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DBT for Co-Occurring Mental Health & Substance Use Disorders

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DBT for Co-Occurring Mental Health & Substance Use Disorders

by

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GRSW 682-Applied Research

Presented to the Faculty of the
School of Social Work
St. Catherine University and the University of St. Thomas
St. Paul, Minnesota
in Partial fulfillment of the Requirements for the Degree of

Master of Social Work

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The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

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Abstract

Current research available identifies that when treating Borderline Personality Disorder (BPD) the empirically supported model of choice is Dialectical Behavioral Therapy (DBT), and BPD is known to impact approximately 1% of the population. However, it is estimated that 23 million Americans (or 10%) of the population meets criteria for a Substance Use Disorder (SUD). With a non-completion rate in upwards of 60% when a person has co-occurring BPD & SUD this research sought out to identify what current practices DBT providers in Minnesota implemented to increase patient successes, and what the perspectives were from DBT providers as it relates to intervention timing and strategies when treating Co-Occurring patients. Through a survey of DBT practitioners in Minnesota, this study unearthed data illustrating that the complex needs of BPD & SUD patients are often not addressed with DBT alone. Additionally, in this mixed methods study respondents identified that when addressing the needs of co-occurring BPD and SUD patients, no one approach is recommended. Data indicated that patient needs and the severity of each disorder is what drives them to recommend different approaches. Additionally, it was discovered that DBT alone is typically not sufficient when treating BPD & SUD patients.

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This research is dedicated to all those who strive to overcome substance use disorders, as well as additional co-occurring disorders. Your life is not defined by your struggles, but it is defined by how you allow the guidance and direction of others to assist you in finding your true happiness.

DBT for Co-Occurring Mental Health & Substance Use Disorders

Dialectical Behavioral Therapy (DBT) has undoubtedly found its place in clinical social work practice throughout the world in treating personality disorders such as Borderline Personality Disorder (BPD), which is a severe and persistent mental disorder. DBT is an evidence-based treatment model that was specifically developed for BPD, created by Marsha M. Linehan, Ph.D (DiGiorgio, Glass, & Arnkoff, 2010; Koons, 2008). Linehan's model of DBT has three structural components that are all derived from different subdivisions of expertise to create the DBT's foundational elements (Koons, 2008). The three different areas are: Behaviorism, Zen Principles of Mindfulness, and Dialectics. DBT has demonstrated through rigorous study to be highly effective when treating BPD (Bornovalova, Daughters, 2007; Rosenthal, 2006).

Often, with any mental health disorder there is a propensity for the person afflicted to have what is called a co-occurring or co-morbid disorder. When individuals are afflicted with co-occurring disorders they often present with a much more complex set of barriers to overcome than when they present with only one primary disorder. Substance abuse¹ can be considered impulsive behavior that constitutes self-harm. Therefore, a substance abuse disorder is regularly contemplated when evaluating diagnostic criteria for BPD, and clinicians routinely identify high rates of co-morbidity (Dimeff, & Linehan, 2008). Research steadily has affirmed the rates of BPD and SUD are frequently between 67% and 76% of the BPD populations. Criteria is met when BPD patients abuse at least one substance to the degree they meet criteria for the diagnosis of a SUD (Linehan, et al. 1999).

Linehan's work and research affirms that individuals with BPD and SUD are the most

¹ With recent changes to the Diagnostic and Statistical Manual of Mental Disorders (DSM 5), Substance Abuse, Substance Dependency, Addiction, and Substance Use Disorder (SUD) will be used interchangeably.

arduous individuals to treat for either disorder, as they present with more complications. The nature of complexity can be described in the elevated rates of suicide and suicide attempts for each diagnosis alone, but when combined the rates nearly double. Patients with substance abuse disorders present with extensively greater problems within the legal system, medical system, and mood disorders tend to be more widespread if they also are accompanied by a personality disorder (Dimeff, & Linehan, 2008). Of all the factors that lead to client attrition in therapy a study of over 290 patients being treated for BPD, researchers found the single factor most related to negative treatment outcomes was having a co-morbid SUD (Bornovalova, Daughters, 2007; Rosenthal, 2006; Dimeff, & Linehan, 2008). Some research has indicated that in upwards of 57 percent of individuals diagnosed with BPD also meet diagnostic criteria for a SUD, and dropout rates in DBT therapy have shown to be in upwards of 60 percent (Bornovalova, Daughters, 2007; Rosenthal, 2006).

Statistics are clear that DBT considerably falls short in treating the client that presents with co-occurring SUD and BPD. As psychotherapists seek to ever evolve their intervention techniques in the best interest of client care, this research sought to identify DBT's current effectiveness when it is applied to individuals who have a co-occurring mental health and substance use disorder from the perspective of DBT practitioners, and to offer suggestions in order to increase treatment success for the SUD-BPD patient. Through reviewing available literature combined with conducting quantitative analysis from a series of questions that were disseminated to DBT providers in the state of Minnesota, this research sought to understand practicing clinicians' viewpoints of retention, and methods of delivery when implementing DBT to patients that present with either BPD, or BPD and SUD. Additionally, this research evaluated the clinicians' subjective accomplishments and/or limitations in DBT practice among individuals

having a co-occurring disorder in which one of the disorders is a substance use disorder.

Literature Review

Dialectical Behavioral Therapy

DBT is a type of psychotherapy that evolved in the late 1970's from cognitive behavioral therapy, and was designed by Marsha M. Linehan, Ph.D, specifically to address chronically suicidal and self-injurious clients (Kienast, Stoffers, Bempohl, & Lieb, 2014; Koons, 2008). Linehan theorized that the main afflicting factor of the patients was their inability to regulate their emotions, and these emotional deregulations contributed to all of their other problems in life (Koons, 2008). She found that individuals with BPD resort to self-injurious behaviors because they have an absence of skills needed to navigate essential interpersonal relationships, which includes the lack of ability to self-regulate emotions (Kienast, Stoffers, Bempohl, & Lieb, 2014; Panos, Jackson, Hasan, & Panos, 2014).

Based in Biosocial Theory it was Linehan's assertion that BPD resulted in biological vulnerability to process emotion combined with pervasive invalidation, which causes the disorder (Koons, 2008; Linehan, et al. 1999). Research has shown that DBT treatment is most effective when it includes individual therapy, a weekly skills training group, and help with skills application through phone therapy between sessions (DiGiorgio, Glass, & Arnkoff, 2010; Linehan, et al. 2002). The scores of available research available indicate that the evidence-based model of DBT as it is designed continues to support the original findings of success as it pertains to maladaptive behaviors associated with BPD.

In the application of DBT the term "dialectical" is what makes DBT different than other treatment models. Specifically, dialectical behavioral therapy means discovering the central equilibrium between two contrasting perspectives creating balance between the dialectics

(Dimeff & Koerner, 2007). In the patients' thought processes two viewpoints contradict one another, and a divergence in thinking occurs causing instability (Linehan, et al. 2002). When the contradictory viewpoints are identified in therapy it then becomes the therapist's responsibility to recognize, call to light the dialectic, substantiate clients' thoughts in a validating manner, and assist clients with finding middle ground: the "synthesis," which is nothing more than a rational compromise to "all or nothing/extreme" thought processes (Dimeff & Koerner, 2007). Research supports this approach as effective in treating BPD which is made up of extremely unhelpful thought patterns. In a study that compared DBT to treatment as usual (TAU) for a collection of drug-dependent suicidal females presenting with BPD, the DBT group had a considerably lower attrition percentage of 36% over the TAU group 73% (Linehan, et al. 1999).

Since clinical application studies have deemed DBT as evidence based practice in treating suicidal and self-injurious behaviors more successfully than other treatment modalities, it is considered the preferred therapy for treating BPD, and appears to be spreading throughout the U.S. (Bornovalova, & Daughters, 2007; DiGiorgio, Glass, & Arnkoff, 2010; Linehan, et al. 2002; Lopez, & Chessick, 2013). Although DBT was originally designed to treat the chronically suicidal (a main feature of BPD), because of its ability to target emotions and emotional deregulation its components are being tailored to serve as treatment approaches for other disorders (Heagerty, P., et al. 2002; Linehan, et al. 1999). Unfortunately, research is limited for being able to dissect specific components of DBT, and therefore some researchers are unsure which specific components may or may not be empirically successful. In summary, Dialectical Behavior therapists focus on the dysregulated areas with clients by using approaches of: Group Skills Training, Individual Therapy, and Phone Consultation. All of these approaches allow the therapist to express acceptance, validation, change, and problem solving tactics (Koons, 2008;

Linehan, et al. 1999).

Substance Use Disorders

A Substance Use Disorder (SUD) is when a person habitually consumes substances, either legally or illegally, which results in significant negative consequences in their lives. As individuals begin to experience negative consequences and distressing emotions their substance use often increases. This, in turn, leads to behaviors and emotions that are maladaptive and negatively impact a person's life, resulting in additional substance intake as a coping mechanism despite the ongoing negative consequences (Schultz Fischer, 2007). The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) has moved away from identifying addiction as substance abuse or substance dependence. Because addictions are complex disorders that are centered in the brain the medical community has refined how they categorize use disorders. The DSM-5 and the psychiatric community no longer use the terms substance abuse & substance dependence, but instead refers to the maladaptive and/or habitual intake of substances as substance use disorders (American Psychiatric Association 2013).

Substance use disorders are further expressed as mild, moderate, or severe to signify the level of severity. The disorder severity is defined by the specific number of diagnostic criteria that are met by an individual for any given substance (American Psychiatric Association 2013).

As defined in the DSM-5:

The diagnosis of a substance use disorder is based on a pathological pattern of behaviors that are related to the use of the substance... and criteria can be considered to fit within overall groupings of impaired control, social impairment, risky use, and pharmacological criteria (p. 483).

According to data from the Substance Abuse and Mental Health Services Administration (SAMHSA) and their 2009 National Survey on Drug Use and Health, there are approximately 23.5 million people in America that currently have substance use disorders and are in need of treatment services. Unfortunately, only one in 10 of them (2.6 million) receives needed treatment (Substance Abuse and Mental Health Services Administration 2010). With the astonishing number of individuals that are in need of substance abuse treatment services it undoubtedly has a staggering impact on all facets of society. In the United States there are a reported four million deaths each year, and one out of every four deaths are reported to be accredited to alcohol, tobacco, and illicit drug use (Horgan, 2001). The overall costs of substance abuse in the United States alone transcend \$414 billion annually (Horgan, 2001). Additionally, the costs associated to the healthcare industry that are associated with substance use disorders tops \$114 billion yearly. Lastly, Federal allocations to the criminal-justice system consume 60% of the drug control budget per year, with only 18% devoted to treatment (Horgan, 2001).

Out of all of the individuals that meet criteria for substance abuse treatment approximately only eleven percent actually receives treatment services (Substance Abuse and Mental Health Services Administration 2010).

Sixty percent of individuals who are diagnosed with an SUD also have a co-occurring mood or personality disorder (Schultz-Fischer, 2007). Over decades of study in treating problematic substance abuse no other modality has proven to be more accepted than cognitive behavioral therapy (CBT) (Moggi, Giovanoli, Buri, Moos, & Moos, 2010; Sampl, Wakai, & Trestman, 2010; Walter, et al., 2009). Unfortunately, research is just beginning to catch up to the treatment approach of individuals being treated simultaneously for multiple disorders. And when success rates are not as successful as professionals and patients would like them to be it is crucial

to evaluate approaches to make positive corrections in service delivery, which includes approaches that target co-occurring disorders.

Borderline Personality Disorder

The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) states that someone with BPD will make frantic efforts to avoid real or imagined abandonment (Criterion 1). “The perception of impending separation or rejection, or the loss of external structure, can lead to profound changes in self-image, affect, cognition, and behavior” (American Psychiatric Association, 2013, p. 663). The DSM-5 indicates the current prevalence of BPD is between 1.6% and 5.9% (American Psychiatric Association, 2013).

As defined in the DSM-5, the diagnosis of borderline personality disorder is based on a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Frantic efforts to avoid real or imagined abandonment. (NOTE: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.
3. Identity disturbance: markedly and persistently unstable self-image or sense of self.
4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (NOTE: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)

5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior.
6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

(American Psychiatric Association, 2013, p. 663).

Co-Occurring BPD & SUD

In reviewing available literature and scientific studies there appears to be an alarming rate of treatment attrition when servicing clients that have both Borderline Personality and Substance Use Disorders. Study data indicates that non-completion rates of treatment for BPD-SUD individuals fall between 30 to 60 percent (Bornovalova, & Daughters, 2007; Linehan, Schmidt, Dimeff, Craft, Kanter, & Comtois, 1999). Moreover, it is alarming that between 20 and 67 percent of patients that have BPD also have an active SUD (Panos, Jackson, Hasan, & Panos, 2014; Van, d. Verheul, Schippers, & van, d. B. 2002). Unlike individuals who present with one disorder the heightened complexity of someone having co-occurring disorders leads to each individual presenting with more severe symptomology than if they presented with a singular disorder (Panos, Jackson, Hasan, & Panos, 2014). As a result of the clinical complexity professionals are finding this specific BPD-SUD population to be extremely challenging in their efforts to foster motivation for change; also, premature discharge as a result of substance abuse,

and heightened interpersonal conflict within treatment groups leads to statistically significant negative outcomes (DiGiorgio, Glass, & Arnkoff, 2010; Linehan, et al. 2002; Moggi, Giovanoli, Buri, Moos, & Moos, 2010).

When there are negative outcomes in the treatment of psychological disorders, it is important to improve methods of intervention, and ultimately improve the lives of individuals that suffer from these afflictions. One thing is clear: the more complex the disorder, the more it will promote innovations in treatment modalities. This study utilized information gathered from practicing DBT providers to evaluate their perceived pitfalls in approaching the complexity of treating the BPD-SUD clientele, and provide potential declarations to ultimately improve treatment interventions for clients, thus improving their lives.

Conceptual Framework

Mindfulness Theory

In psychotherapy and counselling psychology mindfulness theory can be described as coherent attentiveness of thoughts events, and experiences (Colman, 2015). Its origins are from transcendental meditation practices relating to Buddhism. The Buddhist teachings of mindfulness allow one to acknowledge thoughts and viewpoints without bias, thus allowing for awareness rather than reactivity. With this type of focus and awareness it allows the DBT patients a particular openness to new material, and in cognitive-fashion advances different habits of shaping perception (Colman, 2015). Mindfulness and its use of contemplation techniques has been customized into western nonspiritual contexts to treat patients with an assortment of psychological illnesses. Contemplation of thought processes allows the opportunity for patients to gain insight on how they have formed unhealthy thought patterns, and to foster more regulation over them. Mindfulness is considered an essential aspect of perception that often is heightened in an assortment of mental teaching exercises, in which patients become aware of most-all mental activity allowing them to make analytical decisions on which thought to act on (Logan, 2014). Individuals who have BPD, experience conflict in their thinking patterns, such as black and white thinking, often referred to as all or nothing thinking. This often influences the person with borderline personality disorder to make rash decisions, or find themselves in a state of hopelessness leading to self-injurious behaviors (Perroud, Nicastrò, Jermann, & Huguelet, 2012). The person with BPD is stuck between ideas referred to as thesis and anti-thesis, to where they cannot achieve emotional harmony (Linehan, 1993). This is where mindfulness can be utilized as a potential treatment approach, and it may be assimilated within other treatment

schemes in working with individuals and groups to break through dysfunctional thought processes that effect both BPD and/or SUD patients (Logan, 2014).

Social Learning Theory

Social learning theory suggests that human behavior is learned as individuals interact with their environment (Colman, 2015). Behavioral Therapy looks at what function thoughts play in supporting the problematic actions, and places importance on shifting destructive thought configurations, which are the motivation of negative behaviors. Linehan theorizes that a major factor of those with BPD is that in childhood they did not experience an environment that is validating, which in turn does not allow them to develop the necessary skills to regulate their emotions (Koons, 2008). This theory would make sense as to why the highly structured format of DBT would in a sense re-condition patients so they can identify distress and make rational choices, thus avoiding getting lost in emotion. Transformation techniques entail systematic and recurrent behavioral proficiencies training in the group setting, which foster repair of dysfunctional schemes of behavior (Linehan, et al. 1999). Behavioral skills training in the group context then draw in the component of social learning as individuals witness skills being emulated, to overpower chaotic mental reactions (Linehan, et al. 1999).

Mindfulness and Social Learning theories can be beneficial to breaking the cycle of compulsivity as relating to harmful behaviors and thought processes that afflict both the BPD and SUD patients. Both theories set out to undermine the behavior and thought schemas where compulsion takes over through an unhealthy response to impulse. Pursuing satisfaction or fulfillment through the uncontrolled reaction to desires signifies an impulse-control problem (MacNeil, 2013). Impulses in thought and behavior frequently create anxiety (among other

distressing emotions) that people with an SUD and/or BPD endure, and these individuals often attempt to diminish this distress by firmly applying maladaptive mental or behavioral habits, creating a never ending cycle of impulse control problems (MacNeil, 2013).

Research Question

Statistics are strong indicating that DBT significantly assists patients in finding meaningful relief in the symptoms of BPD. Unfortunately, data implies that DBT falls short in treating the client that presents with co-occurring Substance Use & Borderline Personality Disorders. The focus of this research study is to determine: How do practitioners relate their experience in delivering DBT when treating BPD and SUD? And, what methodologies ought to be considered when serving the BPD-SUD population?

This research described conclusions considering the views from practicing clinicians, and the methods of delivery they identify as most effective when implementing DBT to patients that present with either BPD or BPD & SUD. Additionally, this research evaluated the clinicians' subjective accomplishments and/or limitations in DBT practice among individuals having a co-occurring disorder in which one of the disorders is a substance use disorder.

These questions are important to the social work and mental health professions for many reasons. One reason is, available research has identified a shortfall in successful intervention with persons who present with active co-morbid BPD and SUD. Additionally, most research regarding DBT has been concentrated within highly controlled clinical trials, thus it is important that additional research be developed that takes into account those who face the complexity of serving these populations on a daily basis.

Methods

Research Design

This study utilized a convenience sample of practitioners who identified themselves as DBT providers. These providers were asked to answer a series of questions that relate to their professional experiences in applying DBT to those clients with and without co-occurring mental health and substance use disorders. The questionnaires were developed in order to draw conclusions relating to the successes of patients both with and without mental health disorders that occur with or without substance use disorders, as seen through the eyes of the DBT survey participants. The purpose of this study was to explore whether results with providing DBT are similarly as effective when applied to patients that have both a mental health disorder that co-occurs with a substance use disorder and a singular diagnosis of BPD.

Prior to disseminating the research questionnaire to active professionals the Institutional Review Board (IRB) at University of St. Thomas St. Paul, Minnesota reviewed a consent form (Appendix A), and the consent form was disseminated with the confidential online questionnaire. This research complied with the University of Saint Thomas's (UST) IRB and Protection of Human Subject guidelines, including adequate explanation of confidentiality and anonymity of the respondents during the research practice. The respondents' name, gender, and place(s) of employment were omitted from this report. The survey questions were disseminated via electronic mail services.

Protocol for Ensuring Informed Consent

Informed consent was obtained from the survey participants prior to completing the Qualtrix online survey. A script was positioned previous to the survey questions, which stated, "I understand the above written, and agree to take part in the anonymous survey to further research

on the subject matter. I also acknowledge I have the right to discontinue the survey at any time.” Participants were not authorized (in the Qualtrix program) to proceed through the survey without consenting to above statements. Please see the script prior to the survey located in Appendix D.

Sample

This study solicited practitioners from the Minnesota Department of Health and Human Services website who work on certified DBT teams. The respondents were asked to answer a set of questions (Appendix C) that were approved by the Institutional Review Board (IRB) at University of St. Thomas, St. Paul, Minnesota to safeguard the study participants from harm that could result from them answering the study questions, and to confirm adherence to the UST IRB and Protection of Human Subjects guidelines (Appendix F).

Data Collection

Participants had been asked to complete a brief eleven question survey on Qualtrics as a self-identified DBT Practitioner. The survey was designed to take the participants approximately 3-8 minutes to complete in its entirety. The survey was created to be non-identifying, and totaled eleven closed-ended questions. For participants who participated in this study there were no identified risks nor benefits, and the survey participants had the opportunity to decide whether or not to agree to an informed consent statement.

Quantitative Data Analysis Plan

The quantitative data analysis that was used analyzed several statistics related to the closed ended questions/variables. Multiple nominal and ordinal variables were analyzed. The researcher collected data from respondents who are professionally responsible for the delivery of DBT services throughout the state of Minnesota. Analysis of this data sought to answer questions relating to the intervention of dialectical behavioral therapy and how respondents relate their experience when serving clients afflicted with BPD, and co-occurring BPD and SUD.

Descriptive Statistics

The first measure of central tendency and dispersion statistical procedure was used to analyze the three scale items: “How long have you practiced DBT as designed by Dr. Marsha Linehan?” This data was utilized to identify the length of time in years and months that professionals have delivered DBT. The question is a ratio variable, which was analyzed using measures of central tendency and dispersion, and displayed in a histogram.

In the second measure of central tendency and dispersion this researcher analyzed three questions forming the “DBT Practice Scale-BPD only” measuring clinicians’ perception of whether or not DBT alone is adequate to treat BPD (e.g., “I strictly adhere to the DBT model when treating Borderline Personality Disorder (without substance use)”). Each question is scaled as follows: “Strongly disagree, disagree, agree, and strongly agree,” and the results are presented in a histogram to present the measures of central tendency and dispersion. The scale ranges from 3-12, with higher scores indicating stronger adherence to the DBT model, and lower scores indicating more deviation from the DBT model.

In the third measure of central tendency and dispersion this researcher analyzed the three questions forming the “DBT Practice – Co-Occurring BPD &SUD” scale measuring clinicians’ perception of whether or not DBT alone is adequate to treat BPD (e.g, “Clients with co-occurring BPD and SUD often have complex needs that are not fully addressed with one treatment model”). The items are scaled as follows: “Strongly disagree, disagree, agree, and strongly agree,” with the scale ranging from 3-12, with higher scores indicating stronger adherence to the DBT model, and lower scores indicating more deviation from the DBT model. Results from this scale score were analyzed using measures of central tendency and dispersion and are displayed in a histogram and standard bar chart.

In the first frequency distribution, this researcher analyzed responses to the question: “When would you generally recommend DBT for clients who present with an active co-occurring substance use and borderline personality disorder?” Frequency distribution analyses was used to analyze the following responses: “Simultaneously with substance abuse treatment; Prior to enrolling in outpatient substance abuse treatment; Near the completion of substance abuse treatment; No consistent pattern identified.” Respondents were asked to elaborate with the last response option, which is discussed below in the qualitative analysis. The results were analyzed using frequency distribution and displayed in a bar chart.

In the second and final frequency distribution, this researcher analyzed responses to the question: “Which of these strategies do you use for addressing co-occurring BPD and SUD (check all that apply)?” The respondents have the following choices to select from: “The dialectical behavioral therapy skills workbook; The 12 steps of Alcoholics Anonymous; Referral of patients to have a substance use disorder evaluation; Refer patients to substance abuse therapy; Integrate substance abuse treatment approaches in both DBT skills group and individual

sessions; Other. Respondents were asked to elaborate with the last response option, which is discussed below in the qualitative analysis. The results were analyzed using frequency distribution and displayed in a bar chart.

Inferential Statistics

In the first correlation, this writer analyzed the relationship between the ratio item: “How long have you practiced DBT as designed by Dr. Marsha Linehan?”, and the interval scale titled “DBT Practice-BPD only” scale with the scaled questions (identified above in descriptive analyses). The hypothesis was that there would be a relationship between the length of time practitioners have performed DBT and the likelihood of adhering to the DBT model as Linehan has developed. Therefore, the null hypothesis was that there would be no relationship between the length of time practitioners have performed DBT and their likelihood of adhering to the DBT model as Linehan has developed. This relationship was measured using correlation analysis and displayed in a scatter plot.

The second correlation analysis analyzed the relationship between the ratio item: “How long have you practiced DBT as designed by Dr. Marsha Linehan?” and the interval scale titled “DBT Practice-Co-Occurring BPD & SUD” as the independent variable. In this analysis, the researcher sought to identify the strength and direction between the relationship of the practitioners’ length of experience in DBT practice with the DBT Practice-Co-Occurring BPD & SUD. The hypothesis is that there would be a relationship between the length of time practitioners have performed DBT and the likelihood they will believe the DBT model as Linehan has developed is sufficient alone in treating Co-Occurring BPD and SUD. Therefore, the null hypothesis was that there is no relationship between the length of time practitioners have

performed DBT and the likelihood they will believe the DBT model as Linehan has developed is sufficient alone in treating Co-Occurring BPD and SUD. This relationship was measured using correlation analysis and displayed in a scatter plot.

The third and final correlation analysis analyzed the relationship between two sets of scaled questions: the DBT Practice-BPD only scale, measuring practitioners' adherence to the DBT model for treating BPD alone; and the DBT Practice-Co-Occurring BPD &SUD scale, measuring practitioners' adherence to the DBT model for treatment for co-occurring BPD and SUD. The hypothesis was: There is a relationship between the DBT Practice-BPD only scale and the DBT Practice-Co-Occurring BPD & SUD scale. Therefore, the null hypothesis was: There is no relationship between the scales. This relationship was measured using correlation analysis and displayed in a chart and scatter plot format.

Qualitative Data Analysis Plan

The qualitative data analysis in this study used grounded theory (i.e. theory in which is based on, or grounded in data), which began with the raw data of respondents (Monette 2013). The two questions analyzed with this method were the qualitative portion of response D (please elaborate) from item 10: "When would you generally recommend DBT for clients who present with an active co-occurring substance use and borderline personality disorder?"; as well as the qualitative portion (please elaborate) from item 11: "Which of these strategies do you use for addressing co-occurring BPD and SUD?" The researcher analyzed the open-ended responses from the participants. Through careful review of the respondents' written answers the researcher made note of themes and/or concepts as they emerged.

Results

Quantitative Findings

The measures of central tendency and dispersion reported in Table 1 analyzed the question: “How long have you practiced DBT as designed by Dr. Marsha Linehan?” The findings in this survey study represented in Table 1 show that of respondents (N= 35), the mean length of time in years and months that professionals have delivered DBT is 7.63 years (see Figure 1).

Table 1: Descriptive Statistics for Years Certified as DBT Therapist.

	N	Minimum	Maximum	Mean	Std. Deviation
Q3yearsrecoded	35	.5	19.0	7.629	5.4521
Valid N (listwise)	35				

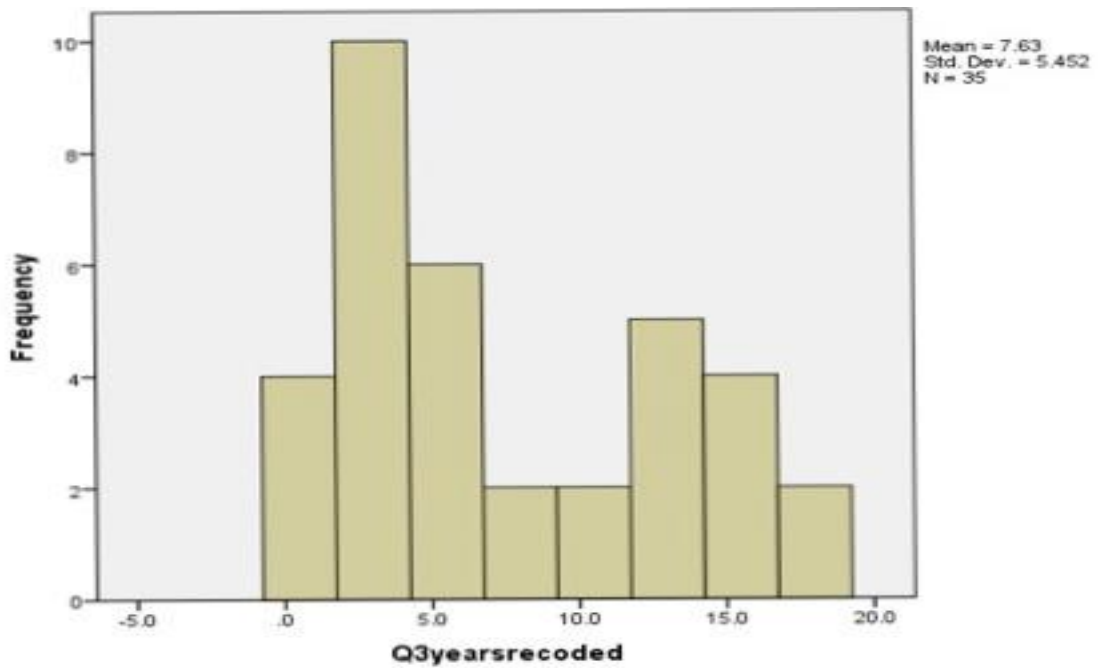


Figure 1: Histogram for Years Practicing as DBT Therapist.

In the second measure of central tendency and dispersion, this researcher analyzed the scale comprised of three items measuring clinicians’ perception of whether or not DBT alone is adequate to treat BPD (DBT Practice-BPD only). The results are presented in Table 2. The mean of 9.16 indicates professionals’ perception that DBT alone works well with patients that do not present with a co-occurring SUD.

Table 2: Distribution of DBT Works well with BPD and no SUD.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
DBT Practice -BPD only	37	3.00	11.00	9.1622	1.53684
Valid N (listwise)	37				

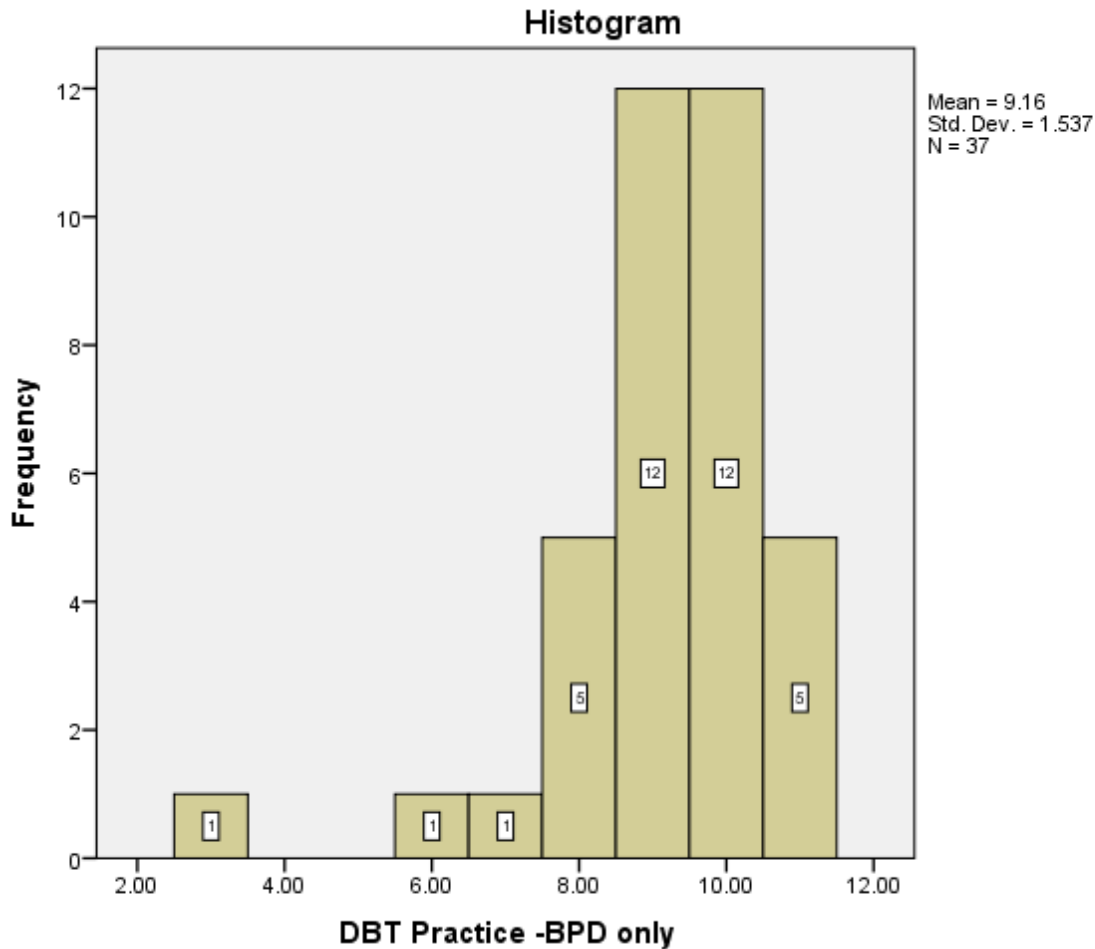


Figure 2: Histogram for DBT Works well with BPD only (no SUD).

In the third measure of central tendency and dispersion, this researcher analyzed the scale comprised of three items measuring clinicians' perception of whether or not DBT alone is adequate to treat BPD and co-occurring SUD (DBT Practice Co-Occurring BPD & SUD). The mean of 7.94 is lower than the mean for the DBT Practice-BPD Only scale ($M=9.16$), indicating professionals' perception that DBT works less well with patients that present with a co-occurring BPD & SUD (compared to BPD only).

Table 3: Distribution of DBT Works well with BPD and Co-Occurring BPD & SUD.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
DBT Practice -Co-Occurring BPD &SU	37	5.00	12.00	7.9459	2.13367
Valid N (listwise)	37				

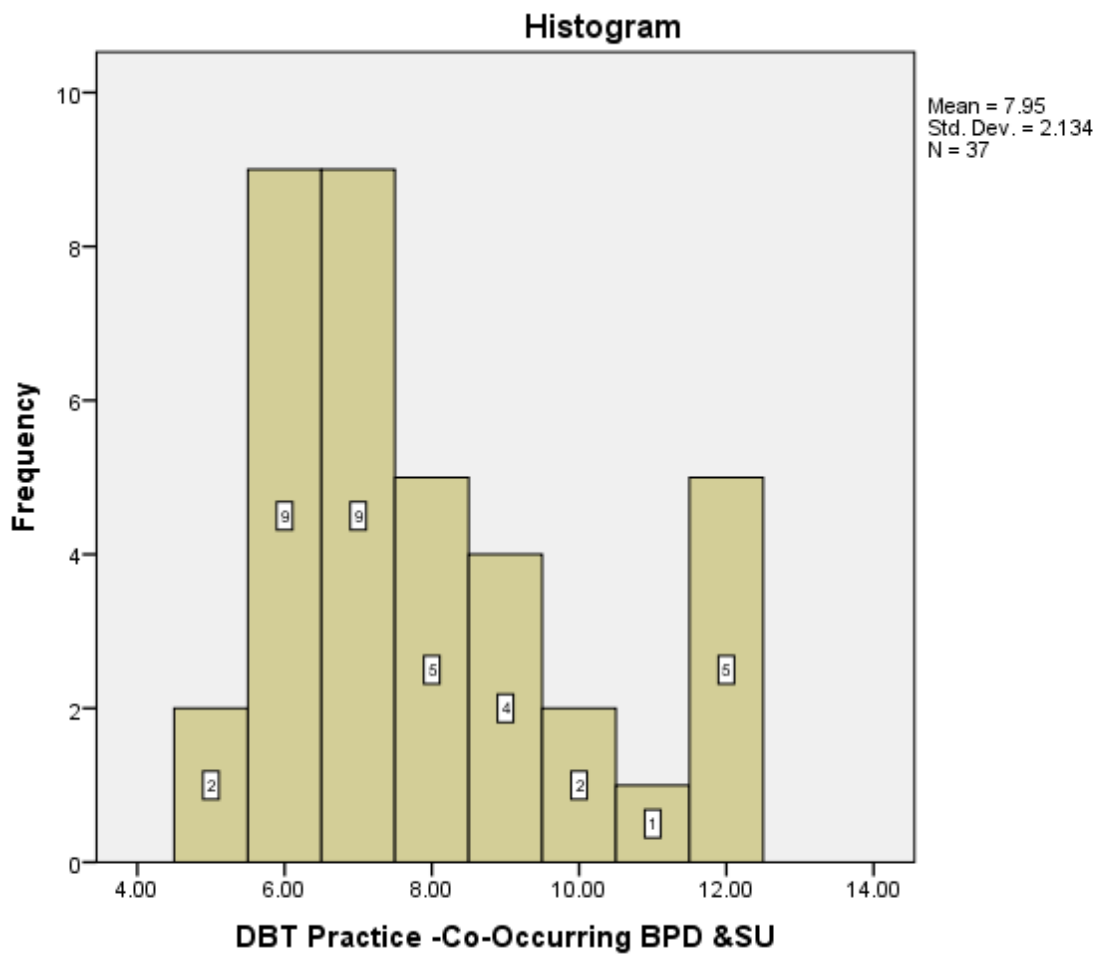


Figure 3: Histogram for DBT Works well with Co-Occurring BPD & SUD.

In the first frequency distribution, this researcher analyzed responses to the question: “When would you generally recommend DBT for clients who present with an active co-

occurring substance use and borderline personality disorder?” The findings are displayed in Table 4 and depicted with a bar chart in Figure 4. Findings show that the highest selected response was “Simultaneously with substance abuse treatment,” representing 41% of the sample or 16 practitioners. The next highest response was, “No consistent pattern identified,” selected by 13 respondents or 33% of the sample. Respondents elaborated and the results will be discussed in the qualitative analysis.

Table 4: Distribution for when DBT Providers recommend DBT with someone who has BPD & SUD.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Simultaneously w/ outpatient SU txt	16	41.0	43.2	43.2
	Prior to enrolling in outpatient SU txt	1	2.6	2.7	45.9
	Near completion of SU txt	7	17.9	18.9	64.9
	No consistent pattern	13	33.3	35.1	100.0
	Total	37	94.9	100.0	
Missing	System	2	5.1		
Total		39	100.0		

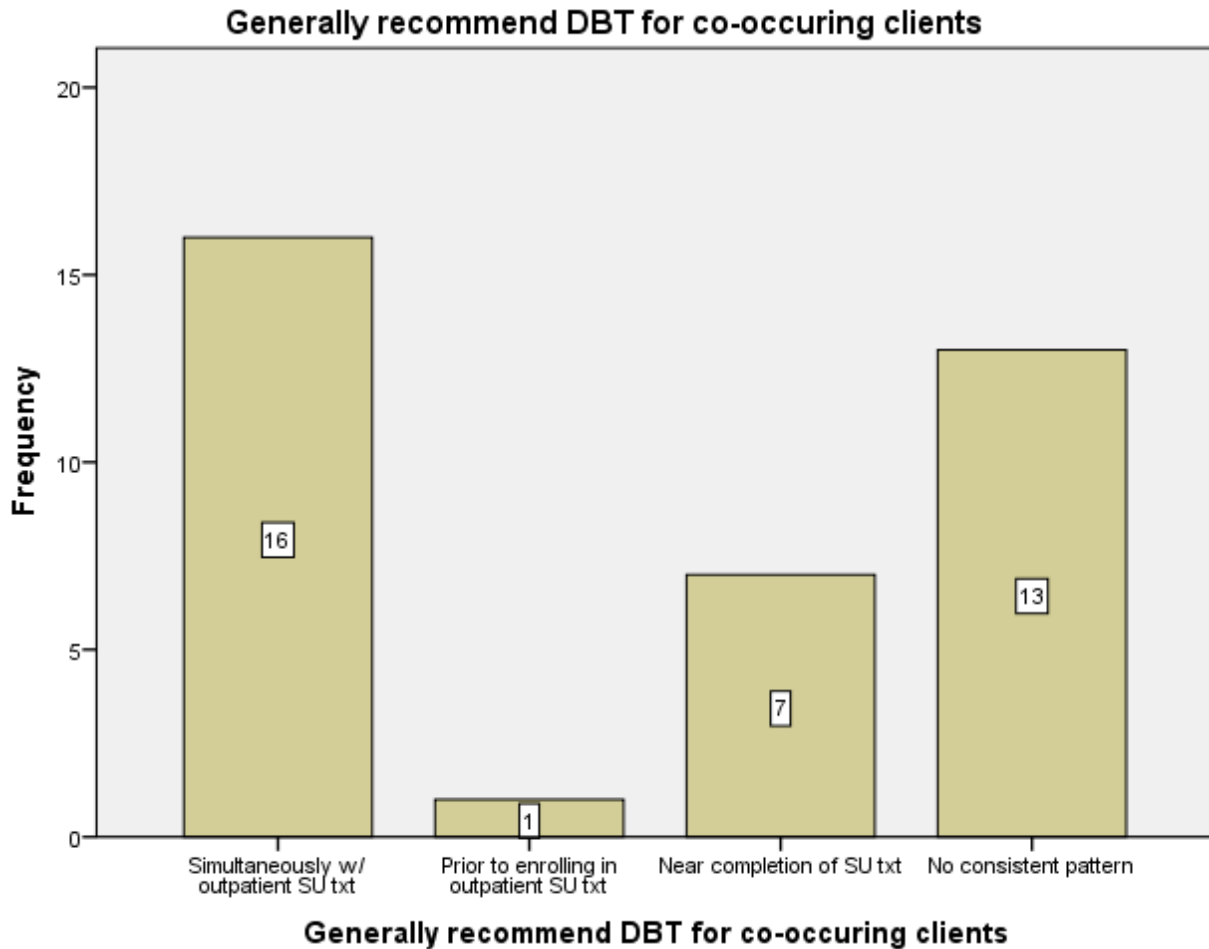


Figure 4: Histogram for When DBT providers recommend DBT with someone who has BPD & SUD.

In the second and final frequency distribution, this researcher analyzed responses to the question: “Which of these strategies do you use for addressing co-occurring BPD and SUD (check all that apply)?” Strategies practitioners recommended were the DBT workbook (89%), integrating the SU treatment in both DBT individual and DBT group treatment (62%), and/or referring for SU evaluation (57%) or SU treatment (54%). (see Table 5 and Figure 5).

Table 5: Distribution for Strategies DBT Providers recommend for someone who has Co-Occurring BPD & SUD.

Strategies co-occurring Frequencies				
		Responses		Percent of Cases
		N	Percent	
Strategies for Co-occurring BPD & SUD ^a	DBT workbook	33	28.7%	89.2%
	12 step program	12	10.4%	32.4%
	Refer for SU eval	21	18.3%	56.8%
	Refer for SU group therapy	20	17.4%	54.1%
	Integrate SU txt in both DBT group and individual	23	20.0%	62.2%
	Other for co-occurring	6	5.2%	16.2%
	Total	115	100.0%	310.8%

a. Dichotomy group tabulated at value 1.

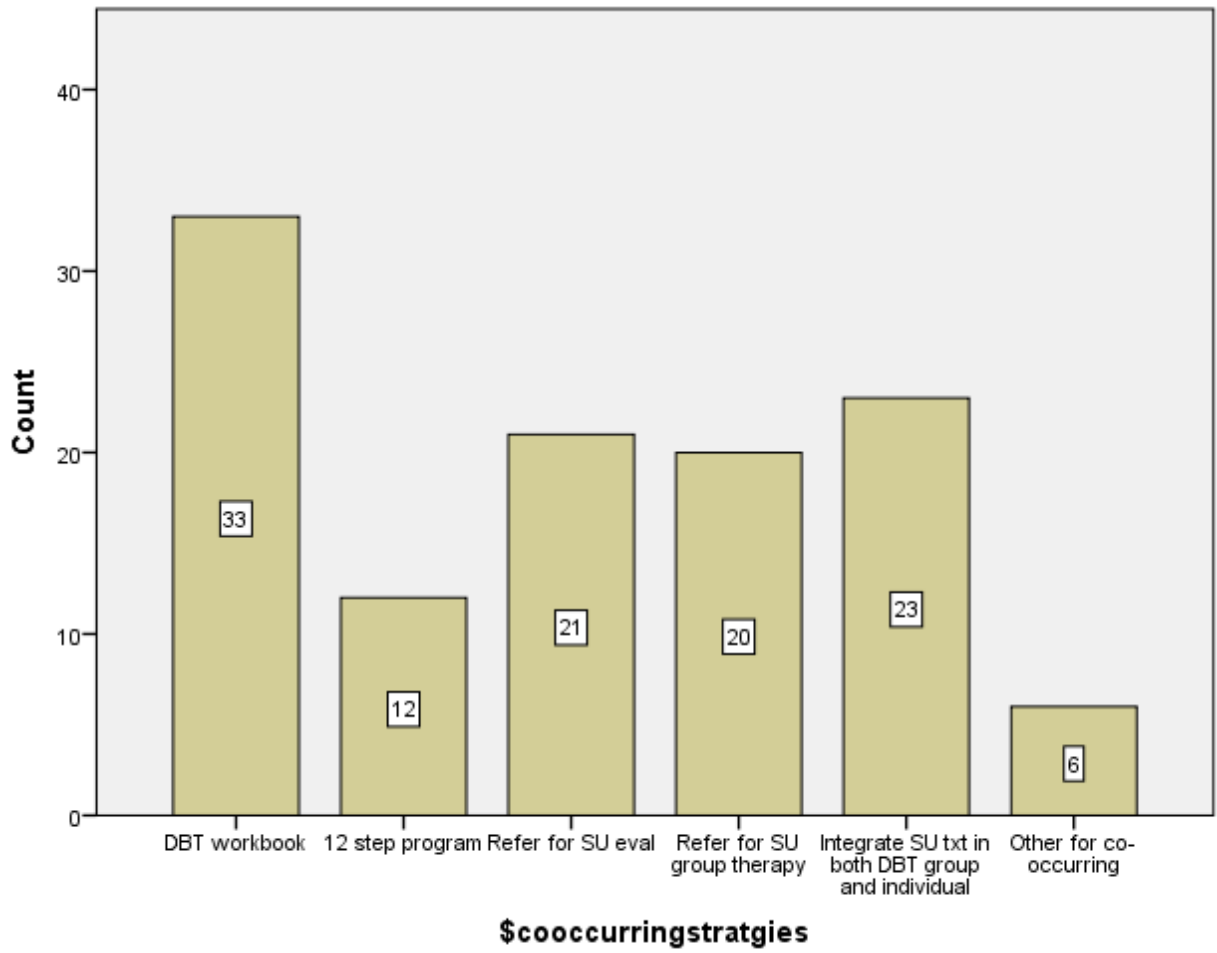


Figure 5: Histogram for Strategies DBT Providers recommend for someone who has Co-Occurring BPD & SUD.

Inferential Statistics

In the first correlation this writer analyzed the relationship between the ratio item: “How long have you practiced DBT as designed by Dr. Marsha Linehan?” (variable 1), and the DBT Practice-BPD Only scale (variable 2). The hypothesis was that there is a relationship between the length of time practitioners have performed DBT and the likelihood that they find the DBT approach (as Linehan has developed) to be effective when treating BPD without co-occurring disorders. Therefore, the null hypothesis is that there was no relationship between the length of time practitioners have performed DBT and their likelihood to believe the DBT model is effective when treating BPD without co-occurring disorders.

Table 6 and Table 7 show the inferential statistics between the two variables, years practicing DBT and DBT Practice-BPD Only scale. Table 13 shows that 35 respondents (N=35, N = 37) the calculated Pearson correlation is positive ($r = .096$, $p < .583$). This data concludes that there is no statistically significant correlation between the two variables. Therefore, an increase in one variable does not significantly relate to an increase in the second variable (see Figure 6). Therefore, the data failed to reject the null hypothesis.

Table 6: Descriptive Statistics for DBT Effectiveness Without SUD.

	Mean	Std. Deviation	N
Q3yearsrecoded	7.629	5.4521	35
DBT without Substance Use	9.7297	1.82039	37

Table 7: Correlated DBT Effectiveness Without SUD.

		Q3yearsrecoded	DBT without Substance Use
Q3yearsrecoded	Pearson Correlation	1	.096
	Sig. (2-tailed)		.583
	N	35	35
DBT without Substance Use	Pearson Correlation	.096	1
	Sig. (2-tailed)	.583	
	N	35	37

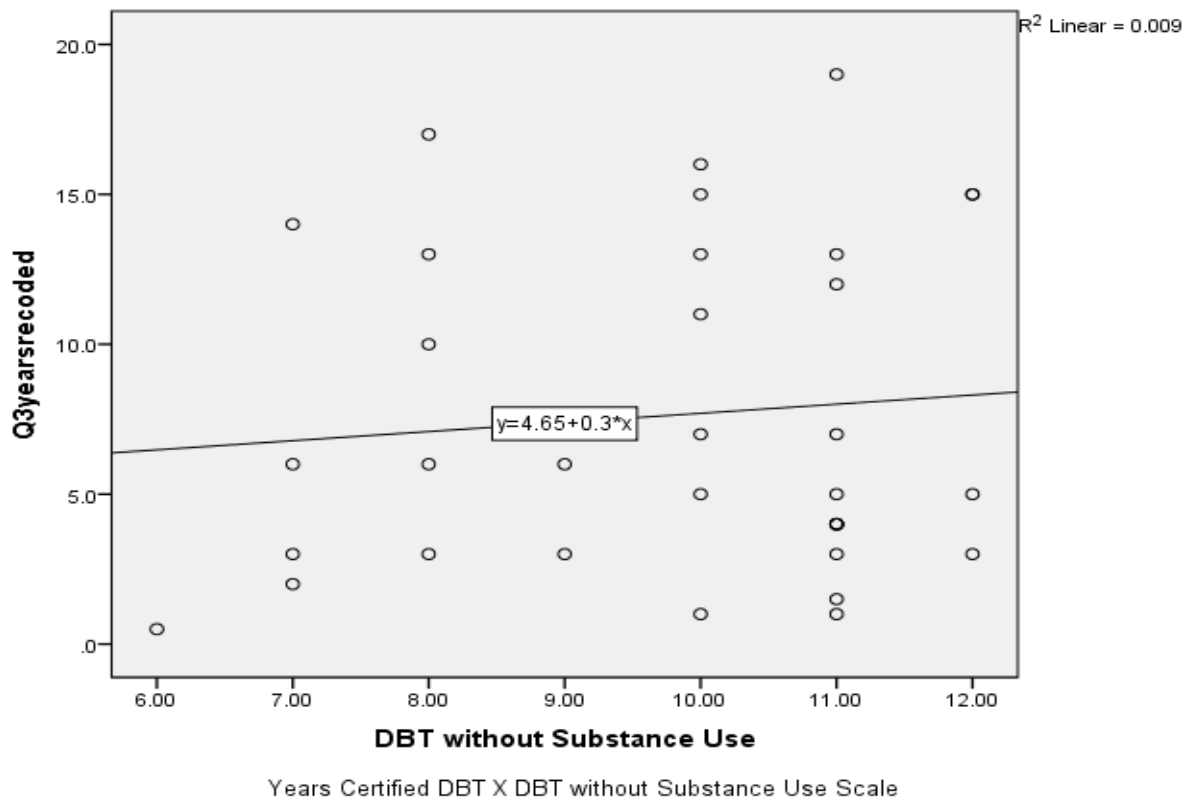


Figure 6: Years Certified DBT X DBT without Substance Use Scale.

The second correlation analyzed the relationship between DBT Practice-BPD Only scale and DBT Practice Co-Occurring BPD & SUD scale to determine if a relationship existed

between adherence to the DBT model for BPD without SUD, and adherence to the DBT model for co-occurring BPD and SUD (DBT Practice Co-Occurring BPD & SUD scale). The hypothesis was: There is a relationship between DBT Practice-BPD Only scale and DBT Practice Co-Occurring BPD & SUD. Therefore, the null hypothesis was: There is no relationship between DBT Practice-BPD Only scale and DBT Practice Co-Occurring BPD & SUD.

Table 9 shows the calculated Pearson correlation ($r = -.698, p < .000$), which indicates a strong negative and statistically significant correlation between the two variables. That means, as one variable increases in value, the other variable decreases in value (see Figure 7). This data rejects the null hypothesis and determines there is a relationship between DBT Practice-BPD Only scale and DBT Practice Co-Occurring BPD & SUD. This suggests that practitioners are significantly more likely to adhere to the DBT model for BPD without SUD.

Table 8: Descriptive Statistics for DBT Effectiveness with and without Substance Dependency Present.

	Mean	Std. Deviation	N
DBT with substance use	7.9459	2.13367	37
DBT without Substance Use	9.7297	1.82039	37

Table 9: Pearson 2-tailed correlation DBT with and Without Substance Use.

		DBT with substance use	DBT without Substance Use
DBT with substance use	Pearson Correlation	1	-.698**
	Sig. (2-tailed)		.000
	N	37	37
DBT without Substance Use	Pearson Correlation	-.698**	1
	Sig. (2-tailed)	.000	
	N	37	37

** . Correlation is significant at the 0.01 level (2-tailed).

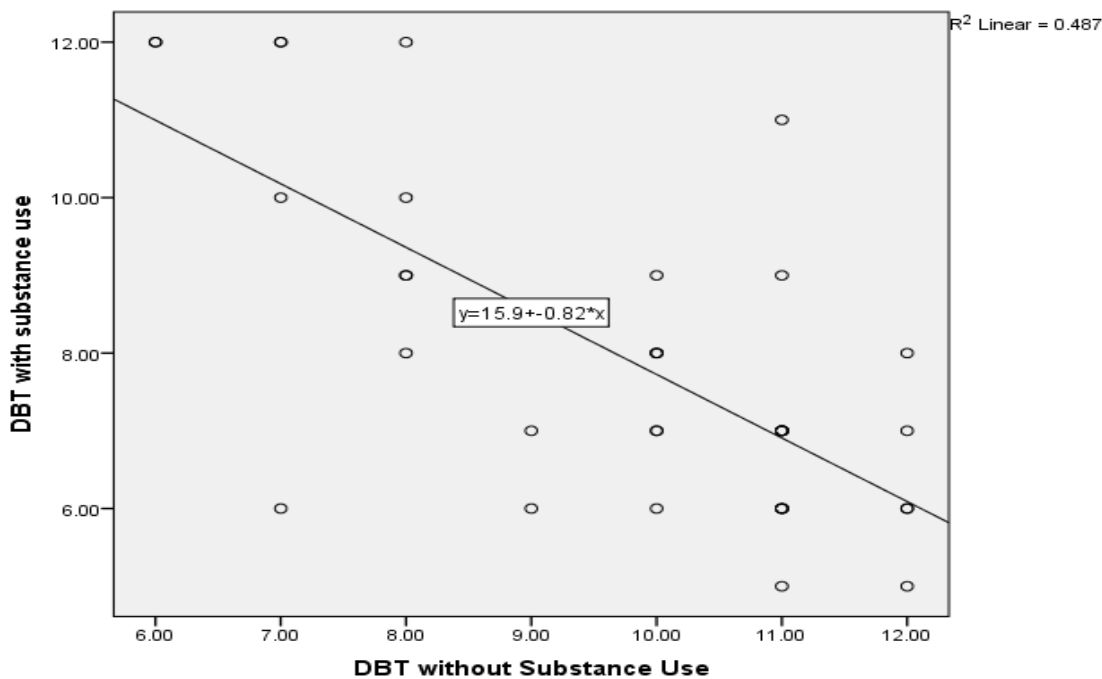


Figure 7: SCATTERPLOT (BIVAR) = [DBT without SUD] WITH [DBT with SUD].

Qualitative Findings

The qualitative data analysis utilized the response titled “D (please elaborate)” (Figure 8) from the question “When would you generally recommend DBT for clients who present with an active co-occurring substance use and borderline personality disorder?” The researcher analyzed

the open-ended responses from the participants. Through careful review of the respondents' written answers the researcher identified themes that emerged. The most common theme from the respondents was: "no consistent pattern identified," as the severity and complexity of each patient was so different that a one size fits all recommendation was not defined by the practitioners that completed the survey.

Figure 8: No Consistent Pattern Identified for when to Recommend DBT for Co-Occurring Clients.

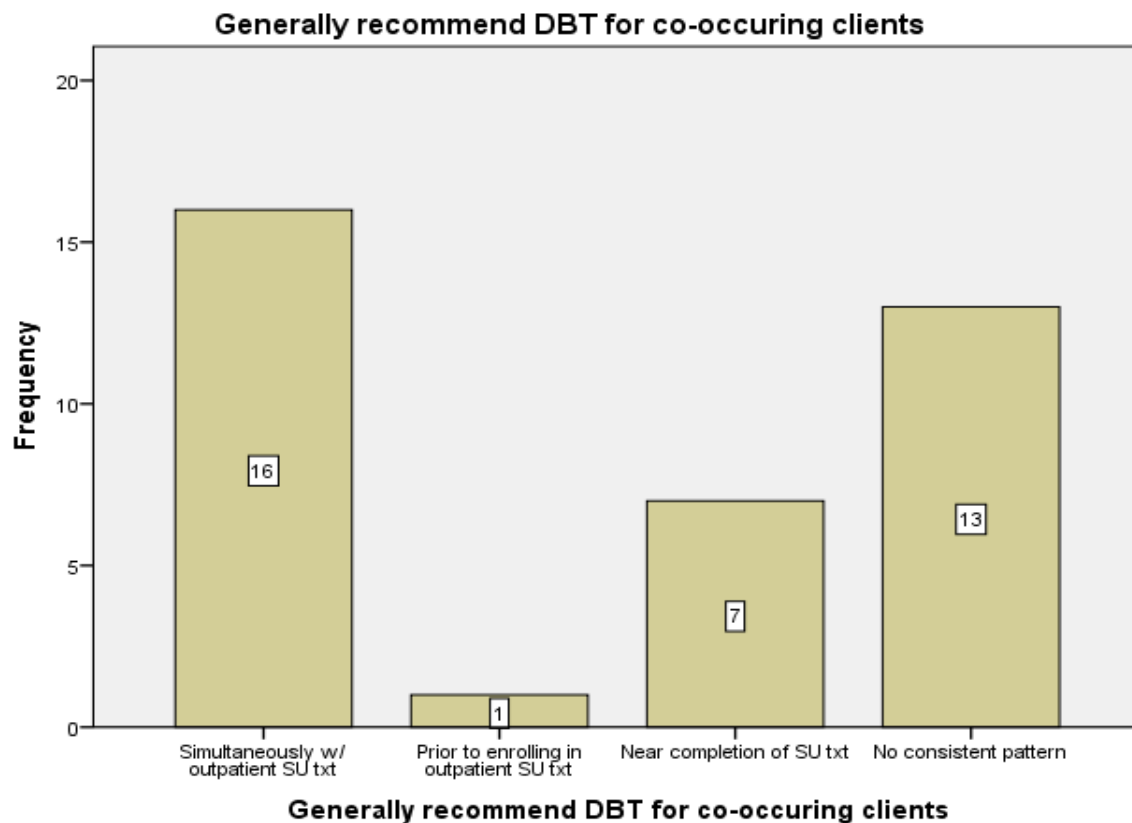


Figure 8: No Consistent Pattern Identified for when to Recommend DBT for Co-Occurring Clients.

Discussion

The overall research identified that respondents' perceptions of whether or not DBT alone is adequate to treat BPD when patients present with and without a co-occurring SUD. The mean of 9.16 as seen in table 2 indicates professionals' perception that DBT alone works well with patients that do not present with a co-occurring SUD. Of 35 respondents that identified their length of practice with the DBT modality, the average length of time in years and months was 7.63 years. When measuring clinicians' perception of whether or not DBT alone is adequate to treat BPD and co-occurring SUD the mean of 7.94 indicated professionals' perception that DBT works less well with patients that present with a co-occurring BPD & SUD (compared to BPD only). The relationship between DBT for BPD alone and DBT for co-occurring BPD and SUD was examined, and it was found that practitioners are significantly more likely to adhere to the DBT model for BPD without SUD, and in turn be more likely to deviate from the DBT model when addressing the more complex BPD-SUD patients.

When studying responses to strategies respondents generally use for addressing co-occurring BPD and SUD patients, practitioners recommended the: DBT workbook (89%), integrating the Substance Abuse treatment in both DBT individual and DBT group treatment (62%), referring for Substance use evaluation (57%), and referring patient to substance abuse treatment (54%). With the above query respondents were able to make multiple selections, and a large number of respondents favored integrating approaches to address substance abuse both in working with the DBT manual, as well as in both individual DBT skills group along with patients' individual DBT therapy. Intriguingly respondents also chose to refer patients to have either a substance use evaluation and/or engage in substance use treatment. Overall practitioners are significantly more likely to adhere to the DBT model for BPD without SUD, and vary

significantly to how they approach patients that present with the more complex co-occurring disorder of BPD & SUD.

When analyzing qualitative data from the question of when practitioners would ‘generally’ recommend DBT with those patients that have a co-occurring disorder two principal responses appeared. The first and largest response was that practitioners would recommend DBT concurrently with substance abuse treatment (unconnected groups) 43% of the time. And the second and nearly equal response of 35% of respondents identified “no consistent pattern,” and therefore provided a brief open ended account as to why. Those that identified no consistent pattern also noted that the severity and complexity of each patient was so distinctive that the timing of when DBT should be applied in a general sense could not be conjectured.

Strengths and Limitations

Multiple strengths of this research were identified through the execution of this study. First, this survey was an appropriate way in which to collect data as the respondents were able to identify the length of time they practice DBT, as well as identify from their perspectives what practice interventions they employ with complex cases. This allowed this researcher to identify the relationship between DBT practice for BPD only, and DBT practice for co-occurring BPD and SUD. Additionally, this survey allowed multiple avenues for the respondents to identify how they intervened with complex BPD and SUD clientele. It would be fair to assert that limitations of this study surrounded the sample size of respondents. With a sample size of 35 respondents it does not fully allow for broad assertions in the service delivery of DBT when working with the co-occurring SUD-BPD population. Also this survey was limited to professionals that identified

themselves as delivering DBT as designed by Marsha Linehan, PhD, only in the state of Minnesota.

Implications

As many city, county, and state municipalities are promoting Dialectical Behavioral Therapy as an evidenced based practice which they are willing to fund through the use of government block grant programs, it is critical to consider the facts. Although DBT is a heavily researched and supported modality when delivering services to those with BPD it has a staggering rate of attrition when its applied to co-occurring SUD and BPD populations (Bornovalova, & Daughters, 2007; Linehan, Schmidt, Dimeff, Craft, Kanter, & Comtois, 1999). Far too many program grants do not allow deviation from a prescribed method, which does not allow for program evolution as fluidly is needed once shortcomings in implementation are identified. This in turn creates an entire subset of individuals that do not get the services needed. For social workers and aligned professionals it is pertinent that future research takes into account more flexible approaches to address the complexity of co-occurring BPD and SUD. Since the vast majority of research that has been performed regarding DBT has not specifically addressed those with co-occurring substance use disorders, this research has highlighted the need to expand the research into that specific area. This researcher would propose future research that addresses underperformances in the successes of DBT when applied to co-occurring BPD & SUD by suggesting case-study research from local/state funded and licensed DBT providers in order to get an enhanced impression of what practitioners currently employ when addressing the complexity of BPD-SUD patients.

Furthermore, this study could be replicated on state and national levels. If such research produced similar findings to this study, it would suggest that local and state governments should allow more flexible grant structures to allow for credentialed professionals to expand program curricula with the specific needs of patients. It is imperative that social workers and other mental health professionals remember the effect co-occurring illnesses produce to the individuals who are afflicted, as well as, how it influences service delivery throughout many systems.

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Appendix A

Survey Questions

1. Are you currently a certified DBT provider? (Yes, No)
2. If no, have you ever been certified? (Yes, No)
3. How long have you practiced DBT as designed by Linnehan?

YEARS _____ MONTHS _____

	Strongly Disagree	Disagree	Agree	Strongly Agree
I strictly adhere to the DBT model when treating Borderline Personality Disorder (without substance use).				
My experience is that DBT works well for patients presenting with BPD (without substance use).				
When clients have BPD (without substance use), I find myself using other strategies besides DBT.				
Clients with co-occurring BPD and SUD often have complex needs that are not fully addressed with one treatment model.				
I often consider other treatment options besides DBT when treating co-occurring SUD and BPD.				
When clients have co-occurring BPD and SUD, I don't find DBT alone to be effective.				

10. When would you **Generally** recommend DBT for clients who present with an active co-occurring substance use and borderline personality disorder?

- a. Simultaneously with outpatient substance abuse treatment.
- b. Prior to enrolling in outpatient substance abuse treatment.
- c. Near the completion of substance abuse treatment.

No consistent pattern identified. Please elaborate _____.

11. Which of these strategies do you use for addressing BPD and SUD?

Check all that apply.

- The Dialectical Behavior Therapy Skills Workbook:
- The 12 Steps of Alcohols Anonymous/Narcotics Anonymous.
- Refer Patients for Substance Use Disorder Evaluation.
- Refer Patients for Substance abuse group therapy.
- Integrating Substance abuse treatment approaches in both DBT skills Group and individual sessions.
- Other please describe. _____

Appendix B

Survey Disclosure Agreement

DBT for Co-Occurring Mental Health & Substance Use Disorders

- You been asked to complete **BRIEF 11 question survey** because you are DBT Practitioner. The purpose of this research study survey is to examine the impact of Substance Use Disorders on DBT therapy.
- **This survey is designed to take approximately 5 minutes to complete, but depending thoughtfulness could take an additional 2-3 minutes.**
- The survey has 3 non-identifying demographic inquiries, and totals with 11 closed-ended questions.
- There are no identified risks or benefits by participating in this study.
- **Your respected perception of DBT Practice, and the contribution to this study is greatly valued.**

By selecting the box below, you are assuming informed consent.

Meaning you recognize that you can omit responses, withdrawal by not completing the survey. After the survey is submitted, you cannot alter your responses.