

Beyond Borderline Personality Disorder: Dialectical Behavior Therapy in a College Counseling Center

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The study investigated the efficacy of a dialectical behavior therapy (DBT) program with a general college counseling center population, not limited to students diagnosed with borderline personality disorder. A review of records of 64 students found that obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, paranoia, somatization, psychoticism, and phobic anxiety decreased, as did overall distress. All four target areas of DBT, namely confusion about self, impulsivity, emotional dysregulation, and interpersonal chaos, also significantly decreased. Limitations and implications for college counseling centers are discussed.

KEYWORDS *college counseling center, coping skills, dialectical behavior therapy*

This article outlines the program implementation and reports on the efficacy of a modified dialectical behavior therapy (DBT) program with a general college counseling center population. Students did not need to be diagnosed with borderline personality disorder in order to participate; instead, the program was open to any client who lacked coping strategies. We modified the program to fit within our college counseling center's short-term treatment approach and semester scheduling.

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DIALECTICAL BEHAVIOR THERAPY

DBT is a treatment approach designed to target four key problem areas—confusion about self, impulsivity, emotional dysregulation and interpersonal chaos—by increasing coping strategies (Linehan, 1993a). Confusion about self refers to difficulty staying present and aware, possible dissociation, identity disturbance, and feelings of emptiness. The mindfulness module targets these behaviors by increasing observational skills, noting the present, increasing the ability to participate fully in events, and doing all this non-judgmentally, effectively, and one-mindfully. Impulsivity refers to detrimental behaviors such as suicidal behaviors, nonsuicidal self-injurious behavior (NSSIB), alcohol and drug abuse, and eating disorder behaviors. The distress tolerance module targets impulsivity by teaching clients about crisis survival strategies such as distraction, self-soothing, and radically accepting the situation. Emotional dysregulation includes intense emotional reactions and extreme mood swings. The emotion regulation module targets this problem area by teaching labeling of emotions, reducing vulnerability to emotions, letting go of emotional suffering, acting opposite of emotions, and increasing positive experiences. Finally, interpersonal chaos refers to ineffective interpersonal relationships. The interpersonal effectiveness module teaches ways to be assertive as well as maintain relationships and self-respect.

The components of a traditional DBT program are skills training group sessions, individual therapy sessions, skills coaching, and consultation team (Linehan, 1993a, 1993b). Traditional DBT programs usually run from 6 months to 1 year, and the skills training group sessions are usually 2.5 hours in length. Modules except mindfulness tend to be 8 weeks in length, with 2 weeks of the core mindfulness module repeating after completion of each of the other three modules. This repetition allows for new members to join the open-ended skills training groups during the core mindfulness module. Traditional DBT programs incorporate DBT-focused individual therapy that allows for in-session skills coaching and the opportunity to solidify skills attained in group.

Additionally, members may receive phone coaching to assist in applying DBT skills and reduce the likelihood of engaging in self-harm or a suicide attempt. Lastly, DBT programs employ a consultation team, made up of all counselors providing DBT, to discuss group members' life-interfering and therapy-interfering behaviors and allow facilitators to demonstrate and teach one another core principles of DBT.

DBT has extensive empirical support in treating borderline personality disorder (BPD), as it was developed for this population (Linehan et al., 2006). Randomized clinical trials have shown DBT has better efficacy than treatment as usual (TAU) in reducing suicidal thoughts and attempts, NSSIB, hospitalization, substance abuse, depression, hopelessness, violence, and anger, while increasing treatment compliance and social adjustment (Evershed et al.,

2003; Koons et al., 2001; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Linehan et al., 1999; Verheul et al., 2003). The Society for Clinical Psychology (Division 12) of the American Psychological Association (2013) and the Substance Abuse and Mental Health Services Administration (2013) have designated DBT as an empirically supported treatment for women with BPD.

DBT has been utilized in inpatient hospital settings and outpatient settings and adapted to target various diagnoses and populations. Adapted DBT programs have proved effective in a number of settings, including community mental health (Turner, 2000), inpatient settings (Bohus et al., 2004), and a male forensic unit (Evershed et al., 2003).

DBT IN COLLEGE COUNSELING CENTERS

Given DBT's success in other settings, college counseling centers may also benefit from using it to teach students coping strategies. Nationwide, college centers are seeing students with more severe psychopathology and have been experiencing increasing demands for service (Benton, Robertson, Tseng, Newton, & Benton, 2003; Erdur-Baker, Aberson, Barrow, & Draper, 2006; Kettmann, Schoen, Moel, Greenberg, & Corkery, 2007; Pledge, Lapan, Heppner, Kivlighan, & Roehlke, 1998). Most recently, center directors estimated that approximately 20% of their students presented with severe concerns (Association for University and College Counseling Center Directors, 2012). Hersh (2013) called for empirically based treatments for borderline personality disorder on college campuses, highlighting the importance of effective assessment and treatment, collaboration on campus and within the community, and the benefit of lessening the stigma of BPD.

Also of importance, Mitchell, Kadar, Haggerty, Bakhai, and Warren (2013), conducting an archival study examining the hospital records of college students who underwent a psychiatric evaluation at a comprehensive psychiatric emergency program in a hospital, found that only 27% of students evaluated were admitted to the psychiatric unit at the hospital. Since college counseling centers cannot assume that students who present with suicide risk will be admitted to the hospital, they need to find a way to provide comprehensive outpatient treatment to reduce students' risk of self-harm and increase their coping strategies.

Little research has investigated DBT programs on campus. Pistorello, Fruzzetti, MacLane, Gallop, and Iverson (2012) conducted a randomized clinical trial in a public university counseling center and concluded that a modified DBT program can be successfully adapted and implemented with severely distressed students who met at least three criteria for BPD. They noted that DBT modifications were necessary because college centers utilize short-term treatment models and operate as training sites. Their study concluded that a comprehensive DBT package, including group, individual

therapy, coaching, and consultation team, was more effective than treatment as usual, results that persisted at follow up.

Engle, Gadischkie, Roy, and Nunziato (2013) outlined a DBT program implemented at a small liberal arts college for students who met full diagnostic criteria for BPD. The program consisted of individual therapy, 60- to 90-minute semester-long skills training groups that focused on mindfulness plus one other module, telephone coaching, and a consultation team for therapists. Engle and colleagues reported reduced psychiatric and substance-use hospitalizations and a higher retention rate when compared with treatment as usual. Meaney-Tavares and Hasking (2013), implementing an 8-week modified DBT group in a college counseling center to treat college students with BPD, found significant decreases in depressive symptoms and BPD traits, increased coping strategies, including problem solving and constructive self-talk, but no reduction in anxiety.

Chugani, Ghali, and Brunner (2013) conducted a pilot study of the efficacy of an 11-week modified DBT skills training class for college students with cluster B personality disorders or traits who also exhibited significant impairments in functioning. The skills training group met for 90 minutes and focused on all four modules. A weekly consultation group (based on the standard DBT consultation group format) was conducted for interested staff members. Phone coaching was provided at the decision and discretion of each individual therapist. Chugani and colleagues concluded that participants in the class significantly benefited across all measured domains, providing preliminary support for the effectiveness of a modified DBT skills training group, and also found a quick reduction in potentially risky or lethal behaviors. This stabilization allowed the focus to shift toward therapy- and quality of life-interfering behaviors and also decreased stress experienced by the individual therapists.

Finally, Kerr, Muehlencamp, and Larsen (2009), conducting a case study at a rural university training clinic, concluded that DBT can be incorporated into a time-limited or brief therapy training model. Although unable to offer a group option, this study found that brief skills training in individual sessions led to reduction in suicidality and misery and gains in skills acquisition. Given that this study only looked at a single case, more research is needed regarding the efficacy of skills training alone.

EXTENDING DBT BEYOND BPD

The previous studies investigated DBT programs in college centers for clients who had characteristics of BPD. Our belief is that many other students could benefit as well from learning coping strategies. Bland, Melton, Welle, and Bigham (2012) indicated that Millennial Students (Generation Y, born after 1982) have a more difficult time navigating stress and often lack effective

coping to manage the transition to college. Millennial students have frequently been sheltered from experiencing pain and have not learned to cope with distressing experiences, according to Twenge (2007). In agreement, Bland and colleagues argue that today's students would benefit from reinforcement of coping mechanisms that increase stress tolerance.

The current study focuses on a program for which students did not need a particular diagnosis or presenting problem; they merely needed assistance in increasing coping strategies. Therefore, the study provides information about the efficacy of an on-campus DBT program with the general client population rather than only students with a borderline personality disorder diagnosis or suicidal ideation. Our article outlines our DBT program and its efficacy in bringing about symptom reduction, as measured by a symptom inventory. Another goal was to understand if the DBT target areas as defined by Linehan (1993a, 1993b)—confusion about self, impulsivity, emotional dysregulation, and interpersonal chaos—decreased as a result of program participation.

METHOD

Participants

A total of 110 students participated in 14 DBT groups, 85 females and 25 males. Ages ranged from 18 to 48, with a mean of 25.53 ($SD = 6.16$) and mode of 20. There were 55 undergraduate, 53 graduate, and two nonmatriculated students. From this total, 64 (58%) completed the group skills training sessions and both pregroup and postgroup assessments. Among these 64 students, 47 were female and 17 were male; 25 were undergraduates, 38 graduate students and one nonmatriculated student; 67% identified as Caucasian, 6% Asian/Asian American, 5% multiracial, 3% Hawaiian/Pacific Islander, 1.5% each for African American, American Indian/Alaskan Native, and Hispanic/Latino, and 14% checked off "other" or "prefer not to answer."

Students completed an initial assessment and were assigned individual counselors. Counselors were able to make appropriate referrals to the DBT program based on identifying students' deficits in behavioral skills. Other inclusion criteria for the program were suicidal ideation, with or without intent and/or plan; NSSIB; substance use/abuse; eating disordered behaviors; unsafe sexual practices; impulsive behaviors such as gambling and shopping; and a general lack of coping strategies. Exclusion criteria included unmanaged active psychotic symptoms, being a danger to others, or being unwilling to fully commit to participating in group and following group guidelines. In practice, students were only screened out due to lack of commitment, as counselors did not refer psychotic or dangerous clients.

Students did not need to meet diagnostic criteria for BPD. Of the 64 students who completed the group, five (8%) were diagnosed with BPD.

In terms of other Cluster B personality disorders, only one student (2%) diagnosed with antisocial personality disorder completed the group. In other words, only 9% of the students who finished the group had a Cluster B diagnosis, including BPD. The following are the primary Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Axis I diagnoses for the students who completed the group: depressive disorders (19%), anxiety disorders (19%), adjustment disorders (17%), V-codes (17%), eating disorders (16%), substance abuse (3%), obsessive-compulsive disorders (3%), bipolar disorders (2%), mood disorders unspecified (2%), post-traumatic stress disorders (2%), and attention-deficit/hyperactivity disorders (2%).

Counselors

Five licensed professional staff members participated in a 10-day intensive DBT training facilitated by Behavioral Tech, founded by Marsha Linehan, the developer of DBT. The remaining 15 staff members, including social workers, psychologists, and predoctoral psychology interns, received 20 hours of online training through Behavioral Tech. In addition, trainees from graduate programs in the disciplines of psychology, social work, and mental health counseling received didactic group training from staff who attended the intensive DBT training. All DBT groups were co-led by two counselors, with at least one counselor having intensive training, the second counselor either having intensive training or having received online training. The one exception was a group cofacilitated by an intensively trained counselor and a predoctoral psychology trainee who took a doctoral level class on DBT.

Measures

The Brief Symptom Inventory (BSI) and the Life Problems Inventory (LPI) were administered to participants at the first group session and then again at the last group session of each DBT group. The BSI (Derogatis, 1993) is a 53-item symptom checklist using a 5-point Likert scale (from *not at all* to *extremely*) to assess various symptoms. The nine symptom scales are Depression, Anxiety, Interpersonal Sensitivity, Hostility, Somatization, Obsessive-Compulsive, Phobic Anxiety, Paranoid Ideation, and Psychoticism. The three global indices are a Global Severity Index which looks at overall distress, a Positive Symptom Total which adds the number of symptoms that are endorsed above a zero, and a Positive Symptom Distress Index measuring intensity of distress. Cronbach's α for all items in the measure for the present study's sample is .93, suggesting adequate reliability. Internal consistency for each subscale is: .84 for Depression, .75 for Anxiety, .64 for Interpersonal Sensitivity, .46 for Hostility, .83 for Somatization, .79 for Obsessive-Compulsive, .63 for Phobic Anxiety, .75 for Paranoid Ideation, and .60 for Psychoticism.

The LPI (Rathus & Miller, n.d.) is a 60-item checklist using a 5-point Likert scale. The LPI measures the behaviors targeted by DBT treatment, addressing Confusion about Self, Impulsivity, Emotion Dysregulation, and Interpersonal Chaos. Participants are asked to read statements and assign a number (1 = *not at all like me* and 5 = *extremely like me*). The LPI does not have normed cut-off scores and so is used as a comparison for before and after group participation. Cronbach's α for all items in the measure for the present study's sample is .94, suggesting sound psychometric properties. Internal consistency for each subscale is: .87 for Confusion about Self, .72 for Impulsivity, .88 for Emotional Dysregulation, .86 for Interpersonal Chaos.

Procedures

Clients participated in a 30-minute group screen to determine whether they would fit with the group's goals and were willing to commit to the group for the semester. Immediately before the first group, clients completed the BSI and LPI. Group sessions lasted between six and 13 weeks, depending on recruitment procedures. At the last group session, group participants again completed the BSI and LPI as part of program evaluation. The current research was completed using the records review of these testing instruments.

DBT Program

The DBT Team implemented a modified version of Linehan's (1993b) DBT protocol due to session limits for individual therapy and the semester schedule. DBT treatment consisted of weekly 90-minute skills training group sessions, biweekly individual sessions, and skills coaching (via telephone or in person) to help participants generalize skills outside of the counseling setting. There was also a therapist consultation team.

From Spring 2011 through Spring 2013, the team facilitated 14 DBT Groups. Due to working within the semester, group skills training sessions ranged from six to 13 weeks, depending on the time required for recruitment for the group. These groups included skills from all four modules (mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness). The length of the modules varied based on the number of weeks of the training sessions (see Table 1 for 12-week group schedule). For example, the 11-week group consisted of 3 weeks each of mindfulness, distress tolerance and emotion regulation, 1 week of interpersonal effectiveness, and 1 week to review and terminate. At the other extreme, we also ran a 6-week group due to recruitment difficulties, which consisted of 2 weeks each of mindfulness, distress tolerance, and emotion regulation, while eliminating interpersonal effectiveness.

TABLE 1 Schedule for Coping Skills Group

Week	Module	Skills
1	Mindfulness	Introduction (Group Rules, Structure of Group, Phone Coaching, General Handout D) Wise Mind
2	Mindfulness	Observe, Describe, Participate
3	Mindfulness	Nonjudgmental, One-mindful, Effective
4	Distress Tolerance	ACCEPTS Self-Soothe
5	Distress Tolerance	IMPROVE the Moment Pros & Cons
6	Distress Tolerance	Radical Acceptance Willingness
7	Emotion Regulation	Three Goals Myths about Emotions
8	Emotion Regulation	Model for Describing Emotions What Good Are Emotions? PLEASE Master Steps for Increasing Positive Emotions Big List of Pleasurable Activities (McKay, Wood & Brantley, 2007, pp. 15–16)
9	Emotion Regulation	Letting Go of Emotional Suffering Opposite Action
10	Interpersonal Effectiveness	DEAR MAN
11	Interpersonal Effectiveness	GIVE FAST
12	Wrap Up	Review, answer questions, practice DEAR MAN, say goodbye

Note. All skills are adapted from Linehan (1993b) except where noted.

All group skills training sessions followed a similar structure. Sessions opened with a mindfulness exercise followed by debriefing. Mindfulness exercises included focusing on breathing and bringing one's awareness and attention to thoughts, feelings, and physical sensations. Then, students reviewed homework by discussing an event where they either were successful or struggled to practice skills. During the week, students completed a diary card providing the information needed for homework review, including the event, feelings, thoughts, skills practiced, and Subjective Units of Distress (SUDS) before and after using skills. Homework review took approximately 45 minutes, during which cofacilitators provided skills coaching to students. Didactic education of new skills followed. The session closed with students identifying significant items they learned from group and then committing to practice a skill in the coming week.

Group members were required to be in concurrent individual therapy. All students engaged in individual therapy at the counseling center except for one who saw an off-campus provider. Students generally met with counselors biweekly due to the center's 14-session limit per academic year. Since the center subscribes to a generalist practitioner model and respects theoretical diversity among the clinical staff, participants did not

necessarily receive DBT in individual therapy, but all individual therapists agreed to review DBT skills to help participants master and generalize skills. Counselors reviewed the student's diary card to reinforce the use of skills, and every week they were e-mailed handouts of the skills students were being taught. Additionally, group facilitators and individual counselors often informally consulted about potential student difficulties such as attendance, self-harm, and progress in skill utilization.

All clinical staff and psychology interns were expected to know the DBT skills in order to provide skills coaching. Distressed students were encouraged to call for coaching before engaging in self-harming behaviors. During a call, counselors conducted a brief lethality assessment and helped students decide which skills could be helpful in that situation. Students could also utilize skills coaching during business hours by walking into or calling the center. After-hours phone coaching took place through the center's existing after-hours on-call system. Counselors had access to the skills through the handouts included in the on-call folder.

The DBT consultation team met biweekly and consisted of the group leaders facilitating the skills training sessions during that semester. The consultation team meetings set an agenda at the start of each meeting following a mindfulness exercise and debriefing, which focused on discussing students in the DBT program who were at risk or were engaging in self-harm and/or therapy interfering behaviors, or who were at academic risk, for example, academic probation, dismissal from the academic program, or dismissal from the university. Lastly, the consultation team discussed counselors' challenges to delivering the best treatment while also providing an opportunity to practice DBT skills and principles. The most common challenge was for counselors to use nonjudgmental language. When a counselor made a judgmental comment, a consultation member would sound a bell and ask the counselor to restate the comment using descriptive rather than judgmental language. This gave the team the opportunity to practice skills, an important DBT tenet, within the confines of the consultation team.

RESULTS

Results are reported for participants who completed measures at pretest and posttest. A repeated measures ANOVA was used to identify differences between pretest and posttest scores. On the Life Problems Inventory, two students' data were not used because they did not complete the back side of the instrument. Four students skipped one question, so the mean for the subscale was substituted for those items so that the data could be included in the analysis. Results for the LPI and BSI are presented in [Table 2](#). Since the LPI is designed to measure the four DBT targets, these findings suggest good

TABLE 2 Brief Symptom Inventory and Life Problems Inventory Results

Scale and subscale	Pretest mean (SD)	Posttest mean (SD)	<i>F</i>	Sig.	Effect size
Brief Symptom Inventory (BSI)					
Somatization	.75 (.78)	.58 (.57)	4.13	.046	.062
Obsessive-Compulsive	1.91 (.96)	1.57 (.96)	11.56	.001	.155
Interpersonal sensitivity	2.10 (.94)	1.59 (1.03)	19.12	.000	.233
Depression	1.73 (1.09)	1.32 (.98)	14.95	.000	.192
Anxiety	1.65 (.89)	1.22 (.78)	17.26	.000	.215
Hostility	.78 (.65)	.67 (.71)	1.50	.225	.023
Phobia	.70 (.75)	.55 (.65)	4.12	.047	.061
Paranoia	1.42 (1.05)	.99 (.82)	19.33	.000	.235
Psychoticism	1.27 (.81)	.99 (1.20)	4.925	.030	.073
Global severity index	1.35 (.61)	1.04 (.60)	23.56	.000	.272
Positive symptom total	30.36 (10.12)	27.48 (10.43)	7.13	.010	.102
Positive symptom distress index	2.28 (.52)	1.87 (.63)	32.22	.000	.338
Life Problems Inventory (LPI)					
Confusion about self	38.30 (11.84)	31.98 (12.03)	42.79	.000	.412
Impulsivity	24.35 (7.07)	21.42 (5.55)	26.20	.000	.300
Emotional dysregulation	32.19 (10.31)	27.45 (9.88)	19.24	.000	.240
Interpersonal chaos	34.59 (11.12)	28.59 (9.41)	31.27	.000	.339
Total	129.43 (33.77)	109.33 (31.10)	43.44	.000	.416

efficacy in accomplishing the goals of the program. Behaviors associated with all four areas decreased.

Next, a series of one-way ANOVAs was conducted to see if there were differences in BSI change scores based on the length (number of weeks) of each group. No significant differences were found on any of the BSI scores. The length of group did not have an effect on the magnitude of the reduction of symptoms, as measured by the BSI.

A series of one-way ANOVAs was conducted to see if there were differences in LPI change scores based on the number of weeks of each group. No significant differences between groups were found.

DISCUSSION

DBT is traditionally utilized in the treatment of clients with BPD. Much of what is known regarding DBT effectiveness was found through investigations with this target population. The goal of the current study was to determine if DBT is also a valuable clinical modality for the general college student population in developing coping skills. The DBT program implemented in our center targeted the behaviors traditionally addressed through DBT programs: confusion about self, impulsivity, emotional dysregulation, and interpersonal chaos. Group participants showed significant reduction of behaviors targeted

in all four of these areas, consistent with prior research focusing on treatment of clients with BPD (Koons et al., 2001; Linehan et al., 1991, 2006; Martens, 2005; Verheul et al., 2003). The improvement in DBT target behaviors suggests that the program is effective in helping students, not solely those with borderline personality disorder, improve coping skills.

Our study's findings were largely, but not entirely, consistent with previous DBT studies. As in our study, meaningful reductions in depression (Lynch et al., 2007; Meaney-Tavares & Hasking, 2013; Pistorello et al., 2012; Ritschel, Cheavens, & Nelson, 2012) and anxiety (Ritschel et al., 2012) were found, presumably as a result of skills training though most importantly in the emotion regulation and distress tolerance modules. In contrast to the present study however, Meaney-Tavares and Hasking (2013) did not find significant reductions in anxiety with a college student population, perhaps due to a smaller number of participants (23), the use of a different anxiety inventory (the Beck Anxiety Inventory) or the fact that Meaney-Tavares and Hasking, unlike our study, only enrolled students with a BPD diagnosis. Also consistent with previous studies was our study's observed improvement in interpersonal sensitivity (Lynch et al., 2007), as measured by the Interpersonal Sensitivity scale, which focuses on feelings of inferiority, self-deprecation, and interpersonal difficulties (Derogatis, 1993). These characteristics are targeted throughout the skills training, beginning with the mindfulness module through interpersonal effectiveness in the final module.

The results of this study also revealed improvements in several areas that have not been observed in previous DBT studies, including obsessive-compulsive, psychotic, somatic, paranoid ideation, and phobic anxiety symptoms. The Obsessive-Compulsive scale includes items likely targeted by the mindfulness module, including difficulty concentrating and mind going blank (Derogatis, 1993). The Psychoticism scale looks at a range of behaviors from interpersonal alienation and withdrawal to hallucinations, symptoms that may have been addressed in the mindfulness module's focus on being present and aware of surroundings and the focus on social promotion found in emotion regulation and interpersonal effectiveness. The Somatization scale measures distress caused by physiological symptoms, which may have been targeted by the mindfulness module's emphasis on embodiment and the distress tolerance module's acceptance of pain without leading to further suffering. Describing "just the facts" in the Mindfulness module may have helped students reduce suspicion and judgment and hence paranoid ideation. The Phobic Anxiety's scale focus may have been addressed by the "acting opposite" skill in emotion regulation, in which students were encouraged to approach, rather than avoid, fears. Finally, there was a reduction in the amount and intensity of overall distress, which was hardly surprising given the significant decreases on the subscales.

The Hostility scale did not decrease significantly. One possible explanation is its low internal consistency and range restriction.

The number of weeks the group met did not impact the outcome. For the most part, students received the same skill set in all groups, although longer groups taught skills at a slower pace and allowed more time to practice. This finding suggests that the group does not need to meet for an extended time to have therapeutic impact; the most important component of the group is teaching the DBT skills. One implication is that groups can still run even if unable to start early in the semester. Future research may investigate the optimal group length.

Clinical Implications

The current study bolsters other recent studies suggesting that DBT programs may be successfully adapted to fit college counseling centers' needs (Chugani et al., 2013; Engle et al., 2013; Kerr et al., 2009; Meaney-Tavares & Hasking, 2013; Pisterello et al., 2012). Given the finite resources at most centers, future research may focus on analyzing which components of the DBT program are critical to success on campus, consistent with a recommendation by Pisterello and colleagues (2012). All of the DBT components may not be necessary inasmuch as the presenting problems of students are likely not as severe as clients in a DBT program in a hospital or community setting. Knowing the critical components that provide students benefit would allow college centers to implement the most effective program while using the least amount of resources.

As mentioned earlier, Bland and colleagues (2012) argue in light of today's college students' poor coping strategies and low stress tolerance that coping strategies should be taught in general health classes and first year experience classes. Often, students in the Coping Skills groups commented that all students should be required to take a course on coping strategies. Campuses may benefit from teaching certain skill modules in nontraditional settings such as the classroom or as outreach programming. Future research could focus on the efficacy of these ways of teaching coping skills to a greater number of students, including some students who would not be willing to go to the counseling center.

Our experience generated a few recommendations to aid retention. Graduate students tended to be more likely to persist in group, so we recommend that individual therapists spend some session time addressing possible therapy-interfering behaviors particularly with undergraduate students. Group therapists would also benefit from monitoring behaviors that may be a sign of ending group (e.g., attendance, tardiness, lack of participation) and encourage the student to utilize skills to prevent these behaviors. Also to encourage retention, group therapists may want to consult with individual therapists, and consultation teams should monitor students to try to find ways to keep them invested in the group.

Limitations

The study has a number of limitations. Though our study was larger in enrollment than two prior on-campus DBT studies, the number of participants was still small, requiring caution about generalizing from the findings. Additionally, the study lacked a control group and random assignment. Instead, students were referred to the group based on a need to increase coping strategies and were accepted if they had goals consistent with the group and could commit to the group time throughout the semester. Although the DBT program was effective in reducing target behaviors and symptoms within the general counseling center population, this design does not allow one to conclude that the program is more effective than treatment as usual or no treatment at all, despite Pistorello and colleagues' (2012) finding that DBT could effectively be adapted into a college counseling center with better results than treatment as usual.

Our program experienced a high attrition rate. It began with a three-miss rule, which led to students being asked to leave group near the end of the term, leading to even further attrition. As the rule did not make good clinical sense, we eliminated it. This change allowed students to stay in the group for a longer period of time and to complete the posttest assessments. Given that few students were affected by this rule change, we cannot determine how it impacted results. It is possible that some of the results are a function of the more motivated students staying in treatment. Future research should include an analysis of variables, including the pretest measures, to predict premature termination in order to identify and target at risk groups.

A final limitation of our study is that individual counselors did not necessarily practice DBT, similar to Chugani and colleagues' (2013) study. All counselors were trained in the DBT skills and were asked to reinforce skill usage and to help to generalize skills. The research team did not evaluate interactions in individual therapy to determine whether the differences in therapy style may be significant. Future research might look at the impact of a DBT individual counselors versus non-DBT counselors for students participating in the Coping Skills Group.

In conclusion, the DBT program investigated here was effective at reducing general mental health symptoms as well as the four areas targeted by DBT: confusion about self, impulsivity, distress tolerance, and interpersonal effectiveness. Students did not need to be diagnosed with borderline personality disorder to participate in the group, suggesting that a DBT program may have benefit to a larger group of students than solely this one clinical group. DBT programs on college campuses may be helpful for students with impulsive behavior and other borderline personality disorder traits as well as other students who are in need of more effective coping strategies.

ACKNOWLEDGMENT

We thank Dr. Sharon Mitchell for her support of the DBT program and our training as well as her comments on an earlier draft.

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