



Decreasing stress and supporting emotional well-being among senior nursing students: A pilot test of an evidence-based intervention



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ABSTRACT

Background: Nursing students can experience stress related to their academic and practice experiences, which can have deleterious effects on physical and emotional well-being.

Objectives: To pilot test an evidence-based intervention, Dialectical Behavior Therapy-Skills Group, designed to promote emotional well-being among nursing students.

Design: A single group, pre-posttest design, mixed-method approach.

Setting: A large university situated in a multicultural urban setting.

Participants: Senior undergraduate nursing students (n = 31).

Methods: Students participated in an 8-week modified Dialectical Behavior Therapy-Skills Group (DBT-SG) intervention. Quantitative and qualitative data were collected to explore the interventions' feasibility, acceptability, and students' perceptions of its applicability to practice. Students also completed standardized outcome measures of psychological distress and emotional well-being pre- and post-intervention to evaluate preliminary effectiveness.

Results: Overall feedback was positive, with participants describing how skill modules helped them establish relationships and manage stress in clinical, academic, and personal settings. Significant reductions in stress and improvements in well-being were also reported.

Conclusion: Results suggest that DBT-SG offers a promising approach for mitigating nursing students' stress by helping them acquire practice-relevant strengths and self-care strategies. Further research is required to examine the effectiveness of DBT-SG among other nursing student groups, as well as to explore optimal approaches to delivering this intervention in conjunction with nursing curricula.

1. Introduction

Students pursuing higher education experience significant expectations and demands which can result in stress and anxiety, as well as compromising academic success and personal well-being (Hassed and Chambers, 2014). This is most evident among nursing students, who are required to manage academic demands; social and personal stresses associated with attending university; as well as additional stresses experienced in the clinical environment (Pulido-Martos et al., 2012; Timmins et al., 2011). Specifically, emotional challenges associated with patient or family suffering and death, as well as difficult interpersonal relationships in the practice environment, contribute to the high degree of stress experienced by students (Moridi et al., 2014; Pulido-Martos et al., 2012). Of particular concern is the negative impact of stress and its effect on students' physical and emotional well-being (Jimenez et al., 2010), and future roles as clinicians (Rudman and

Gustavsson, 2012). Therefore, there is an urgent need for interventions to minimize distress and to support emotional well-being for this student population.

Despite the high levels of stress and negative emotional sequelae reported by nursing students, limited attention has been given to developing strategies to mitigate them. Accordingly, an intervention that supports students to develop skills in emotional regulation may increase their capacity to navigate the stressful aspects of clinical practice. One such intervention is Dialectical Behavior Therapy (DBT) (Linehan, 1993). DBT is based on an understanding that difficulties in coping with a diverse range of life challenges are related to inadequate emotional regulation. It is an empirically supported intervention designed to address a variety of mental health challenges, such as anxiety, mood disorders, disruptive and self-harm behaviors, among others (Miller et al., 2007). Despite evidence supporting the effectiveness of DBT in reducing emotional distress among people managing a variety of

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<https://doi.org/10.1016/j.nedt.2019.02.009>

Received 6 October 2018; Received in revised form 23 January 2019; Accepted 12 February 2019

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challenging life situations, to our knowledge, this intervention has not been tested, as yet, among nursing students. Thus, the purpose of this study was to pilot test a modified DBT intervention designed to support nursing students in managing stress. It was anticipated that the intervention would reduce psychological distress and improve emotional well-being among this group.

2. Background/literature review

Nursing students can experience high levels of stress (Alzayyat and Al-Gamal, 2014; Moridi et al., 2014). While sources of stress may vary, experiences with clinical practice are identified consistently as among the most stressful situations that nursing students encounter. Several studies have specifically examined the practice sources of students' stress (Alzayyat and Al-Gamal, 2014; Jimenez et al., 2010; Moridi et al., 2014; Pulido-Martos et al., 2012; Timmins et al., 2011) and three broad areas of stressors have been reported 1) concerns related to providing care for patients including confidence in nursing skills and knowledge, and perceived discrepancies between theory and practice; 2) witnessing pain and suffering, including not knowing how to help patients and families with psychosocial problems; and 3) interpersonal relationships with patients, families, staff and educators.

Experiences of stress can have a profound impact. Several deleterious outcomes have been associated with high levels of stress among nurses and nursing students. Negative effects of stress include poor physical and mental health (Jimenez et al., 2010), limited self-care, engagement in potentially harmful behaviors (Timmins et al., 2011) and burnout (Rudman and Gustavsson, 2012). Additionally, mental well-being has been reported to be worse in senior students (Timmins et al., 2011), reinforcing the importance of addressing stress in this group. Of concern is the increasing level of burnout symptoms, such as emotional exhaustion, as students progress through the program (Rudman and Gustavsson, 2012). Notably, higher levels of burnout have been associated with poorer individual (mood and life satisfaction) and occupational outcomes (turnover intentions and reduced mastery of tasks), both at graduation and one year later (Rudman and Gustavsson, 2012). These results underscore the need to develop strategies to assist senior nursing students to manage stress, particularly associated with clinical practice.

While some attention has been given to exploring strategies to reduce stress in undergraduate nursing students, much of the research has focused on curriculum development, with mixed findings (Turner and McCarthy, 2017). However, it has been observed that the extent to which nursing curricula “prepare students to deal with emotional aspects of nursing is unclear” (Timmins et al., 2011, p. 765). Further, the number of studies addressing how best to reduce stress in nursing students is limited, with few being grounded in a theoretical perspective (McCarthy et al., 2018). Several studies have explored mindfulness-based approaches to decrease stress among nursing students. Specifically, these studies have demonstrated that mindfulness-based programs are effective in reducing depression, anxiety, negative thinking, and stress, as well as increasing mindful awareness, sleep and concentration (Song and Lindquist, 2015; Van der Riet et al., 2015). Although these preliminary positive results suggest that mindfulness practices are helpful in alleviating the experience of distress for nursing students, there is some evidence to suggest that mindfulness alone does not provide students with sufficient breadth of skills to learn how to effectively deal with stress at the personal and professional level. In particular, a systematic review of interventions to reduce stress in nursing students concluded that stress interventions should be theory-based and multi-faceted, including skills for dealing with stressful situations and changing problematic thoughts (Galbraith and Brown, 2011). Thus, given the complexity of stress experienced by nursing students, novel interventions are needed to assist students to mitigate stress and its effects.

One such evidence-based intervention is Dialectical Behavioral

Therapy (DBT). DBT has demonstrated effectiveness in reducing emotional distress, including depression, anxiety, and self-harm, in adult and adolescent populations (Dimeff and Koerner, 2007; Miller et al., 2007). As such, it promises to improve the well-being of undergraduate nursing students. Further, two studies have shown DBT to be effective in alleviating university students' psychological distress. Specifically, one study where the full multi-component DBT intervention was implemented demonstrated significant improvements in emotional distress (Pistorello et al., 2012). An additional study (Rizvi and Steffel, 2014) tested an abbreviated 8-week version of DBT skills group, which focused primarily on emotion regulation and demonstrated improvements in emotion regulation, skills use and functioning. Thus, implementing and evaluating one DBT component specifically, the DBT skills group (DBT-SG), with undergraduate nursing students extends the research previously undertaken in this area and has potential to effectively address stress experienced by these students.

DBT is a theory-based intervention that decreases distress and enhances individuals' capacity to cope with life difficulties by learning to: withstand emotional distress and regulate emotions; as well as to be more mindful in order to enhance interpersonal relationships and overall sense of self (Linehan, 1993). A critical component of the DBT intervention is the skills group (DBT-SG) that is offered on a weekly basis. DBT-SG operates through two mechanisms important to undergraduate nursing students: 1) actively engaging participants in learning to manage emotional distress, and regulate emotions over a relatively short time frame; as well as 2) emphasizing problem solving skills, and the development of relationship skills applicable to other life situations. Theoretically, DBT (Linehan, 1993) is based on the idea that a diverse range of difficulties in coping with life challenges can be understood in terms of inadequate emotional regulation. DBT consists of cognitive behavioral methods in combination with acceptance-based approaches, which originated in mindfulness Zen philosophy (McMain et al., 2001). Accordingly, mindfulness skills are an important component of the DBT-SG intervention.

In addition, DBT emphasizes a dialectical philosophy, which highlights the need for synthesis of natural tensions between opposing forces to achieve a sense of balance (Chapman, 2006). Dialectical philosophy is realized in DBT through the recognition of the need for simultaneous acceptance of the self, as well as striving for continued growth and change (Chapman, 2006). Specifically, DBT focuses on validating the individual's challenges within the context of supporting needed change. Thus, by assisting nursing students to understand and learn to regulate their emotional response to stressful experiences, as well as developing effective interpersonal skills, it was anticipated that DBT-SG would reduce psychological distress and improve emotional well-being.

3. Methods

A single group, pre-posttest design, mixed method approach was used to pilot-test a modified DBT-SG intervention among senior undergraduate nursing students. The Research Ethics Board at the University approved the study and all participants provided written consent. The specific aims were to: 1) examine the feasibility and acceptability of the DBT-SG intervention in an educational setting; 2) explore students' experiences with the intervention and their perceptions of its applicability to practice and 3) evaluate the preliminary effects of the DBT-SG on the outcomes of psychological distress and emotional well-being.

3.1. Sample and recruitment

The sample was recruited from students in the final year of the Bachelor of Science in Nursing (BScN) program at a large university situated in a multicultural urban setting. There are two undergraduate nursing programs: 1) a 4-year BScN collaborative program between two

college partners and one university, and 2) a post-diploma degree program for Registered Nurses, bridging Registered Practical Nurses and bridging internationally educated nurses; all of whom are upgrading to a BScN degree. All students in the final year of both BScN programs were eligible to participate. Prior to the start of each semester, students were informed about the study via the list-serves of the respective programs, through information posted on the online announcement page for the clinical placement courses, and class talks conducted by the Research Assistant (RA). The target sample size for the study was a minimum of 30 participants. Sample size estimation considered the pilot nature of the study and its focus on testing the feasibility and acceptability of DBT-SG in a student population.

3.2. The DBT-SG intervention

DBT-SG is a manualized intervention (Linehan, 1993), which the research team adapted by (i) decreasing the total number of sessions from 16 to 8, in order to facilitate student involvement and (ii) incorporating examples relevant to nursing students. The adapted intervention included three modules, each offered over 2 sessions and covering core DBT skills (distress tolerance, interpersonal effectiveness, emotion regulation), along with an orientation and closing session. Skills modules were comprised of didactic content, role play and take-home work sheets. All modules included a review of the principles of DBT and core mindfulness was repeated at the beginning of each. Weekly sessions were 1.5 h in duration and were co-led by two facilitators. Participants were given the option of counting session attendance as a professional development activity, which was credited toward clinical hours. Upon completion of the sessions, participants were offered a \$25 gift card in acknowledgement of participation.

3.3. Quantitative data collection and analysis

To assess feasibility, data were collected regarding the numbers of students who: (i) expressed interest, (ii) enrolled (consented), (iii) declined enrollment and reasons for refusal (if available), and (iv) completed the intervention; including total number of sessions attended.

Students' ratings of acceptability were assessed with adapted versions of 1) *Treatment Acceptability and Preference (TAP)* scale (Sidani et al., 2009) where participants rated the appropriateness, effectiveness, and convenience of DBT-SG on a 5-point scale ranging from *not at all to very much*, and 2) *Satisfaction with Treatment measure (SWTM)* a 27-item measure covering six domains a) suitability and utility of the DBT-SG modules, b) attitude toward and desire to continue with the treatment, c) competence and interpersonal style of therapist, d) implementation of treatment, e) improvement in stress and in everyday functions, and f) attribution of the experienced outcomes to the treatment (Sidani et al., 2017).

To evaluate preliminary effectiveness, outcomes were measured at baseline (pretest) and after completing the DBT-SG (posttest). Five established self-report questionnaires with sound psychometric properties were used to assess psychological distress and emotional well-being.

Psychological Distress. *Depression Anxiety Stress Scales (DASS)-21* (Antony et al., 1998; Lovibond and Lovibond, 1995): A 21 item instrument used to measure depression, anxiety and stress within the past week. Cronbach's alpha ranged from 0.67 to 0.90 in the present study. **Emotional Well-being.** 1) *Toronto Mindfulness Scale (TMS)* (Lau et al., 2006): A 13-item measure with a 5-point Likert response format to assess the acquisition of curiosity and de-centering (from thoughts and feelings); core characteristics that are cultivated with mindfulness practice. Cronbach's alpha in this study was > 0.80. 2) *Self-compassion Scale (SCS)* (Neff, 2003): A 26-item scale measuring self-compassion with a 5-point Likert response format. This scale assesses self-kindness, self-judgment, common humanity, mindfulness and over identification. In this study Cronbach's alpha was ≥ 0.90 . 3) *Resilience Scale (RS)* (Wagnild and Young, 1993): A 25-item self-report scale with a 7-point

Likert response format capturing personal competence and acceptance of self and life. In our study, Cronbach's alpha for the RS was ≥ 0.89 . 4) *WHO-FIVE Well-Being Index (WHO-5)* (World Health Organization, 1998): A 5-item questionnaire using a 6-point rating system from 0 to 5, based on how individuals have been feeling in the past two weeks. Cronbach's alpha ranged from 0.67 to 0.84.

Descriptive statistics were used to characterize the demographic profile of participants, as well as responses to the study questionnaires. Total scale and subscale scores were computed (as the mean across respective items) to quantify the outcomes and paired *t*-tests were performed to examine changes in outcomes from pretest to posttest. Cohen's *d* statistic was computed to estimate the effect size of the change.

3.4. Qualitative Data Collection and Analysis

Upon completion of the DBT-SG sessions, participants had the opportunity to participate in a focus group interview to share their experiences. A semi-structured interview guide was developed to elicit students' perception of DBT-SG (e.g., its usefulness, challenges and facilitators to its use in practice, and its effectiveness in enhancing students' ability to initiate and sustain therapeutic relationships with patients). Additionally, students were asked to comment about the impact of DBT-SG on academics, personal well-being and professional practice. Three focus groups were held with 25/31 students (group sizes ranged from 6 to 12). Focus group interviews were facilitated by a study RA and audio-recorded and/or documented by the facilitator with detailed notes. Sessions lasted approximately one hour. Qualitative comments were also provided by 26 participants in response to two open-ended questions embedded in the SWTM. Focus group recordings/facilitator notes and students' written comments were transcribed verbatim and were analyzed using qualitative content analysis (Schreier, 2014) to categorize patterns in the responses according to interview questions.

4. Results

Recruitment began in Fall 2015 and was completed in Winter 2017. During this time, a total of 87 students contacted the RA to learn more about the study; 40 students indicated they were interested and available to participate and 47 were interested, but unable to attend. Of the 47 unable to attend, 19 cited scheduling conflicts/availability and 1 cited personal reasons; the remaining 27 did not provide a reason. Finally, we were unable to accommodate 3/40 students who were interested and able to attend, due to space constraints (this was based on a first-come first-serve basis). As such, 37 students were enrolled in the study across three waves (Fall 2015; Fall 2016; Winter 2017). Initial group sizes ranged from 10 to 15 across the waves and of the 37 students who were enrolled (consented), 31 (84%) completed the intervention.

Demographic characteristics of participants are displayed in Table 1. They ranged in age from 20 to 35 years ($M = 23$) with the majority of participants identifying as female (97%) and single (84%). Most participants indicated that they did not have any previous post-secondary education (68%) or previous healthcare experience (65%).

4.1. Acceptability

Scores for the TAP and SWTQ scales are reported in Table 2. Responses on the TAP revealed that overall, participants found the intervention to be effective, appropriate and convenient. Similarly, responses to the SWTQ reflected overall high ratings of satisfaction across most domains. Overall, participants reported a positive attitude toward the intervention and high levels of satisfaction with the suitability and perceived benefits of DBT-SG.

Table 1
Participant characteristics at baseline (n = 31)^a.

Variable	Range	M	SD
Age	20–35	22.97	3.08
	Frequency		Percentage
Sex			
Male	1	3.2	
Female	30	96.8	
Marital status			
Single	26	83.9	
Married/commonly law	5	16.1	
Previous post-secondary education			
Yes	10	32.3	
No	21	67.7	
Highest level of post-secondary education ^b			
Diploma	3	9.7	
Partial degree	3	9.7	
Degree	6	19.4	
Other	1	3.2	
Previous healthcare experience			
Yes	11	35.5	
No	20	64.5	
Role and practice area ^b			
Receptionist/unit clerk	3	9.7	
Student intern/extern	4	12.9	
Registered practical nurse	1	3.2	
Other	4	12.9	

^a Some missing data.

^b Respondents could select more than one response.

Table 2
Descriptive statistics of treatment acceptability measure and satisfaction with treatment questionnaire subscales (n = 31).

Subscale	Possible range	Range	M	SD
Treatment Acceptability Measure (TAP)				
Effectiveness	0–8	2–7	5.00	1.44
Appropriateness	0–8	2–8	5.65	1.68
Convenience	0–12	3–11	6.39	2.22
Total	0–28	8–25	17.03	4.32
Satisfaction with Treatment Questionnaire (SWTQ)				
Suitability	0–12	3–11	7.71	1.90
Utility	0–16	3–15	10.97	2.42
Attitude toward treatment	0–8	4–8	6.13	1.15
Desire to continue treatment	0–8	1–8	5.90	1.76
Perceived benefits – health problems	0–24	7–23	16.68	3.71
Perceived benefits – functioning	0–20	7–19	13.55	2.83
Discomfort	0–4	0–3	0.19	0.60
Therapist – competence	0–12	7–12	11.10	1.40
Therapist – interpersonal style	0–12	11–12	11.74	0.44
Dose	0–8	2–8	6.35	1.62
Format	0–12	6–12	10.10	1.78
Group dynamics	0–8	3–8	6.32	1.42

4.2. Outcomes

Table 3 displays the results of the t-tests examining pretest and posttest scores for psychological distress and emotional well-being. No statistically significant changes were found in depression (p = 0.669) or anxiety scores (p = 0.450), however a statistically significant improvement was noted in levels of stress (p = 0.033) with an effect size of 0.40. Statistically significant improvements were found for all four measures of emotional well-being. A large effect size was observed for the mindfulness (1.25) and self-compassion (1.01). The effect size for resilience (0.63) was medium and for well-being was small (0.36).

Table 3
Scores on outcome measures and t-test results (n = 31).

Psychological distress						
Measure	Possible range	Time		t(30)	p	Effect size ^a
		1	2			
Depression, anxiety & stress total score	0–100	38.72 (23.22)	32.26 (17.31)	1.41	0.168	0.025
Depression	0–42	8.39 (8.16)	7.61 (5.45)	0.43	0.669	0.08
Anxiety	0–42	12.26 (8.26)	11.03 (8.18)	0.77	0.450	0.14
Stress	0–42	18.08 (10.52)	13.61 (7.33)	2.23	0.033	0.40
		4–38	2–38			
Emotional well-being						
Measure	Possible range	Time		t(30)	p	Effect size
		1	2			
Mindfulness	0–52	25.48 (9.91)	34.29 (7.13)	–6.95	< 0.001	1.25
Self-compassion	26–130	73.03 (16.77)	87.95 (13.53)	–5.64	< 0.001	1.01
Resilience	25–175	129.21 (21.04)	137.45 (15.38)	–3.49	0.002	0.63
Well-being	0–100	56.13 (18.05)	63.48 (12.89)	–2.00	0.054	0.36
		16–88	36–88			

^a Cohen's d.

4.3. Participant experiences with DBT-SG

Results of the content analysis were grouped into three categories according to the focus group questions. (1) **Perceptions of the DBT-SG.** Most found the experience of participating in the program positive, meaningful, and useful. Concepts and skills that participants found particularly valuable included interpersonal effectiveness, stress management, and emotion regulation. The integration of mindfulness in all the sessions was highlighted as especially helpful as it encouraged participants to pause and reflect on how best to respond. Some content was more easily accepted, with a few participants commenting that some new terms took time to get used to. In addition, a few felt overwhelmed with the amount of content in some weeks and suggested increasing the amount of group time. (2) **Applicability and relevance of the intervention.** Overall, participants felt that the content was valuable in helping manage stress more effectively and in promoting their well-being, building capacity to provide better patient care and to effectively communicate with the healthcare team. Several participants described an increased awareness of their own responses to challenging situations; allowing them to be more empathic to the responses of others (e.g., patients and families). Many participants also reported adopting self-care strategies which enabled them to handle academic demands more effectively. In addition, a majority of participants described developing skills in mindfulness and as such were increasingly reflective regarding managing challenging situations. (3) **Factors that influenced participation.** Most participants felt that the facilitators' ability to create a supportive, trusting and accepting atmosphere

resulted in an environment whereby participants felt comfortable and safe, supporting the adoption of a non-judgmental attitudes toward one another. As well, the facilitators' knowledge of the content was perceived by participants to be a positive and worthwhile aspect of the intervention. Further, some participants expressed that other commitments, sometimes hindered their ability to participate or learn effectively in the intervention.

5. Discussion

Currently, there is limited research addressing the effectiveness of evidence-based interventions, such as DBT-SG, to support nursing students in managing their own emotional responses to caregiving, despite the high levels of stress associated with clinical practice reported by nursing students. The preliminary results from this pilot study suggest that DBT-SG is a promising intervention for nursing students experiencing stress within the context of a demanding academic and clinical program. Overall participants found participation in the DBT-SG sessions to be a positive experience and found the intervention effective, appropriate and convenient. Results reflect overall high ratings of satisfaction with the intervention. Participants highlighted how the skills modules helped in establishing relationships and managing stress in clinical, academic and personal circumstances.

Content analysis of qualitative data revealed that DBT-SG offered participants the opportunity to gain concrete and transferable skills and to develop a repository of coping strategies, which should help position them to be more effective and compassionate practitioners. Thus, DBT-SG has the potential to support students to acquire a range of practice-relevant strengths, alleviate stress and learn self-care strategies, which may have a positive impact in their future careers.

Participants experienced decreased levels of stress, after participating in DBT-SG, providing preliminary evidence the intervention supports senior nursing students in managing stress. This is consistent with previous research supporting the effectiveness of mindfulness interventions in reducing depression, anxiety and stress (Chen et al., 2013; Song and Lindquist, 2015). However, in our study overall anxiety remained at moderately high levels after the intervention. Although related, stress and anxiety may be associated with different personal and situational characteristics, suggesting the need to consider complementary strategies to support students; for example, peer mentoring and biofeedback-assisted relaxation training (Turner and McCarthy, 2017). A systematic review of interventions to reduce stress in nursing students concluded that stress interventions should be theory-based and multi-faceted (Galbraith and Brown, 2011), as is the case in this study. Further, consideration should be given to increasing the support provided to students so that they can better manage the stress that is frequently associated with clinical practice.

Given the increasing level of burnout symptoms, such as emotional exhaustion reported by nursing students (Rudman and Gustavsson, 2012), supporting students' ability to positively manage their own emotional responses to caring is essential. Thus, the significant increase in resilience, self-compassion, well-being, and mindfulness reported by our participants following the 8-week DBT-SG intervention, is very encouraging. In addition to the DBT skills learned in the sessions, participants described mindfulness as helpful, because it encouraged pausing and reflecting in a non-judgmental way when dealing with challenging situations. This finding is comparable to previously reported benefits of mindfulness interventions for nursing students (Song and Lindquist, 2015).

DBT-SG involves balancing acceptance of self with desire for growth or change. Self-compassion encompasses mindfulness, self-kindness, and common humanity; thus, the increase in self-compassion seen in study participants suggests an increase in being kind toward oneself, being mindfully aware of one's painful feelings and seeing one's fallibility as part of a broader human experience. (Barnard and Curry, 2011; Neff, 2003). Further, participants highlighted the importance of having

a time and space to share with their peers in a nonacademic context, suggesting nurse educators may want to consider building time in the curriculum for peer support activities. The importance of peer caring and support is also highlighted by researchers who found that it can improve subjective well-being (Zhao et al., 2016), as well as enhance professionalism, increase engagement in socialized learning, and facilitate transition from student to professional nurse (Jacobs, 2017).

Overall, our preliminary results suggest DBT-SG offers a promising approach for mitigating nursing students' stress by helping them acquire a range of practice-relevant strengths, and learn self-care strategies, which may have a positive impact on their future careers. However, these findings need to be considered in the context of study limitations. Although appropriate for the pilot nature of this study, our sample was relatively small and comprised of nursing students who were interested in and able to participate in a weekly group intervention. Results may therefore not apply to students who prefer not to be in a group or who are unable to participate in such an intervention due to competing academic, personal and/or employment demands. Further research is required to examine the effectiveness of DBT-SG among other nursing student groups, as well as to explore optimal approaches to delivering this intervention and/or subcomponents of the intervention (e.g., mindfulness) in conjunction with nursing curricula. While overall participation in the DBT-SG was good in our study, some participants indicated that competing demands sometimes interfered with their ability to full participate. Thus, future research could also explore alternate delivery modes to increase accessibility for students by considering various forms of technology, such as mobile applications.

6. Conclusions

The consequences of not preparing students to navigate the new territory of challenging emotional work of caregiving can be deleterious for students and can leave them vulnerable to ongoing stress and mental health challenges. Nurses cannot effectively care for patients and their families if they cannot first care for themselves. DBT-SG offers a promising approach in assisting students to learn self-care strategies that can have an impact throughout their careers. The strength of DBT-SG resides in its wide applicability to a range of practice-based situations that students will encounter. Through the acquisition of concrete and transferable skills, students can develop and hone a repository of coping strategies that will position them to be more effective in establishing and sustaining patient-centered relationships.

Funding source

This project was supported with funding received from the National League for Nursing (NLN) Research in Nursing Education Research Grant.

Conflict of interest

None declared.

Ethical approval

Approval for this study was obtained by the Ryerson University Research Ethics Board.

Acknowledgements

We gratefully acknowledge the contributions of the following graduate nursing students, advance practice nurses and research staff in support of this project; Shara Ally, Celina Carter, Audrey Danaher, Medina Esmail and Joanna Lynch.

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