness and reduced recidivism. By balancing accountability with validation, DBT is a treatment that brings to light "the human dimension in crime" for those working with juvenile delinquents (Steiner et al., 1997), which is an ideal antidote for healing the traumas suffered by vulnerable, delinquent youth.

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