Community Based Participatory Research Informed Manualization and Piloting of E-Training of a Modified Dialectical Behavior Therapy Intervention

Annika M. Miyamoto
University of San Francisco, annika.miyamoto@gmail.com

Follow this and additional works at: https://repository.usfca.edu/diss

Part of the Behavior and Behavior Mechanisms Commons, and the Psychiatric and Mental Health Commons

Recommended Citation

This Dissertation is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.
Community Based Participatory Research Informed Manualization and Piloting of E-Training of a Modified Dialectical Behavior Therapy Intervention

A Clinical Dissertation Presented to

The University of San Francisco
School of Nursing and Health Professions
Department of Health Professions
Clinical Psychology PsyD Program

In Partial Fulfillment of the Requirements for the Degree
Doctor of Psychology

By
Annika Mariko Miyamoto
August 2021
PsyD Clinical Dissertation Signature Page

This Clinical Dissertation, written under the direction of the student's Clinical Dissertation Chair and Committee and approved by Members of the Committee, has been presented to and accepted by the faculty of the Clinical Psychology PsyD Program in partial fulfillment of the requirements for the degree of Doctor of Psychology. The content and research methodologies presented in this work represent the work of the student alone.

Student Signature

Annika Miyamoto  
Student  
8/6/2021  
Date

Clinical Dissertation Committee Member Signatures

Brent R. Fenn  
Committee Chair  
8/6/21  
Date

William J. Collins, PsyD  
8/7/2021  
Date

Administrator Signatures

Dean Miyatake  
Program Director, Clinical Psychology PsyD Program  
8/17/2021  
Date

Dean, School of Nursing and Health Professions  
8-23-2021  
Date
Table of Contents

Abstract ........................................................................................................... 1

Chapter I: Introduction ................................................................................ 2

  Serious Mental Illness ............................................................................... 3
  Group Interventions for Cognitively Impaired Adults ......................... 4
  Challenging Behaviors ........................................................................... 5
  Training Direct Care Staff .................................................................... 6
  Dialectical Behavior Therapy ................................................................. 7
  Community Based Participatory Research ........................................... 11

Purpose and Rationale of Present Study .................................................... 12

Clinical and Theoretical Relevance ......................................................... 12

Research Question ................................................................................... 13

Definition of Terms .................................................................................. 13

Chapter II: Methods ................................................................................ 15

  Qualitative Phase ................................................................................ 15
  Quantitative Phase .............................................................................. 18

Chapter III: Results .................................................................................. 24

  Qualitative Phase ................................................................................ 24
  Quantitative Phase .............................................................................. 28

Chapter IV: Discussion ............................................................................. 33

  Limitations .......................................................................................... 36
  Future Directions .................................................................................. 37
TRAINING DIRECT SUPPORT STAFF IN MODIFIED DBT

References 39

List of Tables & Figures

  Table 1. Participant Demographics for Web-Based Training 47
  Table 2. Pre-/Post-Survey Responses 48
  Figure 1. Distribution of Quiz Scores 49

Appendix A: IRB Approval 50
Appendix B: Revised Modified DBT Manual 51
Appendix C: Pre-/Post-Survey 84
Appendix D: Modified DBT Online Training 85
Acknowledgements

A very special thanks to all of my committee members who chose to embark on this wild journey with me through this dissertation process. As my committee chair, Dr. Brent (Rick) Ferm invested quite a bit of time and patience into this project while never allowing me to lose hope with each new challenge. To Dr. Bill Collins, I am grateful for many things but most of all your unending encouragement to eschew ABD status and text messages of wisdom. To Dr. Valerie Jackson who has provided much needed statistical guidance on this project, your intimate knowledge of Medical Hill Health Center, its residents, and early beginnings of this modified DBT protocol has been invaluable throughout this process. To the staff and psychology practicum students at Medical Hill Health Center, I am indebted to you for all of your contributions to this project. And, I am grateful to Nick Heng of the University of San Francisco for his tireless efforts in helping me launch the web-based training.

Huge thank you to my spouse, Darren, our fur-babies Bella and Max, my in-laws Mama Evie and Papa Honey Navarro for your unwavering love and support. Now it is time to celebrate!
Dedication

This dissertation is dedicated to my parents, Glenn and Lisbeth, who gave me life and taught me to never give up. Go For Broke!
Abstract

This study explores the efficacy of delivering modified dialectical behavior therapy (m-DBT) to direct support staff who work with seriously mentally ill patients with neurocognitive deficits using remote web-based technology. The partnering facility for this study is a residential skilled-nursing facility that provides 24-hour care to individuals under conservatorship. Using a previously piloted m-DBT protocol, qualitative feedback was gathered from four participants with background training in psychology and varying experiences with DBT. All participants had direct knowledge of the treatment environment and experience working with the patient population. Gathered feedback was used to revise the m-DBT protocol to be used in future pilot studies for this specific patient population. An online m-DBT training program for direct service providers was developed based on the revised m-DBT protocol. Pre- and post-measures providing dichotomous responses were completed by participants assessing knowledge of DBT, ability to manage patients’ challenging behaviors, and assist patients with communication. Additionally, learning quizzes were completed between each module. Statistical analysis included a McNemar’s test to determine whether there were significant changes among participants before and after the online training. The results of the McNemar’s test suggest that there were no significant differences on responses from the pre- and post-survey among a small sample. These results suggest that direct support staff are able to learn concepts (i.e., coping skills) assist patients in using learned DBT skills outside of group. Future staff training in DBT might include more advanced content and live practice during m-DBT groups.
Chapter I. Introduction

The safe and effective management of challenging behaviors, specifically with severe mental illness in inpatient settings, remains a complex issue for researchers and healthcare providers. Physically assaultive behavior, a severe form of challenging behavior, places many who provide patient care at high risk for injury (Longton, 2015), causing increased concern among medical professionals (Farrell et al., 2010). While a substantial amount of research on challenging behaviors exists in the literature, most of this research focuses on intellectual and learning disabled populations. Researchers have conducted minimal studies on challenging behaviors related to severe mental illness and even less with comorbid neurocognitive deficits. In the absence of cognitive deficits, evidence-based treatments designed to help those with SMI show significant promise in improved patient outcomes.

Behavioral health interventions, such as Linehan’s (1993) dialectical behavior therapy (DBT), initially developed for people with severe mental illness, have shown efficacy in reducing parasuicidal behaviors, another form of challenging behaviors, in a small patient population (Goethem et al., 2015). More recent research has focused on developing adapted versions of DBT to address the needs of patients with neurocognitive deficits and intellectual or developmental disorders (Lew et al., 2006; Brown et al., 2013; Crossland et al., 2017; Florez & Bethay, 2017; Sakdalen et al., 2010). However, staff-wide training on evidence-based treatments is rarely implemented (James et al., 2013). Hence, staff who provide the necessary daily support to patients may be optimal to support patients in utilizing DBT skills.

The following sections will provide an overview of various components in consideration of the current issue of mitigating challenging behaviors.
Serious Mental Illness

Serious mental illness (SMI) is characterized by severe and persistent psychiatric symptoms that can include aggressive behaviors and emotional instability that significantly interfere with personal and social functioning (Sharma & McClellen, 2021). Common diagnoses falling within the SMI category include psychotic-related disorders, bipolar disorder, recurrent major depressive disorder, and personality disorders depending on the individual’s level of functional impairment. Frequently, people with significant deficits in everyday functioning require extensive care and support from others within the home and community. Since the advent of deinstitutionalization, the care for these individuals increasingly rested on family, community services, and nursing homes (Krieg, 2001; Miller et al., 2006). Interestingly, a study by Fullerton et al. (2009) revealed that most nursing home admissions had a mental illness diagnosis compared to those with neurodegenerative disorders.

In 2019 in the U.S. alone, the National Institute of Mental Health (NIMH) reported the prevalence rates of SMI as 13.1 million people (Retrieved from https://www.nimh.nih.gov/health/statistics/mental-illness). One out of 25 adults in the U.S. are estimated to have a severe mental illness (NAMI, 2021). The burdens associated with SMI are numerous, spanning over many aspects of living. For example, those with SMI were typically unmarried, unemployed, experience higher levels of psychopathology, hold disability status, and have higher utilization rates of community mental health services than healthier counterparts (Parabiaghi et al., 2006). Additionally, a study conducted by Laursen et al. (2009) suggests that individuals with SMI experience higher mortality rates. Further complications of SMI include deficits in cognitive functioning.
Research has uncovered overlaps in affective and cognitive functioning between neurocognitive disorders and SMI (Baune et al., 2009; David et al., 2008; Hwang et al., 2004). Studies on schizophrenia and bipolar disorder have shown deficits in memory function, cognitive processing of information and learning, and visual-spatial skills (Elias et al., 2017; Palmer et al., 2009). Unfortunately, although studies highlight the deficits in various domains of cognitive functioning, the availability of tailored evidence-based treatments for this subpopulation is minimal.

**Group Interventions for Cognitively Impaired Populations with SMI**

Literature regarding guidelines for evidence-based group interventions for people with SMI is minimal (Guhne et al., 2015). However, a study by Pratt et al. (2013) found improved executive functioning among a group of older adults with SMI after receiving psychosocial skills training. Following an extensive literature review searching for an overall consensus of effective interventions, these authors compiled the data and developed a comprehensive treatment guideline. The authors found significant evidence to support the effectiveness and efficacy of social skills training; additionally, the application of cognitive rehabilitation improved neurological and social cognitive functioning. While the development of evidence-based interventions for SMI populations is critical, there were limitations to the guideline as it mainly focused on outpatient treatment. Joosten’s (2012) study of the effects of cognitive behavior therapy (CBT) on individuals with MCI indicated notable improvements of acceptance with cognitive changes and marital satisfaction. Although this study showed the efficacy of CBT-focused interventions, the exclusion criteria prevented the inclusion of those with moderate NCD and psychiatric comorbidities.
Bailey et al. (2017) displayed the benefits of using a modified psychosocial intervention with a group of participants with mild to moderate dementia diagnosed with depression. Using a randomized control trial, the researchers implemented the Question-Asking-Reading (QAR) developed by Stevens et al. (1993) for individuals with cognitive limitations. This QAR method provides a structured plan to a group of participants that incorporates written passages, visual aids, and members to collaborate in problem-solving, reducing cognitive demand. In addition, Bailey et al. (2017) implemented reminiscence therapy and CBT using the QAR format to treat a group of nursing home residents with cognitive impairments experiencing depressive symptoms. This study demonstrated improved depression in participants based on behavioral observations and self-report compared to a control group.

**Challenging Behaviors**

Managing affective and behavioral functioning presents many challenges for the affected individual, providers, and society. In its extreme form, challenging behaviors include self-inflicted harm and verbal or physically assaultive behavior against others. According to Wood (2001), challenging behaviors in individuals with neurobehavioral disorders often take the form of labile mood, impulsivity, low tolerance thresholds, irritability, and difficulties in managing anger (see Alderman & Wood, 2013). The Bureau of Labor Statistics reported that 80% of workplace violence directed at healthcare staff comes from patients with frequent violent acts involving “hitting, kicking, beating, and/or shoving” (See Occupational Health and Safety Administration, 2015). However, prevalence rates of workplace violence in healthcare likely under-represent the frequency in which these instances occur as staff may choose not to report incidents (Joint Commission, 2018). Aside from placing both patients and providers at risk for serious injury, the other impacts of emotional and behavioral dysregulation often lead to poorer
outcomes on the individual’s psychosocial functioning, quality of life, families, and societal cost (Alderman & Wood, 2013). De-escalation of these behaviors places the individual and others at risk for injury, historically resulting in physical or chemical restraint. Exploring safer management of challenging behaviors has left many providers and researchers perplexed on this issue. Equally concerning is the question as to whether DSPs responsible for the daily care of these individuals feel equipped to manage these behaviors safely. Rahman et al. (2018) found in their study that both managers and DSPs who work with people with developmental disabilities needed more training in how to manage and de-escalate challenging behaviors safely.

Direct Care Staff Training in Managing Challenging Behaviors

The research on training direct care staff in the management of challenging behaviors is minimal. Results from meta-analyses indicated that while training had a moderate effect on staff behavior in managing challenging behaviors, the training did not significantly impact the frequency of challenging behaviors in a sample of people with intellectual disabilities (Knotter et al., 2018). However, Knotter et al. (2018) stated that the limitations of their study included a small sample of investigations resulting in low statistical power to run analyses. Other studies addressing how staff respond to challenging behaviors have focused on different domains outside of providing training on skills meant to de-escalate behaviors. For example, Farrell et al. (2010) introduced a conceptual model that addresses staff members’ approach; specifically, their training focused on staff members’ values, emotions, and interpersonal skills when working with a challenging patient population. Although these studies suggest a growing interest in understanding how staff training can be conducive to managing challenging behaviors, gaps in the literature indicate a need for more studies. It is also noteworthy that the lack of training staff in evidence-based treatments, such as DBT, is missing from the literature.
Dialectical Behavior Therapy

Dialectical Behavior Therapy (DBT), initially developed by Linehan (1993), is recognized as an evidence-based treatment intervention (Lindenboim et al., 2007) for Borderline Personality Disorder (BPD) is a disorder marked by emotional and behavioral dysregulation that results in unstable interpersonal relationships. Linehan’s (1993) DBT intervention, informed by biosocial theory and dialectics’ philosophy, addresses BPD’s black and white thought process by synthesizing opposing thought processes. Following numerous revisions since DBT’s outset, current intervention strategies incorporate behaviorism and contemplative Eastern and Western Zen practices (Linehan & Wilks, 2015), which aim to replace maladaptive behavior with more effective strategies.

The structure of DBT in outpatient settings is comprehensive in that it provides extensive support for clients and their treating providers. The program comprises four elements: 1) didactic teaching modules for patients; 2) teaching specific coping skills; 3) between-session phone coaching for residents to reinforce coping skills; 4) and ongoing consultation among all treatment providers involved in the patient’s care. Linehan (1993) developed the following skills training modules for patients covered over eight weeks: 1) Core Mindfulness; 2) Interpersonal Effectiveness; 3) Emotion Regulation; and 4) Distress Tolerance. Patients typically undergo both individual and group therapy where coping skills can be practiced and reinforced. As part of this manualized treatment, a protocol assists providers in making treatment plans that target specific problematic behaviors as patients present for treatment at different stages of the disorder. The inclusion of a treatment hierarchy provides the most appropriate level of response depending on a person’s level of distress: 1) stabilization and behavior control (e.g., address suicide threats, decrease self-harming behavior); 2) facilitation of full emotional expression; 3) addressing
problems of ordinary daily living; 4) and bolstering feelings of completeness and joy. For instance, a client in lower distress might receive treatment that assists them with everyday problems compared to someone presenting with self-injurious behaviors (Linehan & Wilks, 2015). Linehan’s (1993) DBT framework for groups provided additional therapeutic benefit for patients having interpersonal difficulties in that: 1) therapists can directly observe and address interpersonal exchanges between peers; 2) peers with similar difficulties provide support and validation; 3) individuals could learn from peers and the therapist; 4) decreased intensity in the therapist-patient dyad; 5) and an opportunity to learn how to work and interact in a group. In support of Linehan’s reasons for incorporating a group format, Wolpow et al. (2000) found that patients engaged more comfortably within a group format using Linehan’s DBT group therapy model. In addition, clinical trials have continuously shown that DBT is effective, evidenced by reductions in self-injurious behavior, reduced psychiatric hospitalization, decreased anger outbursts, and improved social adjustment (Lew et al., 2006).

Adaptations of DBT

Since its introduction, researchers have developed numerous variations of DBT to fit the needs of different treatment contexts and patient populations. For example, according to Swenson et al. (2001), DBT has been adapted and used in a variety of environments (e.g., residential and forensic treatment settings); contexts (e.g., case management, emergency services, family and adolescent treatment); and treatment for different disorders other than BPD (e.g., eating and dissociative disorders). However, as DBT became more common in various treatment settings, some aspects of DBT were more challenging for individuals with cognitive deficits, such as difficulty sustaining attention or grasping abstract concepts. For instance, Wolpow et al. (2000) applied a DBT group intervention for a group of residents diagnosed with
an obsessive-compulsive disorder, schizoaffective disorder, and schizophrenia within a residential treatment setting. The authors found that two residents, one with deficits in short-term memory and the other with difficulty processing feelings and abstract thinking, required extra support. Solutions to these hurdles required extra assistance from milieu staff with homework for the resident who experienced short-term memory loss. In contrast, the second resident benefitted from group discussions that deconstructed abstract concepts. Lew et al. (2006) later suggested that DBT could benefit people with intellectual disorders (ID). However, they recognized that Linehan’s original model was cognitively demanding to apply it to populations with cognitive deficits. For instance, the authors highlighted the usage of metaphors and acronyms in Linehan’s original framework and dependence on participants’ literacy skills and memory abilities as problematic for those with deficits in any of these domains. Lew et al. also recognized that utilizing a DBT intervention with ID would require longer treatment times as repetition is key to learning and reinforcing DBT concepts embedded within the treatment milieu. Additional adaptations to DBT for those with ID would involve the replacement of words on diary cards with pictures, simplifying open-ended questions with “yes” or “no” responses, and more emphasis on sensory stimuli (e.g., tactile, visual, auditory) (Lew et al., 2006).

A pilot study by Lew et al. (2006) delivering a revised version of DBT to a group of participants with ID showed general improvements within the first six months of treatment and a slight but noticeable decrease in self-harming behaviors over 18 months. In another study by Crossland et al. (2017), a small group of participants with ID showed improvement when receiving a modified DBT intervention. Finally, a landmark study conducted by Brown et al. (2013) showed clinically significant declines across three categories of challenging behaviors (verbal outbursts, physically acting out or threatening violence, and violent or aggressive
behaviors) over four years, with the most change occurring in the first year. Predictors of improved outcomes were the presence of BPD, aggression, and self-injury. Results also showed improvements for both ID and developmentally disabled (DD) groups; however, the researchers did not analyze differences among cognitive abilities despite a sample of 40 participants. Thus, studies have shown promise in the use of DBT for populations with ID; however, a meta-analysis by McNair et al. (2017) could not conclude DBT’s efficacy for ID based on analysis of seven studies citing weak experimental rigor.

**DBT Manualization for Diverse Populations**

Linehan’s (1993) original DBT manual has undergone a series of revisions and adaptations for use in a variety of treatment settings (i.e., forensic, schools) and clinical populations (i.e., intellectual disabilities, adolescence). A review of the literature on how researchers made adaptations to traditional formats of DBT does not show a particular method for protocol revision to fit the needs of a specific population; rather, various processes to revise existing DBT manuals are apparent. For example, in working with a subpopulation of forensic patients with IDD, Sakdalen et al. (2010) developed a modified DBT protocol that combined Linehan’s (1993) manual with adapted coping skills for people with IDD developed by Verhoeven (as cited in Sakdalen et al., 2010). Researchers in this study used their direct knowledge of the forensic setting to tailor this intervention specifically for the population. In another study, Brown et al. (2013) incorporated their earlier published work, *The Skills System Instructor’s Guide: An Emotion Regulation Skills Curriculum for All Learning Abilities*, to develop skills training that accommodates different learning abilities. By incorporating guidelines from their previous work, Brown et al. modified both language and format of
Linehan’s DBT manual to accommodate challenges in learning and processing typical of ID populations.

In line with the current study, previous dissertations inform the process by which this study will revise a m-DBT protocol that was previously piloted at this study’s partnering facility. An earlier dissertation by Gemignani (2009) developed a m-DBT for cognitively impaired individuals with challenging behaviors informed by a literature review on moderate cognitive impairment and sought feedback from expert DBT and neuropsychology practitioners. Subsequently, a dissertation study by Spiva (2010) developed and examined the efficacy of applying a m-DBT to a veteran population suffering from traumatic brain injury. In this dissertation, Spiva based revisions to the m-DBT protocol on Kixmiller et al.’s (2003) single case study.

In summary, the literature suggests various methods for manualizing adapted treatment interventions. However, previous study procedures for revising and adapting treatment interventions appear to rely on lessons learned from past practice, expert review, and professionals with intimate knowledge of the treatment setting and population under study.

**Community-Based Participatory Research**

Community-based participatory research (CBPR) provides a novel approach to addressing the care and management of a patient population with specific characteristics and needs. CBPR uses a holistic approach to patient care in that it considers the individual within a cultural and environmental context within a community. CBPR uses an inductive approach by gathering the shared knowledge and experiences of those working on the frontlines. Collins et al. (2018) explained how using a CBPR approach is person or community-focused that seeks to integrate knowledge with action to achieve a goal for the person or community. The defining
principles of CBPR emphasize groups or communities as the critical unit of identity, acknowledges issues related to systems of oppression and exercising cultural humility, broadens perspectives in ecological and multi determinant ways, equitable partnerships with the community, strength-based perspective, and flexibility in the research process. Historically, CBPR was used to research marginalized communities; however, it is also effective in researching non-marginalized groups, such as healthcare workers (Collins et al., 2018). In a methodological review exploring CBPR using mixed-method approaches, DeJonckheere et al. (2018) found that only 15% of CBPR studies focused on behavioral health. Further, none of the studies in the behavioral health sample explicitly focused on serious mental illness. Given the limited research available for developing evidence-based treatments for SMI populations, a CBPR approach can provide more enriching data and resources within the treatment milieu to better serve patients.

**Purpose and Rationale of the Present Study**

This study aimed to update a modified DBT protocol for cognitively impaired individuals with SMI by incorporating feedback from an earlier pilot study and professionals knowledgeable with the patient population and environment. Additionally, this study developed a staff training program using a pre-/post-assessment to measure its effectiveness. This approach provided a framework for members working within the inpatient setting to provide insight and direct feedback in tailoring a DBT intervention and developing training most appropriate to the clinical setting.

**Clinical and Theoretical Relevance**

The value of this research is in expanding more creative ways to help a very challenging treatment population learn how to effectively use DBT that considers various resources available
to aid continual learning and practice of skills. This study also recognizes the importance and relevance of staff who provide direct care in terms of activities of daily living (ADL), which refers to daily feeding, maintenance of personal hygiene, and mobility (Edemekong et al., 2021), as being a valuable resource for continued support and utilization of DBT skills outside of the therapy group. As patients within these treatment settings may have limited capacity for memory and attention, staff within the treatment milieu can assist by reinforcing DBT knowledge and skill utilization to manage emotional dysregulation, potentially deescalating challenging behaviors. Additionally, providing staff with knowledge and training of DBT could lead them to feel more equipped and comfortable in helping emotionally dysregulated patients. Findings from this exploratory study may be used to improve clinical practices using DBT with a challenging patient population and facilitate ongoing collaboration with interprofessional staff in continual implementation of psychology-based interventions to address the serious nature of managing challenging behaviors.

**Research Questions**

This exploratory study mainly focused on answering the following research questions given the novel exploration of developing m-DBT training for staff with minimal or no background in psychology. In light of the recent COVID-19 global pandemic, providing web-based training was a focal point of this study to determine its effectiveness.

1. What is the efficacy of providing remote web-based training to staff?

2. Are there differences in learning acquisition for each e-learning training module within and between groups among interprofessional staff?

**Definition of Terms**
**Challenging Behaviors** - “Culturally abnormal behavior(s) of such intensity, frequency, or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behavior, which is likely to seriously limit the use of, or result in the person being denied access to ordinary community facilities (Emerson et. al., 2001, p.3).

**Serious Mental Illness** - Defined by the National Institute of Mental Health (2019) as “a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities. The burden of mental illnesses is particularly concentrated among those who experience disability due to serious mental illness (SMI).” (“Serious Mental Illness”, para. 1).

**Conservatorship** - Specifically in the state of California, this is defined as the legal process where a judge designates a responsible person or organization (“conservator”) to oversee another adult (“conservatee”) who is unable to care for themselves or manage their own finances due to significant impairment (Judicial Council of California, 2019).

**Direct Service Providers** - Individuals employed in settings (e.g., nursing homes, mental health facilities, nonresidential and residential facilities) who provide daily assistance to individuals with activities of daily living such as, household tasks, personal health and safety, community access, and integration (Bogenschutz et al., 2014).

**Milieu**- Defined by Merriam-Webster as “the physical or social setting in which something occurs or develops.” It is also commonly referred to as a “therapeutic community” (Biel & Plakun, 2019) whereby daily interactions take place among patients and staff providing opportunities for psychosocial experiences and development in inpatient settings.

**Interdisciplinary integration** - process of collaboration among providers from different disciplines in providing patient care (Rodríguez et. al., 2018).
Chapter II. Methods

Research Design Overview

The purpose of this study contained two objectives: to revise a modified DBT manual that was previously piloted with a small group of patients and create a modified DBT training program for direct care staff. Using a mixed-methods approach, this study collected data from employees and psychology trainees familiar with the treatment setting and patient population. Mixed methods research is a common approach in CBPR as this method provides researchers with more comprehensive information of a research topic (DeJonckheere et al., 2019). The procedures for this study followed an exploratory-sequential design where qualitative data was initially elicited from participants that later informed development of staff training.

In alignment with CBPR research practices, participants for all phases of this study were employees or psychology trainees at Medical Hill Healthcare Center (MHHC). MHHC is a secured long-term care facility located in Oakland, California. The facility provides comprehensive 24-hour skilled nursing care to adult and geriatric residents under conservatorship where patient care is provided by an interprofessional healthcare team (e.g., physicians, physician assistants, nurses, certified nursing assistants, physical therapists, recreational therapists, speech therapists, dietitians, pharmacists, psychologists, interprofessional trainees, and social workers).

Qualitative Phase

Participants and Procedures

The initial phase of this project sought four to five participants who are either employed at MHHC or are training there as part of graduate school to provide feedback on the previously-piloted m-DBT manual. Participants in this initial phase served as what Schensul, Schensul, and
LeCompte (1999) refer to as “key informants” (see Centers for Disease Control, 2013, p. 12). In their description, Schensul et. al. defined key informants as individuals who can inform researchers about a specific community based on their knowledge and experience working with and within that community. Therefore, inclusion criteria required experience with direct patient care services and hold a professional level degree (e.g., social work, nursing, psychology). Participants who completed the review received a $15 dollar Amazon gift card. Additionally, participating psychology trainees received credit for time spent on this task towards intervention hours, which is a requirement for the training year.

All were recruited through one of the onsite licensed supervising psychologists. Participants were provided with a brief introduction to the study that included a statement of their right to withdraw at any time. After consenting, participants received a copy of the modified DBT manual and questionnaire via email. They were provided with a copy of the previously-piloted modified DBT protocol and asked the following questions:

1. What is your position and role at Medical Hill Healthcare Center (MHHC)?

2. How long have you been at MHHC?

3. What is your current degree and in what profession?

4. Describe your experience (either current or past) working with populations who have serious or persistent mental illness and cognitive limitations.

5. Describe your experience (either current or past) providing dialectical behavior therapy.

6. Do you think these instructions are useful in explaining DBT concepts to this patient population? Should they be more simple?
7. How might you feel as the group leader in giving these instructions? What is your level of comfortability in using this manual?

8. If a group member had a question, do you feel you could explain what you’re doing in your own words?

9. (Session 2) What concerns might arise in terms of feasibility in delivering all content from this session to this patient population? (e.g., attention span)

10. (Session 3) What parts of this section do you think are key components? What can be removed or condensed?

11. (Session 5) What are your thoughts about the feasibility of delivering all this content? If not, how might you organize the content?

12. How might environmental interruptions/disruptions during meditation or mindfulness activities be effectively handled?

13. (Session 7) What concerns if any come to mind in presenting this material? Is there a way you might suggest simplifying the concepts in this lesson (perhaps using visual aides)?

14. Does this manual provide enough flexibility regarding time to teach all of the content while taking into consideration unforeseen setbacks or 10-minute breaks for group members?

15. What might be some overall challenges in providing this group intervention to this patient population (serious mental illness with cognitive deficits)?

16. What other multi-sensory materials might be helpful in engaging group members with
17. How do you envision milieu staff assisting with this intervention during sessions and outside of sessions?

18. Please provide any other feedback not addressed in the previous questions.

Although most questions in this survey asked participants about more general aspects of the protocol, a subset of questions were session specific. Feedback obtained from these participants on the modified DBT manual are provided in the results section.

*Data Analysis*

Analysis of qualitative data gathered for this project utilized methods borrowed from formative research for the purposes of developing an intervention for a specific targeted community. The Centers for Disease Control (2013) describes formative research as the process by which researchers define a specific community of interest, understand the unique attributes of that community, and “tailor field operations to their local settings and to identify and address any barriers to operations” (p.1). Qualitative analysis in formative research includes triangulation where different sources of data and/or methods of collection are compared (Centers for Disease Control, 2013) for recurrent themes. Participants in phase one who reviewed the original m-DBT manual each submitted their feedback on a structured questionnaire. All written feedback was independently reviewed and, as recommended by the Centers for Disease Control (2013), cross-checked within the sample of key informants to ensure validity and reliability. Key themes emerged from the collected data and were used to inform the updated version of the m-DBT manual.

*Quantitative Phase*
Phase two of this study involved development and implementation of online staff training. Development of staff training content was informed by the revisions made to the previously-piloted modified-DBT completed in phase one. The decision to utilize web-based learning is supported by research showing that it is cost-effective, flexible regarding time constraints and geographical limitations, and increases competency in learning (Christofferson et al, 2012; Rosvall & Carlson, 2017). Development of the online training program utilized Qualtrics, a web-based software, where users with minimal programming experience can develop surveys and collect data from participants. Given the novelty of this study, it was proposed that seeking a minimum of 25 participants with no mental health background (i.e., nursing, certified nursing assistants, physical therapists) would provide an adequate baseline for understanding non-behavioral staff’s learning of the m-DBT content. Further, 12 participants with training backgrounds in mental health were sought for this study. Exclusion criteria included job duties that did not involve direct patient care (e.g., housekeeping, dietary services, administrative support).

Participants and Procedure

Eligible participants were recruited with the assistance of the onsite Staff Development Department who sent out an email notifying staff of the current study with a hyperlink to the online training. Interested participants clicked on the hyperlink redirecting them to a demographic questionnaire that inquired about their age range, ethnicity, gender, level of completed education, length of employment at MHHC, job title, and whether English was their primary language. Participants then completed a pre-assessment survey (see Description of Measure). Participants were informed of the voluntary nature of participation in the study and clicked a button indicating their consent to proceed.
After consenting, participants proceeded to the first of four modules that gives a general overview of DBT and its relevance to the patient population at MHHC. An outline of online training content can be found in Appendix D. At the conclusion of each module, participants completed brief quizzes containing multiple-choice and true-or-false questions to assess their understanding of session content. There was a total of four quizzes with five questions with each quiz embedded between modules. To proceed to the next module, participants were required to complete each quiz to eliminate the possibility of missing data. A minimum passing score was not required on the quizzes for participants to proceed. One example of a quiz question asked participants whether Mindfulness is: a) The ability to be fully aware in the present moment; b) Always thinking about other people; c) Having many thoughts at the same time; or d) Thinking about the future. A complete list of the multiple choice and true-or-false questions including online training content is provided in Appendix D.

Completion of the fourth and final module led participants to the post-survey. Participants were asked the same set of questions presented to them on the pre-assessment survey completed prior to entering the first training module. The pre- and post-surveys were used to assess change in participants’ opinions in relation to knowledge of DBT and managing difficult patient behaviors. Participants who completed the online training received one hour of continuing education credit awarded by the Staff Development Department and a chance to win one of two $50 Amazon gift cards. The Staff Development Department received a list of employees’ names who completed the training for the purpose of receiving their continuing education credits; however, all participants’ demographic data, survey responses, and quiz performance were not shared. Data collection for phase two began May 17, 2021 and ended July 9, 2021.
Description of Pre- and Post-Survey

Due to this study’s novel research aims and exploratory nature, the pre- and post-survey was created by this author in collaboration with their dissertation committee. On the pre- and post-survey, participants were asked:

1. I feel confident in managing patients when they are upset.
2. I think psychology can help patients when they are upset.
3. I know what dialectical behavior therapy (DBT) is used for.
4. I can use dialectical behavior therapy (DBT) to help patients.
5. I know what mindfulness is in a general sense.
6. I know how to help patients tolerate uncomfortable situations.
7. I feel comfortable helping patients manage how they are feeling.
8. I feel comfortable helping patients communicate with others.
9. I believe that I can learn dialectical behavior therapy (DBT) skills to help patients.

Due to the high number of staff with limited English proficiency (LEP) at MHHC, a dichotomous response method to pre-and post-survey questions was employed. Responses to survey questions included “agree” or “disagree.” Additionally, since the online learning content relied heavily on participants’ ability to read and comprehend a substantial amount of information a dichotomous response method was utilized to lessen cognitive load.

Data Analysis

Data from the pre- and post-survey underwent statistical analysis using McNemar's test (1947). McNemar's test analyzes the proportion of discordant pairs in related groups using a within-subjects 'design where there is one independent variable and a dichotomous dependent
variable, and two or more time points (Laerd Statistics, 2015a). In other words, this statistical test analyzes whether the number of discordant pairs (when a participant’s response differs before and after an intervention) to determine that the independent variable resulted in significant change. McNemar's test is similar to the paired t-test where subjects are tested on two or more time points in assessing for differences; however, the former is used to measure a dichotomous dependent variable compared to a dependent variable that falls within an interval or ratio. To run McNemar’s test, three assumptions must be met (Laerd, 2015a). The first assumption requires that there is one dichotomous dependent variable that divides the sample into mutually exclusive groups. For example, a study exploring the difference among a sample of participants receiving psychoeducation on the risks of smoking would be divided into groups of “smokers” and “nonsmokers.” Assumption two requires that there is one independent variable given to all participants in the sample, therefore resulting in matched-pairs of data. Using the previous example of the smoking study, all participants would receive psychoeducation on smoking thus eliminating a control group. The third assumption states that participants are a random sample representing the population of interest. However, Laerd (2015a) recognizes that study recruitment practices do not always result in random sampling. Analysis was conducted using SPSS version 28 to determine whether the online training modules had an effect on participants' responses on the pre- and post-survey. Laerd (2015b) was used to carry out McNemar’s statistical analysis on SPSS. McNemar’s statistical analysis typically follows a similar format to a chi-square distribution, but there are exceptions to this rule. When small samples are used, Edwards’ (1948) continuity correction is applied, which provides more accurate results when an exact $p$-value is needed compared to the chi-square distribution (as cited in Laerd, 2015a).
Moreover, when the number of discordant pairs is less than 25, SPSS automatically incorporates a binomial test using a .50 expected proportion (Laerd, 2015a).
Chapter III. Results

Summary

The literature review section of this study revealed the gaps regarding the inclusion of other professional disciplines in developing staff training of psychological interventions. Additionally, the value of direct care support staff in implementing psychological interventions within the treatment milieu is often overlooked despite their daily interactions with patients and knowledge of individual patient nuances. Subsequently, a previously-piloted modified DBT manual was updated and reviewed by providers with different backgrounds and asked to provide feedback. This section will provide an overview of the reviewer’s feedback that focuses on content and feasibility of the treatment program.

Qualitative Phase: Reviewer Feedback

Among the four participants who participated in the qualitative phase, there were three doctoral-level psychology trainees and a licensed supervising psychologist. All reviewed the piloted m-DBT manual and provided feedback on a structured questionnaire.

Reviewer 1

Reviewer one held a Master’s Degree in Psychology and was pursuing a doctorate degree in clinical psychology. At the time of this review, they had been working as a doctoral-level psychology trainee at MHHC for six months with two years of prior experience working with SMI. However, they had no previous experience providing DBT or working with individuals with cognitive deficits. Based on this reviewer’s feedback, the facilitator instructions were described as “clear and useful” with helpful prompts to conduct the group. This reviewer shared that the m-DBT manual was informative on the general concepts of DBT and was “user friendly.” While the teaching and guidance for facilitators was well received this reviewer
expressed skepticism about whether the content was written at an accessible level for the patient population. Specifically, they expressed concern over the length of time experiential exercises (e.g., Body Scan) might take, which could be extremely challenging for group participants with difficulties in focus and attention span. Additionally, there were concerns over the noise in the surrounding environment that could negatively impact attention span. Therefore, this reviewer suggested introducing multi-sensory activities or stimuli that might “engage their senses.” This reviewer highlighted the need for additional staff resources to assist in facilitating the group where they could assist residents with bathroom breaks and snacks. Also, this reviewer raised the concern that participants may feel reluctant to ask clarifying questions in front of the entire group, but having more staff available during the group could provide more individualized attention. Additionally, having milieu staff remind residents to use their coping skills when feeling upset was described as “pivotal” in the feedback.

**Reviewer 2**

Reviewer two was a practicum student at Medical Hill for four months when they submitted feedback on the manual. This reviewer held a Bachelor's degree and was enrolled in a doctoral clinical psychology program. Their past experience included working with persistent mental illness and cognitive limitations in the veteran population with no previous experience delivering DBT to patients. Regarding ease of use, this reviewer expressed that the manual was clearly written in that it was “concise” and contained “depth” and that fundamental components (e.g., mindfulness) were clearly understood despite limited background experience with DBT. This reviewer’s concerns mostly focused on residents ’limited attention span, environmental distractions, and absence of specific logistical information. Regarding the issue of attentional capacity in residents, the reviewer suggested shortening some of the experiential exercises (e.g.,
Body Scan) and condense some of the content in a few of the longer sessions. Regarding environmental distractions, this reviewer highlighted the issue of limited availability of quiet spaces to conduct groups. They suggested using an office where the door could be closed and either using a noise machine or hanging a sign outside of the door asking those in the immediate surroundings to use muted voices. Regarding logistical information, this reviewer noted the absence of the length of time each group would be running for and concerns about residents experiencing mania or somatic symptoms, which might greatly impact their participation in learning. This reviewer also shared that, in the past, they used pipe cleaners to engage participants’ tactile senses to teach mindfulness. In terms of milieu staff assistance, this reviewer stated that involving them in these group activities “would be really important since they interact with the residents in a fun, different setting…” and additionally would overall be helpful with running groups. Specifically, this reviewer stated that milieu staff could provide residents with more support outside of groups, such as when the residents play Bingo, which is a time “when residents can let their emotions get the best of them.”

Reviewer 3

Reviewer three was a doctoral-level psychology trainee who had been at Medical Hill for five months. They reported having no prior experience working with populations with serious mental illness or providing DBT. Regarding ease of use, this reviewer reported that, compared to past CBT manuals, this manual was easier to follow. However, they recommended simplifying the group rules, instructions regarding the DOT scenario, and mindfulness section. Recommendations also included incorporating visual aids (i.e., handouts with bullet points for residents, short videos, memory cards) and everyday examples that residents might be able to relate. The Body Scan exercise was also deemed too advanced for residents due to demands on
sustained attentional focus. Overall, concerns regarding the length of content presented in each session, residents ‘active engagement, and disruptions were highlighted as areas to be addressed. Suggestions included condensing the material, simplifying language for facilitators and residents, having additional staff to assist facilitators, and shortening the length of time the group would meet for or inserting short breaks.

**Reviewer 4**

Reviewer four held a PhD in Counseling Psychology and has been a consulting neuropsychologist/Cognitive Rehabilitation Specialist at MHHC for over 20 years. Their experience includes consulting the Neurobehavioral Treatment Team, co-supervision of psychology practicum trainees, and providing behavioral management recommendations for residents in the co-associated skilled nursing facility at MHHC. Additionally, this reviewer’s experience includes working with a veteran population with TBI and dementia at the Veterans Administration Northern California Health Care System in Martinez, CA. Regarding knowledge of DBT, this reviewer’s experiences include chairing dissertations, poster presentations at national conferences, and authoring articles related to this topic. Regarding feedback on the m-DBT manual, this reviewer highlighted concerns about language complexity for facilitators, order and flow of specific sessions in terms of content delivery, breaking down concepts (i.e., mindfulness) for easier comprehension, environmental distractions, and residents ’ability to maintain sustained attention to material. To address the issue of language complexity, this reviewer suggested removing jargon (e.g., using “focused breathing” instead of “mindfulness”), re-writing instructions at an 8th grade level, and increasing the frequency of more commonly familiar terms versus highly complex terms used infrequently in casual conversation. To assist facilitators, this reviewer recommended that each session follows a similar structure or pattern
for conducting group. For example, this reviewer suggested consistently beginning each session with a quick review of the previous session, check-in with group members, and then presenting new material. Regarding overall framework, this reviewer suggested incorporating a ‘tried-and-true’ model commonly used in nursing where 1) the material is taught, 2) learned material is applied to examples or demonstrations, and 3) practice of new skills or strategies occurs in-vivo. To further engage residents in the material, this reviewer recommended that facilitators have background knowledge related to residents’ current and future fixations to serve as examples during group using a non-judgmental approach. Other suggestions for improving residents’ attentional engagement were using multimodal materials, such as handouts, music, short video clips; providing residents with homework reminders at the end of session and again at the beginning of the following session while including a small reward for completed homework; avoiding breaks in the middle of group; and scaling back on amount of content delivered in longer sessions or adding another session to cover additional material. To foster better attention and learning, this reviewer recommended playing soft background music to block out environmental noise and to post a sign reminding staff that group is in session.

In summary, recommendations from the four reviewers were incorporated into the updated m-DBT manual. Specifically, language within the manual was simplified for both facilitators and residents and shorter experiential activities were included. Additionally, per reviewer request, content related to Wise Mind, Rational Mind, and Emotional Mind was moved to session two. Content from this revised m-DBT manual was used to develop the online staff training modules.

**Quantitative Phase: Online Staff Training**

Participants for the quantitative phase were recruited by email through the Staff
Development Department at MHHC. Interested participants were informed of the voluntary nature of the study and opportunity to earn one hour of continuing education credit. Staff were notified via email by the Staff Development Department at three different time points over an eight-week time period and had 24-hour access to complete the training. A total of 38 participants initially participated, with 15 disqualified for analysis based on incompleteness of the training (n=10) and multiple submissions (n=5). The remaining 23 submissions contained no missing data. Although progression through training was self-paced, determining the general amount of time participants required to complete the training could help inform future training development. Since completion times resulted in extreme outliers (range was from six to 9,029 minutes) finding the interquartile range was deemed most appropriate. Calculations conducted by SPSS indicated 130 minutes and 26 minutes as representing the 75th and 25th quartiles, respectively; therefore, 50% of participants were able to complete the training in one hour and forty-four minutes.

**Participant Demographics**

Of the 23 participants who completed the online training, a majority identified as female, were within 45-54 in age, African American, completed high school, employed as certified nursing assistants (CNA), worked at MHHC for less than one year, and reported English as a second language. See Table 1 for detailed demographic information.
Table 1  

Participant Demographics for Web-Based Training  

<table>
<thead>
<tr>
<th>Baseline Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>86.97</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>25-34</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>35-44</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>45-54</td>
<td>8</td>
<td>34.78</td>
</tr>
<tr>
<td>55-64</td>
<td>6</td>
<td>26.09</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>African-American</td>
<td>9</td>
<td>39.13</td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>High School</td>
<td>12</td>
<td>52.17</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>PhD or higher</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>Trade School</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>MHHC Job Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology Practicum</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>Recreational Nursing</td>
<td>2</td>
<td>8.70</td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified Nursing Assistant</td>
<td>17</td>
<td>73.91</td>
</tr>
<tr>
<td>Length of MHHC employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a year</td>
<td>12</td>
<td>52.17</td>
</tr>
<tr>
<td>1-3 years</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>4-6 years</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>More than 7 years</td>
<td>7</td>
<td>30.43</td>
</tr>
<tr>
<td>English is first language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>34.78</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>65.22</td>
</tr>
</tbody>
</table>
Pre and Post Survey

A final sample of 23 participants completed the pre-post survey and there was no missing data. In the pre-survey, an overwhelming majority of participants generally responded with “agreed” to all questions; however, a cursory glance at the data shows that DBT knowledge prior to the online training had the highest frequency of “disagree” responses. See Table 1 for a detailed breakdown of participants’ responses. An exact McNemar’s test, using a binomial distribution, determined that the difference in proportions between participants’ responses between pre and post intervention times was not statistically significant for all items on the survey.

Table 2

Pre-/Post-Survey Responses

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel confident in managing patients when they are upset.</td>
<td>22 (95.65)</td>
<td>1 (4.35)</td>
<td>21 (91.3)</td>
<td>2 (8.7)</td>
</tr>
<tr>
<td>I think psychology can help patients when they are upset.</td>
<td>22 (95.65)</td>
<td>1 (4.35)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I know what dialectical behavior therapy (DBT) is used for.</td>
<td>20 (86.97)</td>
<td>3 (13.04)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I can use dialectical behavior therapy (DBT) to help patients.</td>
<td>22 (95.65)</td>
<td>1 (4.35)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I know what mindfulness is in a general sense.</td>
<td>21 (91.3)</td>
<td>2 (8.70)</td>
<td>22 (95.65)</td>
<td>1 (4.35)</td>
</tr>
<tr>
<td>I know how to help patients tolerate uncomfortable situations.</td>
<td>22 (95.65)</td>
<td>1 (4.35)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I feel comfortable helping patients manage how they are feeling.</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I feel comfortable helping patients communicate with others.</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I believe that I can learn dialectical behavior therapy (DBT) skills to help patients.</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
<td>23 (100.0)</td>
<td>0 (0.00)</td>
</tr>
</tbody>
</table>
Intra Modular Learning Quizzes

All participants in the final sample completed a total of four quizzes with each completed before progressing to the subsequent module. The final sample did not contain any missing data. Cumulative scores taken from all four learning quizzes (total of 20 questions) from each participant had a skewness of -.965 ($SE = .481$) and kurtosis of .256 ($SE = .935$; see Figure 1). The interquartile range was four with a median score of 18 obtained by participants. In terms of language, the final sample was broken down into two groups (English versus Not English) to assess for differences in quiz scores between both groups. The results showed that there were no significant differences between both groups with primary English speakers achieving a median score of 20 compared to non-primary English speakers’ median score of 18.

Figure 1

Distribution of Quiz Scores
Chapter IV. Discussion

This study was the first to develop an online staff training program on modified dialectical behavior therapy (DBT) for non-behavioral health providers working within the clinical milieu on an inpatient unit. Prior studies focusing on training direct care providers utilized in-person instruction requiring significant financial resources and time. While intensive in-person trainings have shown higher DBT retention rates among staff (Holbrook et al., 2020), the onset of the COVID-19 pandemic has highlighted the necessity for remote-based services. While remote-based technology has benefited many people during the 2020-2021 pandemic in slowing the spread of the virus, there remains the question of how accessible web-based training and education is for a minority of the population. For instance, there is a growing population of direct service providers with limited English proficiency who may benefit more from live training that can provide clarification on complex concepts. Secondly, many people lack personal access to desktop computers and internet services to participate in remote web-based trainings.

The present study explored the implementation of a web-based program in training interprofessional staff on a modified DBT. The research main questions included 1) What is the efficacy of providing an online DBT training to staff, and 2) Does professional background impact scores on intra-modular learning quizzes among interprofessional staff?

Prior to developing the web-based training program, the modified-DBT protocol used in this study was revised using feedback from facilitators who implemented the protocol in a prior pilot study and from current staff familiar with the environment and patient population. At the start of this study, this researcher intended to seek feedback from professionals outside of psychology to develop an m-DBT manual and training accessible for an interprofessional audience. However, the onset of the COVID-19 pandemic placed incredible demands on
healthcare providers such as nursing at MHHC therefore hampering their availability to participate. Initially, a nurse had expressed interest in participating in the qualitative phase but dropped out shortly thereafter. Hence, the revised m-DBT manual contains only feedback from professionals with psychology backgrounds. Common themes from the qualitative feedback included cutting out a significant amount of content from each session, concretizing DBT concepts, and including multisensory stimuli as adjuncts for learning. Current staff expressed concerns environmental distractions (e.g., noise level) and suggested using background music and hanging up signs reminding others that group is in session. All current staff agreed that the inclusion of direct support staff during m-DBT group with residents would be beneficial in addition to reinforcing learned skills with the residents within the milieu.

Learning content in the online m-DBT training program for staff was taken from the revised m-DBT protocol. To address barriers related to access and time, participants could access the training program 24-hours a day via desktop computer or smartphone. Of the total number of eligible staff at the site, only a small number of staff and practicum students completed the training. Moreover, a majority of this small sample indicated prior knowledge of DBT and skills in working with challenging patient behaviors. Statistical analysis using McNemar’s test indicated that the online training did not result in significant change in knowledge and participants’ perception before and after training. This result is most likely due to design flaws in the pre- and post-survey that utilized a dichotomous independent variable. For example, participants either knew about DBT or they did not. Based on the high number of participants reporting that they were knew about DBT at baseline, a dichotomous response method was unable to measure increases in learning upon completion of the web-based training. Additionally, the small number of participants who completed the web-based training is a significant
limitation. There are many reasons why an adequate sample was not achieved. Firstly, the COVID-19 global pandemic has had a detrimental impact on many individuals with vulnerable health statuses, which includes both patients and staff. Widespread deaths, illness, stress, and staffing shortages have created unprecedented levels of stress for those working on inpatient settings, which more than likely impacted the number of eligible participants for this study.

Secondly, although the 24-hour availability web-based learning provides should eliminate workday time constraints, this does not eliminate the demands on an individual outside of work. Given that none of the participants received monetary compensation for participating, it is likely that this played a factor in the decision to undergo voluntary training outside of work. Thirdly, since participants were self-selected, it is possible that those with no DBT knowledge, perhaps the majority of this population, decided to opt out which might explain the high number of participants stated they had prior knowledge of DBT and felt comfortable managing difficult patient behaviors. However, this consideration does not explain the reason for low participation rates from practicum students who typically hold prior knowledge of DBT. Aside from reasons of the COVID-19 pandemic, a possibility may relate to the timing for when this study’s online training was released in the middle of May. The middle of May tends to be a time of either significant stress for students regarding finals exams and/or term paper deadlines. Especially for those in graduate training, this may be a time of transition to another practicum training site. The accumulation of pandemic stress and student demands may have deterred many from participating in the online training.

Another difficult aspect of this study in answering the first research question regarding efficacy was the dichotomous response method. By participants stating whether they “agree” or “disagree” in answering questions of the pre- and post-survey, it was unclear whether
participants had increased their DBT knowledge throughout training and to what degree did this knowledge increase. The initial decision to use a dichotomous response method was based on a priori assumptions that non-behavioral health staff would have no knowledge of DBT. Additionally, the prevalence of none-native English speakers at MHHC was considered while designing the online training program. Since all online content relied solely on the participant’s ability to read and comprehend material in addition to learning material typically taught in graduate-level training, cognitive overload for participants was a concern (Jessup et al., 2020). Surveys used with populations with limited English proficiency often use dichotomous response methods or Likert scales with a maximum of four points. Given the exploratory nature of this study, it was surmised that most participants would indicate no prior DBT knowledge with change in post-survey responses.

Limitations

There are numerous limitations to this study that should be considered when reviewing the results and conclusion. Limitations pertaining to the qualitative phase of this project are a small sample (n=4) of those who reviewed and provided feedback for the m-DBT protocol. Of this small sample, all participants had varying levels of training in behavioral health; therefore, there is a lack of input from non-behavioral health staff on how accessible the language is to staff with no behavioral health training. Also, the revised m-DBT protocol has yet to be piloted with a group of residents to determine its efficacy with this clinical population. Lastly, the m-DBT protocol was revised specifically with the residents of MHHC in mind; therefore, it is unknown whether the revised protocol is generalizable to other clinical settings and patient populations. Limitations regarding the quantitative phase of this project include a small sample size (n=23) of participants who completed the online training program. Participants were self-selected; hence,
random sampling measures were not used. Similar to the quantitative phase of this study, there was no input from non-behaviorally trained staff on designing the online training. Based on this, it is unknown to what degree the online content is translatable to professionals outside of psychology and those with less years of formal education. Regarding this project in its entirety, this researcher does not have prior experience working at MHHC in any capacity and relied on the accounts of staff and practicum students who currently work or train at the site.

**Future Directions**

Data collected from this study can inform many avenues of research moving forward. First, the m-DBT protocol revised in this study should be piloted with a group of residents who fit the criteria this intervention was intended for (e.g., serious mental illness, cognitive deficits, challenging behaviors). Outcome measures implemented during the pilot study might include residents’ qualitative responses to the intervention (e.g., what did they like and/or dislike?), observational accounts regarding incidents of challenging behavior over the course of the intervention and 6-months post intervention, and feedback from direct support providers who assist during m-DBT group. Feedback from residents and providers can inform future revisions of the m-DBT protocol. Future directions should also incorporate a focus on milieu staff training. Based on lessons learned from this study, development of future surveys assessing staff knowledge of DBT should incorporate a 4-point Likert scale. The rationale for using a 4-point response scale will provide a better understanding of how staff rate their level of knowledge of the m-DBT training content. Additionally, the utilization of a 4-point scale is often used in surveying populations with limited English proficiency. It is also recommended that pre- and post-surveys include negatively-framed questions (i.e., “I do not feel confident teaching coping
skills to patients”) to assure that participants are accurately responding to each question as opposed to indiscriminate responses.

Due to the high amount of “agree” responses on the pre-survey, it was questioned whether social desirability bias was a factor since the online training was distributed from the participants’ employer. Although participants received the link to the online training from the Staff Development Department within MHHC and were informed of the voluntary nature of participation, this may not have provided enough assurance that their performance might impact their employment status. Therefore, future attempts to conduct research using this online staff training should emphasize specifically what data is shared with the employer (i.e., attendance only compared to responses to questions) and that participation does not impact employment status.

Movement towards educating staff from diverse training backgrounds in psychologically based interventions reflects a need for modifying language and content for a general audience. In other words, is it safe to assume that professionals from psychology, nursing, and recreational therapy all speak the same language in terms of manualized interventions? Studies exploring the aspect of common language among interprofessional staff is minimal. At the outset of this study, one of the goals was to seek input from non-behavioral health professionals to assist with manual and training development. However, engaging with providers remotely was a challenge due to limited availability and/or interest. Future attempts to collaborate with other professionals to find a common language for interprofessional training should include onsite engagement through meetings and project proposal presentations with staff when deemed safe following the pandemic.
References


Elias, L. R., Miskowiak, K. W., Vale, A. M. O., Köhler, C. A., Kjærstad, H. L., Stubbs, B.,
impairment in euthymic pediatric bipolar disorder: A systematic review and meta-
286-296. 10.1016/j.jaac.2017.01.008

Emerson, E., Kiernan, C., Alborz, A., Reeves, D., Mason, H., Swarbrick, R., ... & Hatton, C.
developmental disabilities, 22*(1), 77-93. doi:10.1016/S0891-4222(00)00061-5.

10.1111/j.1365-2648.2010.05340.x

challenging behaviors, emotional dysregulation, and generalized anxiety disorder in an
10.1177/1534650116687073

Fullerton, C. A., McGuire, T. G., Feng, Z., Mor, V., & Grabowski, D. C. (2009). Trends in
mental health admissions to nursing homes, 1999–2005. *Psychiatric Services, 60*(7), 965-
971. 10.1176/appi.ps.60.7.965

with moderate cognitive impairment* (Publication No. 3358396) [Doctoral dissertation,
California School of Professional Psychology]. Proquest Dissertations and Theses
Global.
https://doi.org/10.1007/s00406-014-0558-9


doi.org10.1097/00002093-200401000-00004


10.1037/dec0000115; 10.1037/dec0000115.sup (Supplemental)


and their significant others. [Sl: sn]. Retrieved from https://core.ac.uk/download/pdf/16178029.pdf


behavior therapy for suicidal women meeting criteria for borderline personality disorder.

*Cognitive and Behavioral Practice, 14*(2), 147–156. doi:10.1016/j.cbpra.2006.10.004


McNemar, Q. (1947). Note on the sampling error of the difference between correlated proportions or percentages. *Psychometrika, 12*, 153-157. 10.1007/BF02295996


https://www.nimh.nih.gov/health/statistics/mental-illness


doi:10.1111/j.1365-2788.2010.01274.x

10.1016/j.chc.2020.10.010


Table 1

Participant Demographics for Web-Based Training

<table>
<thead>
<tr>
<th>Baseline Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>86.97</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>25-34</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>35-44</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>45-54</td>
<td>8</td>
<td>34.78</td>
</tr>
<tr>
<td>55-64</td>
<td>6</td>
<td>26.09</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>African-American</td>
<td>9</td>
<td>39.13</td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>4</td>
<td>17.39</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>High School</td>
<td>12</td>
<td>52.17</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>PhD or higher</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>Trade School</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>MHHC Job Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology Practicum</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>Student</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>Psychologist</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>Recreational Nursing</td>
<td>2</td>
<td>8.70</td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified Nursing Assistant</td>
<td>17</td>
<td>73.91</td>
</tr>
<tr>
<td>Length of MHHC employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a year</td>
<td>12</td>
<td>52.17</td>
</tr>
<tr>
<td>1-3 years</td>
<td>3</td>
<td>13.04</td>
</tr>
<tr>
<td>4-6 years</td>
<td>1</td>
<td>4.35</td>
</tr>
<tr>
<td>More than 7 years</td>
<td>7</td>
<td>30.43</td>
</tr>
<tr>
<td>English is first language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>34.78</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>65.22</td>
</tr>
</tbody>
</table>
Table 2

Pre-/Post-Survey Responses

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel confident in managing patients when they are upset.</td>
<td>22 (95.65)</td>
<td>21 (91.3)</td>
</tr>
<tr>
<td></td>
<td>1 (4.35)</td>
<td>2 (8.7)</td>
</tr>
<tr>
<td>I think psychology can help patients when they are upset.</td>
<td>22 (95.65)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>1 (4.35)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I know what dialectical behavior therapy (DBT) is used for.</td>
<td>20 (86.97)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>3 (13.04)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I can use dialectical behavior therapy (DBT) to help patients.</td>
<td>22 (95.65)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>1 (4.35)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I know what mindfulness is in a general sense.</td>
<td>21 (91.3)</td>
<td>22 (95.65)</td>
</tr>
<tr>
<td></td>
<td>2 (8.70)</td>
<td>1 (4.35)</td>
</tr>
<tr>
<td>I know how to help patients tolerate uncomfortable situations.</td>
<td>22 (95.65)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>1 (4.35)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I feel comfortable helping patients manage how they are feeling.</td>
<td>23 (100.0)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I feel comfortable helping patients communicate with others.</td>
<td>23 (100.0)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>I believe that I can learn dialectical behavior therapy (DBT) skills to help patients.</td>
<td>23 (100.0)</td>
<td>23 (100.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
</tbody>
</table>
Figure 1

*Distribution of Quiz Scores*

[Histogram showing the distribution of quiz scores with the following statistics:
Mean = 17.39
Std. Dev. = 2.554
N = 23]
Appendix A

Attachments:
- Modification Approved - IRB ID: 1362.pdf

To: Annika Miyamoto
From: Richard Gregory Johnson III, IRB Chair
Subject: Protocol #1362
Date: 05/26/2020

Dear Annika Miyamoto,

Your Amendment for research (IRB Protocol #1362) with the project title Non-Mental Health Providers' Perspectives In Implementation of Modified Dialectical Behavioral Therapy Intervention and Patient Outcomes Among Conserved Treatment Population has been approved by the IRB Chair on 05/26/2020.

Any modifications, adverse reactions or complications must be reported using a modification application to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS via email at IRBPHS@usfca.edu. Please include the Protocol number assigned to your application in your correspondence.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Dr. Richard Gregory Johnson III
Professor & Chair, Institutional Review Board for the Protection of Human Subjects
University of San Francisco
irbphs@usfca.edu
IRBPHS Website
Appendix B

Mindfulness Skills Group

Modified DBT for a population with severe mental illness and cognitive impairment

Developed in Collaboration with a Team of Interprofessional Staff at Medical Hill Health Center
## Table of Contents

- A Note for Facilitators 1
- Session 1: Orientation to Skills Training 2
- Session 2: Emotion, Reasonable, Wise Mind 5
- Session 3: Distraction Techniques (DOT) 8
- Session 4: Relaxation Techniques 10
- Session 5: Distress Tolerance 12
- Session 6: Reducing Self-Judgment and Thought Diffusion 14
- Session 7: What Skills 17
- Session 8: How Skills 19
- Session 9: GIVE 21
- Session 10: Final Meeting: Wrap Up 23
- Appendix: Handouts 24
A Note for Facilitators

This m-DBT manual is a revised version from the previous m-DBT protocol that was previously piloted. This manual has incorporated qualitative feedback gathered from reviewers in the current study.

The original pilot study testing the modified DBT protocol used the St. Louis University Mental Status (SLUMS) Examination to determine, which residents fit criteria for group participation. Residents with scores in the Mild Neurocognitive Disorder and Dementia range were invited to participate. Exclusion criteria included presence of hallucinations or inability to sit for the duration of group. Facilitators are urged to use their clinical judgment when determining eligible participants.

Staff or trainees planning to utilize this manual to facilitate a modified-DBT group with residents will need to search and printout a few materials for certain sessions where it is indicated. The “Feelings Chart” refers to a range of displayed emotions accompanied by faces expressing each emotion for participants with limited literacy. Facilitators will also need to print out individual pages depicting a dragon, turtle, and owl to demonstrate Emotion, Rational, and Wise Mind in session 2. All of these materials can easily be found on the internet.

Ensure that all materials that group attendees will be handling, including food and non-food rewards, are cleared with nursing beforehand for purposes of patient safety.
Session 1: Orientation to Skills Training

Welcome to the first session of the m-DBT program!

This first session will focus on introductions, explaining group format and rules, purpose and benefits of group, and end with Focused Breathing exercise, which will be homework for residents. Preparation: candy or non-food reward (clear with nursing before giving to attendees) for active participation; name tags; Tibetan singing bowl; print Focused Breathing reminder/instructions from Appendix.

Introductions & Group Format

A. Staff and Resident Introductions

1. Leaders and co-facilitators introduce themselves and briefly state their role in the group (e.g., group leader, support staff). Consider name tags if staff and members are unfamiliar with one another.

2. Invite each resident introduce themselves.

B. Explain Group Format

1. “We will be meeting for a total of 10 sessions at ___ (time) on ____ (day of the week) for 30 minutes.”

2. Ask that all residents, and encourage staff to support residents, to use the restroom before starting group.

3. Talk about respect. This includes asking residents to raise their hand if they want to say something and having one person talk at a time.

4. Invite residents to practice skills outside of group sessions each and every week and be open to sharing what went well or did not work for them with the group.

C. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

D. Benefits of this Group

1. “Learn how to identify what you are feeling (e.g., happy, sad, angry).”
2. “Control how you react in stressful situations.”

3. “Be able to calm yourself when stressed.”

4. “Have better relationships with those around you.”

5. “Benefits of working with this group is that you can practice these skills during group time. For example, if you want to tell someone, outside of the group, that you don’t like something they did to you and you are nervous to confront them you can practice how you would handle that situation during group.”

**Mindfulness Discussion & Exercise**

A. Ask residents, “Raise your hand if you’ve ever felt angry?”

1. If hands are raised ask residents what made them feel angry and how did they know they were angry (e.g., heart racing, shaking).

2. If no hands raised have group facilitators and support staff share when they’ve been angry and see if residents start to share their stories.

B. Explain mindfulness to residents, “When I know I am feeling angry about something it’s like having a superpower. We call this superpower being mindful or mindfulness. By having this superpower—that is knowing what I am feeling in that moment—is the first step to being in control of myself.”

C. Explain how knowing what one is thinking is also mindfulness. “Raise your hand if you’ve ever had angry thoughts? This could be thoughts that say, ‘she is mean’ or ‘I want to hit that person!’ Knowing when you are thinking these thoughts is also a superpower we call mindfulness.”

D. Explain to the group, “If we know what we are feeling and what we are thinking—our superpower—we are already making a big step forward in controlling how we react when we are upset. The next big step is learning what to do when we know we’re angry or thinking angry thoughts. Those angry feelings and thoughts need to go somewhere, right?”

E. Mindfulness Exercise: Focus on Breathing

1. Explain to the group, “I would like you to sit comfortably in your chair with both feet flat on the floor and your hands either on your lap or on the armrests on the chair. When I ring the bell, I want you to do your best to only focus on your breathing. If it helps you can rest your hands
over your belly and watch as your hands rise and fall with your breath. If you start thinking about something else besides your breathing it is okay just bring your attention back to the rise and fall of your chest and stomach. We will do this for 30 seconds.” *(Facilitator rings bell to start exercise)*.

2. *(Facilitator rings bell after 30 seconds to signal end of exercise)*. Ask the group, “how was that to sit for 30 seconds and only focus on your breathing? Did anyone’s mind start thinking about anything else?” Ask residents about their experiences with the breathing exercise and for those who struggled with it provide validation that this is difficult for most people and it takes time and practice.

**Homework:** “We encourage you to practice the breathing activity we did in group today at least once a day for 30 seconds. We will give each of you a sign to hang above your bed to remind you to practice. The more you practice, the easier it gets, the better you feel!”

*Remember to hang Focused Breathing instructions/reminder (located in Appendix A) on each resident’s wall for him or her.*

End of Session
Session 2: Mindfulness: Emotion, Reasonable, Wise Mind
The second session will remind residents of the purpose of group and review of mindfulness (superpower), breathing exercise check-in, introduce emotion, reasonable, wise mind concepts. 

Preparation: candy or non-food reward (clear with nursing before giving to attendees); tape; print copies of dragon, turtle, owl images, and a Feelings Chart from the internet, and homework reminder (breathing exercise) from Appendix.

Purpose of Group and Review

A. Welcome attendees back to the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss practice of mindfulness breathing exercise: “Did anyone practice focused breathing? Did the wall reminder help?”

2. Give small reward for those who practiced. This can be a small piece of candy/non-food reward, but must clear with nursing staff prior to starting group.

D. Review of Mindfulness

1. “Remember when we talked about what it means to have a superpower last week?” If nobody remembers say, “I’ll give you a hint…it has to do with feeling angry.”

2. “When I know I am feeling angry about something it’s like having a superpower. We call this superpower being mindful or mindfulness. By having this superpower — that is knowing what I am feeling in that moment— it is the first step to being in control of myself.”

3. Does anyone remember what the second superpower is? It’s knowing what we are thinking like ‘she is bad’ or ‘I want to hit that person!’ If we know what we are feeling and what we are thinking —our superpowers— we are already making a big step forward in controlling how we react when we are upset.”
Introduce Emotion Mind, Rational Mind, and Wise Mind

(Display pictures of dragon, turtle, and owl up on board or give residents copies each. Locate cartoon images of an owl, dragon, and turtle on the internet.)

A. Emotion Mind (dragon)
“This dragon represents strong feelings like anger, fear, sadness, or other feelings that takeover your mind and body. You can also be in emotion mind when you feel happy or joyous. It is okay to be in emotion mind, but there will be times when it causes problems. When we are in emotion mind, we can make bad decisions because it is very hard to consider logic when our emotions take over our ability to think. For example, think about the last time you ate too much candy and you ended up with an upset stomach. Was it difficult to think ‘maybe I should stop eating this because candy usually upsets my stomach?’ Emotion mind can make it very difficult to think about what is best for us versus what we want or feel in the moment.”

B. Reasonable Mind (turtle)
“This turtle represents the opposite of emotion mind. When you are in reasonable mind you are only thinking about facts and logic without emotion. Being in reasonable mind helps people follow a cooking recipe, brush their teeth, and even build houses. You approach things from only a rational space with emotions removed from the experience.”

C. Wise Mind (owl)
“This owl represents the combination of emotion and reasonable mind. It is here where you can acknowledge how you feel about a situation and think about how to rationally go about it. To use the candy example, you would be practicing wise mind by thinking ‘wow I am really loving all of this candy and I don’t want to feel sick from eating so much so I will save some for later.’ Being in wise mind allows you to remain connected with your emotions while putting on the brakes so you don’t overdo it.”

Group Discussion: Ask residents to select which mind they are in at that moment and times when they have experienced the other two. An alternative would be to provide different scenarios and have them figure out whether the person is in emotional, reasonable, or wise mind.

G. Introduce Feelings Chart

1. Pass around colored copies of a Feelings Chart to all attendees. “Of course anger is not the only emotion we feel right? Sometimes we are happy and other times we feel scared. It depends on what is going on around us or even the thoughts we might be having that cause us to feel a certain way. Today we
get to use your superpower to name the other emotions besides anger that you might feel.”

2. Ask residents to look at the Feelings Chart and pick which emotion they are feeling at that moment and share with group if they are comfortable.

Homework:

“For homework, please practice the breathing activity we did in group last week at least once a day for 30 seconds. We will give each of you a sign to hang above your bed to remind you to practice. The more you practice, the easier it gets, the better you feel!” (Ensure that attendees with visual or attentional impairments have a staff member who can help remind them to practice everyday)

*Remember to hang Focused Breathing instructions/reminder (located in Appendix) on each resident’s wall for him or her.

End of Session
Session 3: Distraction Techniques (DOT)
This session will introduce the acronym DOT to remind residents on how they can distract themselves from stressful situations. **Preparation:** candy or non-food reward (clear with nursing before giving to attendees); bring tape; print out dragon, turtle, and owl images; prompts; and wall reminder to practice DOT from the Appendix.

**Purpose of Group and Review**

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss practice of mindfulness breathing exercise: “Did anyone practice focused breathing? Did the wall reminder help?”

2. Give small reward for those who practiced. This can be a small piece of candy, or non-food reward, but must clear with nursing staff prior to starting group.

D. Review Emotional, Reasonable, and Wise Mind

1. “Last week we talked about three types of minds. Let’s play a quick matching game.”

   **Activity:** Facilitators cut out definitions (Appendix) for each mind. Post pictures of dragon, turtle, and owl up on board/wall. Read each description and ask attendees which animal the description goes under. Reward those with correct responses with candy, or non-food reward (clear with nursing beforehand). Ensure that all attendees understand this concept before moving to next section.

**Distraction Techniques**

A. “We all deal with a lot of stressful and difficult situations. These situations might make us feel really upset or worried, scared, hurt, or angry. Sometimes we do not know how to deal with stressful feelings especially when we feel like things are out of our control. The goal today is to learn things that will help us get through upsetting situations without making them worse. We will learn ways to not let things bother us as much even if we do not like what is going on.”
B. “Who here has had a medical test they really did not want to have? It might have been a blood test or some other kind of painful test that the nurse or doctor tells us we have to have. Even if it is good for us, we still don’t want to go through with it.”

C. Write the following on the board: D O T

“We can remember DOT when we are thinking of ways that we can distract ourselves. Let’s see what DOT will help us remember.”

Write “Do something else” on the board.
“You can do things like read, draw, focus on your breathing, or squeeze a ball. You might struggle to find things to do that will distract you from the painful experience. Can anyone tell the group other ways to distract yourself?”

Write “Observe (look at) something else” on the board.
“You can try to look at other people or things that are happening around you. Right now look around the room and find something to focus on. Once you find something to look at share what you found with the group.”

Write “Think about something else” on the board.
“Think about a good memory that you might use to distract yourself from a stressful situation. Maybe think about what you had for dessert last night or your favorite television show. Or maybe you are excited about something fun you will be doing later that day or the weekend.”

Practice Activity
“Let’s practice using DOT. Let’s say you are feeling really tired and decide to take a nap. But suddenly some really loud noises from outside wakes you up! You cannot do anything to make the noise stop and begin to feel angry or stressed. What is something you can do to distract yourself? What is something you can observe or look at to distract yourself? What can you think about to distract yourself?”

Homework
“For homework, please practice the DOT activity we did in group today at least once a day. We will give each of you a sign to hang above your bed to remind you to practice. The more you practice, the easier it gets, the better you feel!” (Ensure that attendees with visual or attentional impairments have a staff member who can help remind them to practice everyday)

*Remember to hang DOT instructions/reminder (located in the Appendix) on each resident’s wall for him or her.

End of Session
Session 4: Relaxation Techniques
This session will introduce deep breathing as a relaxation technique to help residents calm themselves when upset. Preparation: candy or non-food reward (clear with nursing before giving to attendees); calming music; print wall reminder for Deep Breathing in the Appendix.

**Purpose of Group and Review**

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss practice of DOT exercise: “Did anyone practice using DOT to distract themselves? Did the wall reminder help?”

2. Give small reward for those who practiced. This can be a small piece of candy, or non-food reward, but candy must be cleared with nursing staff prior to starting group.

D. Review Mindfulness

1. “Let’s practice using one of those mindful skills now. Look at the Feelings Chart and either say out loud to the group or point to how you are feeling right now.”

E. Review Distraction Techniques

Write the following on the board: D
O
T

“Does anyone remember when we use DOT? We can remember DOT when we are trying to think of ways that we can distract ourselves. Let’s see what DOT will help us remember.”

*Write “Do something else” on the board.*

“You can do things like read, draw, focus on your breathing, or squeeze a ball. Find things to do that will distract you from the painful experience. Can anyone tell the group other ways to distract yourself?”
Write “Observe (look at) something else” on the board. “Look at other people or things that are happening around you. Right now look around the room and find something to focus on. Once you find something to look at share what you found with the group.”

Write “Think about something else” on the board. “Think about a good memory that you might use to distract yourself from a stressful situation. Maybe think about what you had for dessert last night or your favorite television show. Or maybe you are excited about something fun you will be doing later that day or the weekend.”

**Introduce Relaxation**

A. “Now you know how to distract yourself when you feel stuck in a bad situation that you cannot change. Now let’s talk about the other thing you can do to relax yourself. You can try to relax yourself so you can handle the situation until most of the bad thoughts and feelings pass.”

B. “We are going to practice doing five long deep breaths. If it helps, place both your hands on your stomach, slowly breathe in and out while watching your hands rise and fall. Make sure you are sitting comfortably in your chair.”

*(Consider playing soft calming music)*

C. “Great job, do you feel different or calm after that activity?”

**Homework**

“For homework, please practice 5 slow deep breaths like we did in group today at least once a day. We will give each of you a sign to hang above your bed to remind you to practice. The more you practice, the easier it gets, the better you feel!” (Ensure that attendees with visual or attentional impairments have a staff member who can help remind them to practice every day)

*Remember to hang deep breathing instructions/reminder (located in Appendix A) on each resident’s wall for him or her.

End of Session
Session 5: Distress Tolerance
This session will introduce how to identify emotions through a group activity. Preparation: candy or non-food reward (clear with nursing before giving to attendees); calm music for breathing; index cards with different emotions written on each (e.g., happy, sad, scared, angry, calm); hat or basket; print Feelings Tracker homework reminder from the Appendix.

Purpose of Group and Review

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss practice of Deep Breathing exercise: “Did anyone practice using deep breathing to relax themselves? Did the wall reminder help?”

2. Give small reward for those who practiced. This can be a small piece of candy, or non-food reward, but must clear candy/food rewards with nursing staff prior to starting group.

D. Review Relaxation

1. “Last week you learned that making yourself relax is another way to calm yourself when you feel upset about something. You can relax yourself so you can handle the situation until most of the bad thoughts and feelings pass.”

2. “We are going to practice doing five long deep breaths. If it helps, place both your hands on your stomach and breathe in and out as slowly as you can while watching your hands rise and fall. Make sure you are sitting comfortably in your chair.”

(Consider playing soft calming music)

3. “Great job, do you feel different or calm after that activity?”

Identifying Emotions

A. “As we have been talking about, the goal is not to get rid of emotions, but to
manage them better. In order to do so, we need to be able to identify our own emotions. Feelings create urges to do something in many ways, such as fight when we feel angry, run when we are afraid, or hold a loved one’s hand. People show their emotions in different ways:

1. Body language (e.g., facilitator makes a happy face)
2. Words (e.g., I love you, I am sad, I’m sorry)
3. Actions (e.g., kissing, hitting, running)

*Emotion Charades Activity:* Facilitator writes down feelings (e.g., happy, angry, sad, scared, ashamed) on separate index cards folding each in half (scraps of paper work just as well). Place all cards in a hat or basket and have each resident randomly draw a card. Ask residents to use their body, words (without saying the actual emotion), and action to act out the emotion. Ask the other residents to guess what emotion is being acted out. Prompt residents by asking “how might the feeling look or how would I know by looking at you that you are feeling that way?” If time allows, after the residents identify what emotion is being acted out, facilitator can ask the group “how might the emotion feel?” and “what thoughts might come with that feeling?” Reward participants with candy or non-food reward.

**Homework**

“For homework, please identify how you are feeling at least once a day for a whole week. We will give each of you a daily feelings chart to hang above your bed to remind you to practice. The more you practice, the easier it gets, the better you feel!” (Ensure that attendees with visual impairments or difficulty with writing have a staff member who can help them to practice every day)

*Remember to hang the Feelings Tracker (located in the Appendix) on each resident’s wall for him or her.

**End of Session**
Session 6: Reducing Self-Judgment and Thought Diffusion

This session will introduce how to identify emotions through a group activity. **Preparation:** candy or non-food reward (clear with nursing before giving to attendees); print a Feelings Chart and the Thought Chart from the Appendix; scraps of paper and pencils for residents or bubbles for them to blow.

**Purpose of Group and Review**

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss practice of identifying feelings: “Did anyone practice identifying their feelings using the Feelings Tracker? Did the wall reminder help?”

2. Give small reward for those who practiced. This can be a small piece of candy/non-food reward, but candy/food rewards must be cleared with nursing staff prior to starting group.

D. Review Identifying Emotions

“Last week you learned how to identify different feelings by acting them out to the group. It is important to learn how to know what you are feeling because many people learn to hide their emotions, which is a natural result of being trained to do so; this kind of training can even start in childhood when others don’t pay attention, or teach you not to pay attention, to your emotions. The hiding becomes automatic; you are no longer aware that you do it, and you may not intend to do it at this point. It has become automatic. To manage your emotions, you have to be pretty good at identifying them and sensing how you feel in your body.”

(Have residents use a Feelings Chart and share what emotion they are experiencing. This will segue into next section.)

Reducing Self-Judgment

A. “The goal in knowing your feelings is ultimately that you will use your coping skills like DOT and slow deep breathing to control your feelings instead of them controlling you. You need to know what the emotion feels like in your body when
it shows up to be able to name what emotion it is. You also need to be able to stand back and look at the emotion you are feeling without judgment. What is judgment? It is a thought that can create bad feelings.”

“For example, ‘I’m an idiot, I can’t do anything right, there is something wrong with me,’ or ‘I shouldn’t be feeling this way.’ Does anyone ever have thoughts like these?”

“Today we will talk about how to just notice feelings without judging them as good or bad. When we judge ourselves in a bad way, we end up hurting our own feelings. When we judge others, we can hurt their feelings and end up feeling ashamed or embarrassed about what we have done to someone. Judging gets in the way of us feeling good about ourselves and our relationship with other people.”

“Ways to handle judgment against ourselves can include:
   - Forgiving yourself
   - Reminding yourself that you are doing the best you can
   - Reminding yourself that human beings always make mistakes
   - Learning from experiences”

“Avoid trying to be perfect; perfectionism gets in the way of fun, happiness, and pleasure. Seek wisdom rather than perfection!”

“Avoid comparing yourself to others.”

Thought Bubble Activity
Provide each resident with a pencil and scraps of paper to write on. Ask group to perform exercise where they focus on their breathing for 30 seconds. Have residents write down (have staff members available to assist attendees who are unable to write or who have visual impairments) on the scraps of paper thoughts that come up for them during the breathing exercise and set them aside until end of breathing activity. At the end, ask residents to share what thoughts came up for them and how these thoughts made them feel in the moment. When everyone has shared ask everyone to crumple up the thoughts that made them feel bad and toss them in the center of the group as a way to symbolize sending those thoughts away.

Alternative activity—provide residents with materials to blow bubbles so that they can symbolize sending negative thoughts or judgments away using bubbles. Typically stores like Dollar or Walgreens sell small bottles for very cheap (clear with nursing beforehand).

Homework
“For homework please identify at least one thought a day for a whole week. You will each get a Thought Tracker to hang above your bed to remind you to practice. The more you practice, the easier it gets, the better you feel!” (Ensure that attendees with visual impairments or difficulties with writing have a staff member who can help remind them to practice every day)
*Remember to hang the Thought Chart (located in the Appendix) on each resident’s wall for him or her.

End of Session
Session 7: Mindfulness: What Skills
This session will introduce how to observe mindfully through a group activity. Preparation: candy or non-food reward (clear with nursing before giving to attendees). Bring one object for each resident where they can practice using one or more of their senses (e.g., sight, touch, hearing, smell); print Mindful Activity wall reminder from the Appendix.

Purpose of Group and Review
A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss practice of identifying thoughts: “Did anyone practice identifying their thoughts using the Thought Tracker? Did the wall reminder help?”

2. Give small reward for those who practiced. This can be a small piece of candy/non-food item, but candy/food items must be cleared with nursing staff prior to starting group.

D. Review Self Judgment

1. “Last week you learned about what it means to judge yourself (e.g., ‘I can’t do anything right’) and how thinking this way hurts us and can hurt the people we care about. These negative thoughts we think about ourselves will happen at times especially when we are upset. It is hard to stop these thoughts from coming up. The key is to know when the negative self-judgment comes up and remind yourself that:
   i. I’m doing my best.
   ii. People make mistakes
   iii. Learn from mistakes; seek wisdom over perfection”

2. “Once you realize that the negative thought is only a thought toss it like the wadded up slips of paper we threw away (bubble activity: let it float away like the bubbles we blew) last week.”

“What” Skills (observe, describe, participate)

A. “Today we are going to learn more about how to work with our thoughts and
feelings. First, we are going to learn how to just observe —or watch— what we are doing, feeling, or happening around us.”

Activity: residents choose from a bag of random items where they can engage their sense of touch, smell, sight, hearing, or taste if facilitators choose food items (All food items must be cleared with nursing prior to the start of group. The purpose of this activity is to have residents take their time to focus all of their attention and engage their different senses using their chosen item. (Clear with nursing beforehand and make any necessary adjustments regarding items to ensure patient safety)

“Now, I want you to put all of your attention on the object in your hand and just notice without judgment what your object looks like, feels like, or sounds like.”

B. “Now we are going to describe, put into words, different things about the object we have been observing. You want to describe just the facts (e.g., ‘this object feels smooth’) without judgments (e.g., this object is boring).”

Ask residents to describe their object as it relates to their senses.

“Did anyone’s mind wander or did you start thinking about something else not related to this activity when you were just observing your object? Did you start thinking about what happened yesterday or what will happen tonight? If you did it is very normal for our mind to think about something else besides what is happening in the present. We often do not pay attention to the present moment for lots of reasons. By “participating” you are choosing to put all of your attention in the “now” or whatever you are doing in this exact moment. For example, let’s say that you are about to eat your favorite food. Do you want your mind to think about something upsetting that may have happened earlier? Or would you rather enjoy the taste and smell of your favorite food? Participating in that exact moment means tasting, smelling, and really enjoying your meal.”

Homework
“For homework find an activity that you enjoy whether it is eating, watching your favorite show, or drawing. Put all of your attention on that one activity. If a thought comes up to distract you let it go as if it were cloud that floats away. You will each get a Mindful Activity Chart to hang above your bed to remind you to practice. The more you practice the easier it gets, the better you feel!” (Ensure that attendees with visual impairments or difficulties with writing have a staff member who can help remind them to practice every day)

*Remember to hang the Mindful Activity reminder (located in Appendix A) on each resident’s wall for him or her.

End of Session
Session 8: Mindfulness: How Skills
This session will introduce the How Skills. Preparation: candy or non-food reward (clear with nursing before giving to attendees); raisins for experiential activity (also clear with nursing and consider alternative to using raisins if observing COVID-19 precautions); music or brief YouTube video; have role plays available for residents (in case they are unable to think of their own) where they can practice effectiveness.

Purpose of Group and Review

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

C. Check-in:

1. Discuss Mindfulness Activity: “Did anyone practice putting all of their attention while doing a fun activity like watching TV or drawing? Did any thoughts come up that you had to throw away so it wouldn’t distract you from having fun?”

2. Give small reward for those who practiced. This can be a small piece of candy or non-food reward, but all food items must be cleared with nursing staff prior to starting group.

D. Review “What” Skills

1. “Last week you learned how to observe, describe, and participate in the present moment. To learn how to observe - that is watch - you chose an item and just observed what it looked like, smelled like, sounded like, or maybe tasted like. Then you described it to the group without saying whether it was good or bad. After we did that activity, you learned about how to participate. This will help you stay in the present moment. For example, when you are eating your favorite food and you want to experience the wonderful taste and smell rather than think about something unpleasant that happened earlier that day while you are eating.”
Introduce “How” Skills

A. “This part might be a review for you as we have talked about being non-judgmental before. The last time we talked about judgment you were learning how to recognize when thoughts come up, such as ‘I’m not good enough’ that make you not feel good about yourself. Today you will learn how not to assign negative thoughts other people, things, or situations. Because when we do think something is terrible or stupid then we will react with resistance feeling angry or scared. For example, let’s say you have to see the nurse to get a shot and it is definitely something that you don’t want to do, but have to do it. If you keep thinking or saying ‘this is terrible’ you will begin to feel scared or angry, which might make things feel worse than they really are. But it you think or say ‘I am going to get some medicine and I have been through this before and it was okay’ then you will feel more calm and less stressed. This is how you think about things without judgement.”

B. “The next part of the ‘How’ skills is only doing one thing at a time. We call this One-Mindfully. Do you ever find yourself trying to do two things at the same time? Maybe you tried drawing and watching TV at the same time while sitting in the dayroom? Let’s do an activity.”

Activity: Pass out one raisin (may need alternative if COVID-19 precautions warranted) to each resident. Either play music or have them watch a brief YouTube clip while they eat the raisin. After they are done eating ask them to describe what the raisin tasted like or if they had difficulty attending to the raisin and video at the same time. Pass out a second raisin, but this time don’t play music or video. Afterward have residents reflect on this experience of tasting the raisin and compare to first raisin experience.

C. (Effectively) “The last part is how to act in a way where we get what we want in the end. First, you have to know what it is that you want in a situation. For example, let’s say you want to use the phone, but a staff member says they are too busy to help right then. You might feel angry and tempted to yell because you feel you should be able to use the phone. Yelling might make you feel better in the moment, but do you think the staff member will want to help you after they finish up with what they were doing? Most likely not, right? But if you can stay calm and say something like, ‘okay, can you let me know when you are free?’ You are more likely to get to use the phone. Sometimes we don’t get what we want right away, but we can be smart to where we get our needs met eventually.”

Activity: Ask residents about situations where they ask for what they want and they want to react when told “no.” Then role-play with them to practice handling the situation more effectively.

End of Session
Session 9: Interpersonal Effectiveness: GIVE

This session will introduce how to use the GIVE acronym for conflict resolution. **Preparation:** *candy or non-food reward (clear with nursing before giving to attendees)* to encourage active participation; facilitators develop a role play to demonstrate using GIVE; prepare scenarios that residents encounter so they can practice in group using GIVE

**Purpose of Group and Review**

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

C. Review How Skills

1. “Last week we talked about to practice being mindful, which means being fully present in the moment and how to get our needs met. You learned how judging or naming a person, thing, or situation as bad may lead you to feel scared or angry. By not thinking whether something is good or bad will help you feel more relaxed. Remember the example about getting the shot from the nurse?”

*(Review this scenario from last week)*

“Next, you learned about how trying to do two things at once, like eating a raisin and watching/listening to a video/music, kept you from fully enjoying the taste of the raisin. Doing one thing at a time will help you enjoy eating something or doing something more.”

“Then you learned about how to work effectively for the things you want. Remember the telephone example we talked about?”

*(review this example from last week)*

**Relationship Effectiveness: GIVE**

1. “GIVE stands for be Gentle, act Interested, Validate, Easy manner” *(write on board)*.

2. “You use these skills with someone who you are close with or consider a friend, even during a disagreement. To use this, you would start with a polite and gentle approach *(point to G)*. This means no yelling, name-calling, hitting, or
making fists.” *(Facilitator demonstrates threatening then calm posture.)*

“Next, you want to act Interested and listen *(point to I)* to what the other person is saying to you.”

“Next, you validate—which means acknowledge— *(point to V)* the other person’s feelings, wants, and opinions even if you do not agree with them. You want them to know you are doing your best to understand how they are feeling and not judging them.”

“Lastly, smile and use an Easy manner *(point to E)* as you are talking with the other person. Be lighthearted, kind, and use humor if you can. Don’t interrupt or talk over them. Listen for why they may be saying no to your request.”

*Two facilitators perform a role-play for residents to observe that demonstrates using GIVE skills. Create a scenario about a situation the residents tend to encounter.*

End of Session
Session 10: Wrap Up
This session can be used to go over any material that was not covered previously due to lack of time or unforeseen events. Preparation: candy or non-food reward (clear with nursing before giving to attendees) to celebrate getting through program; create and print certificates with residents’ names; facilitators bring pen (check with staff about what types of pens are safe and appropriate for attendees to use) and paper to document residents’ feedback about the program.

Purpose of Group and Review

A. Welcome back the group.

B. Purpose of Group

1. “To learn new ways to help you pay more attention to your thoughts and feelings as you go throughout your day. This group will teach you how to calm yourself when you are feeling stressed out with other people or having to do things you don’t want to do. You can learn ways to be remain calm in an upsetting situation without making things worse.”

Group Wrap Up

A. Congratulate group members for making it through to the final session and thanking them for their participation. Consider printing off completion certificates with residents’ name.

B. Cover any previous session content that was not addressed due to time constraints or other issues.

C. Ask residents what they found helpful from group and if there was any part that could be improved.

End of Session
Handouts/Supplemental Materials

- Focused Breathing Exercise
- Matching Game: Emotion, Reasonable, Wise Mind
- DOT Wall Reminder
- Deep Breathing Wall Reminder
- Feelings Tracker
- Thought Tracker
- Mindful Activity
Focused Breathing Exercise

Homework: Practice focused breathing for 30 seconds once a day.

Sit comfortably in your chair with both feet flat on the floor and your hands either on your lap or on the armrests on the chair.

Only focus on your breathing. If it helps you can rest your hands over your belly and watch as your hands rise and fall with your breath.

If you start thinking about something else besides your breathing it is okay, just bring your attention back to the rise and fall of your chest and stomach.

Do this for 30 seconds.
Matching Game: Emotion, Reasonable, Wise Mind

Directions: Cut out each prompt and read to residents during review activity. Tape prompt under corresponding animal when residents respond correctly.

Having strong feelings like anger, fear, sadness, or other feelings that takeover your mind and body. You can also feel happy or joyous. It can be very difficult to make good decisions. You make choices based on how you are feeling in the moment versus what might be best for you in the long run.

Thinking about facts and logic without emotion. Helps people follow a cooking recipe, brush their teeth, and even build houses. You do certain activities without feeling strong emotions about it.

Wisely combing emotions and reason. It is here where you can acknowledge how you feel about a situation and think about how to rationally make wise decisions. To use the candy example, you think, “Wow I am really loving all of this candy and I don’t want to feel sick from eating so much so I will save some for later.” Using Wise Mind allows you to remain connected with your emotions while putting on the brakes so you don’t overdo it.
DOT Wall Reminder

Homework: Use DOT to distract yourself

**Do something else**
**Observe (look at) something else**
**Think about something else**
Deep Breathing Wall Reminder

Practice 5 SLOW deep breaths once a day
### Feelings Tracker

**Homework:** Put an X each day under emotions you are feeling.

<table>
<thead>
<tr>
<th></th>
<th>Sad</th>
<th>Angry</th>
<th>Happy</th>
<th>Scared</th>
<th>Calm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Thought Tracker**

*Homework:* Write one thought you have each day.

<table>
<thead>
<tr>
<th></th>
<th>Thought (example: I can’t do anything right or I really liked that)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
</tr>
</tbody>
</table>
## Mindful Activity

**Homework:** Write one activity you did this week and what thought/s came up that interrupted your focus.

<table>
<thead>
<tr>
<th>Activity I was doing</th>
<th>Interrupting Thoughts I Had</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Pre-/Post-Survey Questions

1. I feel confident in managing patients when they are upset.
2. I think psychology can help patients when they are upset.
3. I know what dialectical behavior therapy (DBT) is used for.
4. I can use dialectical behavior therapy (DBT) to help patients.
5. I know what mindfulness is in a general sense.
6. I know how to help patients tolerate uncomfortable situations.
7. I feel comfortable helping patients manage how they are feeling.
8. I feel comfortable helping patients communicate with others.
9. I believe that I can learn dialectical behavior therapy (DBT) skills to help patients.
Appendix D

Participants complete Pre-survey

Module 1: Orientation to modified-DBT Skills Training

Course Introduction
Thank you for participating in this online training that aims to assist the residents at Medical Hill! Direct care staff who work directly with the residents are in an optimal position to help residents practice the skills they learn from group therapy. By helping residents practice this can greatly improve the quality of their relationships among each other and with staff as they go about their day. The purpose of this training is to provide staff with a basic understanding of dialectical behavior therapy (DBT) that residents will receive in group therapy.

This online training for direct care staff is self-paced. Staff will read through each module and have the option to take breaks and come back to it when they want to continue. The amount of time to complete this online training ranges from 30 minutes to one hour. Staff who complete the reading and pre and post surveys will receive one hour of continuing education credit.

Overview of Group Skills Training for Residents
This section provides an overview of the group structure for the modified dialectical behavior therapy group residents will attend and ways staff can support group leaders/facilitators and residents. Group leaders/facilitators will be providers from behavior health services that are supervised by licensed psychologists at Medical Hill.

The dialectical behavior therapy (DBT) group is a group therapy that runs for 10 weeks. Residents will attend this group once a week for 30 minutes. The time, day of the week, and specific room location will be determined by the group leaders/facilitators. Direct care staff will accompany residents to group and provide support as needed during group activities. This includes, but is not limited to resident restroom breaks, snacks, encouraging residents to pay attention and participate, calmly managing disruptive behavior from residents, and answering questions or clarifying information for residents during activities. Staff are encouraged to participate in group activities as this communicates to residents that this is a shared and fun learning experience. On certain weeks residents will be asked to practice skills as homework. Residents will receive a "wall reminder" that they or staff can place on the wall of their room to remind them to practice. For these homework activities staff can assist residents by reminding them to do it, remind them how to do the activity, write information when the activity requires writing, and bring written assignments to the next group to share with everyone.

Outside of group therapy, staff can help residents use skills learned from the DBT group when situations happen. For example, if a resident becomes frustrated during a medical appointment staff can walk them through a breathing exercise (this will be covered in a later section) to help calm the resident. As a staff member, you will begin to learn about DBT skills from this online training and by attending the DBT group with residents. It is intended that residents will use these skills outside of the DBT group with the help of staff that will lead to better relationships and a better quality of life which is the reason why dialectical behavior therapy was first created.
What is Dialectical Behavior Therapy?
Dialectical behavior therapy (DBT) was first created and used with patients back in the early 1990's. It was created for patients with strong emotions, such as anger that often leads to destructive behaviors (e.g., self-injury, suicide). These patients often react with strong emotions or extreme behaviors that are out of proportion to a given situation. These reactions happen frequently and lead to problems with daily living and relationships with others.

Example 1) A person who becomes very angry towards their boss when they receive negative comments about their work.

Example 2) A person in a relationship where there is constant fighting. The person becomes upset and threatens or actually hurts themselves if they think their significant other will end the relationship.

The loss of a job or relationship can negatively impact the person's quality of life especially if these events keep happening.

Dialectical behavior therapy was developed to help people learn about their strong emotions and how to avoid harmful behaviors. They learn how to calm and manage their emotions and express them in better ways. More importantly they are less likely to harm themselves through self-injury or suicide and learn how to live a happier life.

Components of DBT
Dialectical behavior therapy is made up of four different parts. The four sections are:

Mindfulness - becoming aware of thoughts and feelings
Distress tolerance - learning about distraction and relaxation
Emotional regulation - how feelings are expressed with words and actions
Interpersonal effectiveness - how to talk with others when conflicts happen

The remainder of this training will give an overview of each section and related skills that residents will learn about.

Quiz 1:
1. Staff who work directly with the residents are in an optimal position to help residents practice the skills they learn from group therapy.
   a. True
   b. False

2. DBT stands for:
   a. Do Better Things
   b. Dialectical Behavior Therapy
   c. Distress Building Techniques
   d. Distressing Behavior Therapy
3. DBT was created for the purpose of:
   a. Improving relationships and having a better quality of life
   b. Helping with a fear of spiders
   c. Money management
   d. Developing personal space

4. DBT helps people learn to:
   a. Incorporate daily exercise
   b. Always get their way in conflict
   c. Calm and manage their emotions and express them in better ways
   d. Find ways to run away from conflict

5. The four components of DBT are mindfulness, emotion regulation, distress tolerance, and interpersonal effectiveness.
   a. True
   b. False

Module 2: Introduction to Mindfulness

What is Mindfulness?
Mindfulness refers to the ability to fully be aware in the present moment. For many people it is very common to go into autopilot while doing everyday tasks while they are thinking about other things.

Example 1) Thinking about the day ahead of you, such as work that needs to be done or people to take care of while you are brushing your teeth?

Example 2) Driving from home to work you are thinking about other things and before you know it you have arrived at work not remembering the drive.

Being mindful while brushing your teeth or driving to work means you are thinking and paying attention to those activities. You are paying attention to how well you are cleaning each tooth, the feeling of the bristles on your teeth, and the smell of the toothpaste. While you are driving you are being mindful, paying attention to: how fast you are driving, the weather and road conditions, and the cars around you. However, full attention to the moment is only part of practicing mindfulness.

Practicing mindfulness includes remaining non-judgmental about our daily experiences. This means that when we are going about our day, we avoid labeling other people, things, or situations as positive or negative. It means that experiences are approached from a neutral standpoint. By using a neutral approach versus thinking in terms of good or bad we reduce the amount of emotional suffering caused by feeling nervous, angry, or disappointment when things do not go our way.
Applying Mindfulness for Medical Hill Residents
The DBT group therapy aims to help residents learn and practice how to identify their feelings and thoughts. This is the very first step to becoming more mindful. This can be very difficult for people. In the DBT group therapy, residents will receive a Feelings Chart that has different faces showing emotions (e.g., happy, sad, angry). They will use this chart to identify in and outside of group how they are feeling at the moment.

Mindfulness Activity: Focus on Breathing
Residents are led through a breathing exercise where they learn to focus their attention only on breathing. You can advise residents to look at the rise and fall of their belly if that is what helps them focus on breathing. This activity will have residents focus on their breathing for two minutes. Staff can coach residents to do this breathing exercise outside of the group whenever residents become upset or overwhelmed.

“What and How” Skills Activity
Residents are led through an activity where they can engage their different senses (e.g., sight, smell, hearing, touch). Doing this activity helps people be aware in the moment (mindfulness); instead, of thinking about other things. Residents are each handed a different object to hold. They are asked to only focus their attention on the object and use their different senses to explore and describe the object to the group. Staff can help residents calm and recenter themselves in the present moment by giving them an object. This can be a resident's favorite object, such as a football or pillow. Have the resident describe the object to you using their senses (e.g., touch, sight, hearing, smell).

Quiz 2:

1. Mindfulness is:
   a. The ability to fully be aware in the present moment
   b. Always thinking about other people
   c. Having many thoughts at the same time
   d. Thinking about the future

2. To practice being mindful is to:
   a. Think about a dream you had last night
   b. Think about what you have to do at work while cooking dinner
   c. Hold two conversations at once
   d. Pay attention to cleaning each tooth while brushing your teeth

3. “What” and “How” skills include:
   a. Having a conversation with residents about what they are doing wrong
   b. Making a chart with one side talking about “What” and the other side “How”
   c. Giving an object to residents and asking them to use their senses (e.g., sight, smell, hearing, touch)
d. A guessing game

4. The “Feelings Chart” helps residents:
   a. Identify how residents themselves are feeling at the present moment (e.g., happy, angry, sad)
   b. Identify how another person is feeling
   c. What an object feels like
   d. Understand a wide range of emotions in general

5. Practicing mindfulness means that when we are going about our day we avoid labeling other people, things, or situations as positive or negative.
   a. True
   b. False

Module 3: Distress Tolerance
What is Distress Tolerance
This session is designed to teach residents how to get through stressful or uncomfortable situations (e.g., medical appointment, crisis). This teaching is based on the idea that pain and distress are part of life that we cannot always avoid. In fact, when we avoid or fight against pain and distress it creates more suffering. One of the main purposes of DBT is to learn how to accept and live through experiences that are painful and unavoidable. This online training will mainly focus on how to help residents survive through crises. The coping skills related to crisis management include mindfulness-based distraction and relaxation techniques. These skills are meant to be used during times of high stress or crises and not on a daily basis. DBT intends to help people stay present and tolerate uncomfortable moments. However, when moments of high stress and crises do happen people can use skills to lessen the impact of strong emotions so that they do not act out with destructive behaviors making the situation worse. Distraction and relaxation of the body are ways that they can lessen these emotions when in crises.

Distraction Skill
The distraction skill residents learn to use can easily be remembered as “DOT.” This stands for “Do something else, Observe something else, and Think about something else.”

Do something else
Things like reading, drawing, focusing on breathing, or squeezing a ball are different ways that people can distract themselves. The main point here is to physically do something else in the moment that helps keep the attention away from the stressful situation. You are trying to find things to do that will distract you from the painful experience. An example of this might be when a resident is getting a shot or having their blood drawn for testing they can squeeze a squishy ball using the hand not being used for the procedure.

Observe (look at) something else
Looking at other people or things that are happening around them is another way to lessen the impact of stress. Colorful pictures or posters on the wall can help draw a person’s attention away
from a stressful medical procedure. Watching a funny video on a smartphone or laptop can be another way to engage the person's attention.

Think about something else
Thinking about a good memory can be used to distract someone from a stressful situation. Staff can help residents by asking them what they had for dinner the night before, their favorite activity, or any other pleasant memory. Ask them to describe aspects of the memory to you which will help them focus their attention away from the stressful situation.

Relaxation
The other skill for this section is learning how to relax the body using breathing exercises. The purpose of this is to relax themselves until most of the stressful thoughts and feelings pass related to the stressful situation. This section teaches people to take five long deep breaths. This kind of breathing is different from the mindful breathing mentioned in the previous module. This skill requires taking breaths that are deeper, longer, and limited to a count of 5. Taking deep breaths requires more attention and effort which lessens the intensity of the upsetting event. The longer and deeper breaths also promote deeper relaxation. Breathing may sound like an overly simplified skill, but oftentimes when people are upset their breaths are fast and shallow. When breathing is fast and shallow it tells the body to get ready for fight or run away from a threat. By taking slow deep breaths for a count of 5 tells the body that it is okay to relax and that there is no threat. However, it is not easy to do this kind of breathing without constant practice. When people are upset it can be difficult to remember to do this breathing exercise in the moment. That is why residents should practice deep slow breaths on a regular basis and when they are not upset.

Staff can help residents with this exercise by counting to 5 when residents take a breath in and again counting to 5 as they release the breath. Provide encouragement as they do this. If it helps, advise residents to use their stomach muscles to draw in the breath. Playing soft and calming music can also help residents while they practice this skill.

Quiz 3:
1. Distraction skills are best used:
   a. When residents are in a bad mood
   b. While exercising
   c. During crisis situations
   d. Eating dinner

2. DBT teaches that:
   a. Pain and distress are part of life that we cannot always avoid
   b. We need to change who we are
   c. Destructive behaviors are okay
   d. Uncomfortable feelings should always be avoided

3. DOT stands for:
   a. Dogs Or Toys
b. Do something else, Observe something else, Think about something else

c. Digging Outside Today

d. Doing Other Things

4. Relaxation skills involve:
   a. Hanging out with friends
   b. Eating candy
   c. Going on vacation
   d. Breathing

5. Fast and shallow breathing help a person feel calm
   a. True
   b. False

Module 4: Emotion Regulation & Interpersonal Effectiveness
This module will combine the remaining two components of DBT.

Emotion Regulation
The ability for a person to effectively manage their emotions is a central theme to DBT. When a
person has difficulty managing their emotions it often leads to self-destructive behavior (e.g.,
yelling or hitting other people, self-harm behaviors). To demonstrate this, imagine a volcano.
The buildup of heat and pressure leads to an eruption, which causes destruction of the
surrounding people and houses/buildings. The heat and pressure inside the volcano can represent
strong emotions (e.g., anger, fear) and the lava that erupts destroying homes is the destructive
behavior. The skills in the Emotion Regulation module aim to teach people how to know when
their emotions are building heat and pressure before a volcanic eruption happens. Strong feelings
can create the urge to do something (e.g., yell, hit). The first step residents will learn in the DBT
group is how to identify emotions and learn ways to lessen the intensity of that emotion. The
goal is not to get rid of the strong emotion, rather, find better ways to manage it using Opposite
Action.

Identifying Emotions: Emotion Charades Activity
Residents will participate in a game of charades where they will draw an emotion out of a
hat/bag. The goal of the activity is for them to act the emotion out and for others to guess what
emotion it is. By acting out the emotion residents will become more aware of what a feeling
looks like (e.g., facial expression, body posture) and what things they would say when they are
feeling that emotion (e.g., anger, “Everything is bad!”).

Managing Emotions: Opposite Action
Using Opposite Action is an effective way to manage strong emotions. If someone is angry at
another person one way to practice opposite action is to do something nice for them. Or if the
person is angry at a situation, Opposite Action would be for them to walk away from the
situation for a few minutes to cool down. When someone is scared of something, Opposite
Action would be for them to approach their fear. Opposite Action is an attempt to balance the
intensity of an emotion by using behavior. As you are going through this online training you
might feel tired, overwhelmed, or bored. Experiment by smiling and sitting up straight in your chair to see if this changes your emotions in the moment :-).

Interpersonal Skills
This final DBT component teaches many ways for people to effectively manage relationships. Maintaining healthy and fulfilling relationships are a struggle for people who have difficulty managing their emotions. The teaching module for the residents at Medical Hill has been shortened to focus on skills that apply to relational conflict with others.

Relationship skill: GIVE
The skill residents learn to use can easily be remembered as “GIVE.” This stands for:

- **G**entle approach - no yelling, name calling, hitting, or making a fist
- **I**nterested - act interested in what the other person is saying; be curious as to why they are saying what they are saying
- **V**alidate - acknowledge the other person’s feelings, wants, and opinion
- **E**asy Manner - express an easy manner by smiling, being lighthearted, kind, use humor when appropriate, and not interrupt the other person

The group facilitators will provide a role play for how to use GIVE skills. Encourage residents to participate so they can practice these skills. Remind residents to use these skills outside of group when they are talking with others.

Quiz 4:
1. Emotion Regulation teaches:
   a. To ignore emotions
   b. Control other people's emotions
   c. Take medication to calm down
   d. How to identify emotions and learn ways to lessen the intensity of that emotion

2. One way to practice Opposite Action is to:
   a. Hit oneself instead of another person
   b. Do something nice for someone when mad at them
   c. Go to sleep when you are tired
   d. Show people you are angry by glaring at them

3. One way to manage strong emotions (e.g., anger) is to:
   a. Yell at someone
   b. Hit a pillow
   c. Ignore people
   d. Use Opposite Action

4. GIVE stands for Gentle, Interest, Verify, Easy Manner.
   a. True
b. False

5. Relationships with others are a struggle for people who have difficulty managing their emotions.
   a. True
   b. False

Participants complete post-Survey

Thank you for participating in this online training! Please enter your email address to be entered into a drawing for an Amazon gift card.