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The impact of dialectical behaviour therapy training on therapists in Singapore: A mixed-methods study

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Abstract

Background: While dialectical behaviour therapy (DBT) has much empirical support for treating borderline personality disorder (BPD) and other conditions, little research has examined the dissemination of DBT in Southeast Asia.

Aims: This study evaluated training outcomes following a 5-day intensive DBT training programme in a group of psychologists in Singapore, who were in the process of implementing DBT as part of the training's objectives.

Methodology: A mixed-methods design was employed. Fourteen psychologists from a public psychiatric hospital in Singapore were recruited. Seven self-selected into DBT training, and the remaining were matched controls who were not attending the training programme. The latter served as a nonrandomised control group. Prior to and 3 months after training, all participants completed measures of stigma towards BPD patients, burnout and therapeutic alliance. DBT training participants additionally attended a focus group discussion assessing their experiences and challenges implementing DBT in Singapore's context.

Findings: Quantitative analyses using mixed ANOVA showed that, compared with controls, DBT-trained participants demonstrated significantly greater increases in acceptance towards BPD patients. No between-group differences were found on changes in burnout or therapy alliance with patients. Analyses of qualitative data using thematic analysis revealed that DBT training impacted the way participants conceptualised and delivered therapy for BPD patients, and highlighted several challenges in implementing DBT in the local hospital context.

Conclusion: The findings demonstrate the potential of DBT training in improving clinicians' attitudes towards BPD patients and support a need for policymakers to prepare organisations for DBT implementation to ensure programme sustainability.

KEYWORDS
burnout, cross-cultural, dialectical behaviour therapy, mixed methods, therapeutic relationship, training

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1 | INTRODUCTION

Dialectical behaviour therapy (DBT) is a third-wave cognitive behavioural therapy that synthesises mindfulness with change-oriented cognitive behavioural therapy principles and strategies (Linehan, 2015). Initially designed for individuals with recurrent suicidal behaviours, DBT has been shown to be effective in treating borderline personality disorder (BPD; Chapman, 2006; Koekkoek et al., 2006), a condition characterised by extreme difficulties with regulating emotions (Harned et al., 2006; Westen, 1991).

The core dialectic of DBT involves balancing acceptance and change, wherein clinicians incorporate validation and problem-solving as key treatment strategies. A meta-analysis found that individuals with BPD demonstrated reduced parasuicidal behaviour, suicidal risk and dropout rates after DBT (Panos et al., 2014). DBT has also been applied for other conditions, such as eating disorders, post-traumatic stress disorder, treatment-resistant depression and substance use disorders (Ritschel et al., 2015). Standard DBT consists of four components, namely individual therapy, DBT skills training (which involves teaching patients four core skills of mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness, usually in a group setting), phone coaching between therapy sessions and a therapist consultation team (Linehan, 1993). The latter requires the formation of a team of DBT providers who work closely with one another to treat patients and is strongly encouraged when carrying out DBT.

1.1 | DBT training for therapists

With its expanding evidence base, there has been an increasing demand for DBT training worldwide (Swenson, 2000). Among several training programmes, Behavioral Tech offers a 10-day DBT Intensive™ training (Behavioral Tech, 2019; Landes & Linehan, 2012) specifically for clinicians interested in establishing DBT teams. Developed based on the programme change model (Simpson & Flynn, 2007), the training equips teams with skills to lead and implement a DBT programme in their local treatment setting (Landes & Linehan, 2012). The training has two parts, each comprised of a 5-day instructor-led workshop. Parts 1 and 2 are separated by several months of independent study, homework assignments and consultation with a Behavioral Tech mentor. In Part 1, teams are introduced to the foundations of DBT (e.g., assumptions and principles), and are taught how to structure DBT sessions with their patients, manage patients in crisis and other treatment delivery strategies via a combination of didactic teaching, role-play exercises and live demonstrations. Part 2 serves to review homework tasks and is a platform for workshop participants to discuss implementation issues encountered.

Dialectical behaviour therapy training may have positive effects for mental health professionals that could translate into positive treatment outcomes for patients. Researchers have studied the impact of DBT therapist training on certain therapist-related factors such as burnout and their stigma towards patients. Additionally, the effects of DBT training on the therapeutic alliance, the working and emotional relationship between therapist and patient (Martin et al., 2000), may be worth studying, having been identified as underlying the positive effects of psychotherapy (Bachelor & Horvath, 1999; Martin et al., 2000). These factors are reviewed below.

Existing literature pertaining to DBT training and therapist burnout is mixed. Carmel et al. (2013) found that clinicians reported lower levels of exhaustion and fatigue following a comprehensive 10-day DBT training programme. Other studies showed that DBT training had no effect on burnout (Clarke et al., 2015), or even resulted in a short-term increase in burnout (Perseius et al., 2007) that could be attributed to initial difficulties with grasping DBT concepts and early implementation of DBT strategies, resulting in elevated stress levels.

Several studies have linked reduced stigma towards patients with BPD with DBT training. As the treatment emphasises validation and cultivating a non-judgemental perspective towards persons with BPD (Linehan, 2015), training in it could facilitate more accepting attitudes towards a patient population sometimes stigmatised by service providers (Cleary et al., 2002; O'Key, 2014). In one study, mental health workers demonstrated improved attitudes towards individuals with BPD following a 2-day DBT

Implications for Practice and Policy

- Taken together, the results indicate that dialectical behaviour therapy (DBT) training may increase participants' acceptance of patients with borderline personality disorder, likely through changing their perspectives of the patients' experiences (i.e., increased empathy and reduced judgement).
- Helping therapists gain more accurate or empathetic perception of their patients may thus be needed to mitigate the high emotional load that is faced when working with clients who display challenging behaviours or other complex cases.
- During implementation of DBT, therapists require ongoing support, such as in the form of practical resources or input from a community of therapists, which was understood by the study sample to refer to consultation with DBT experts or peer support from their teammates and other therapists in training.
- While psychologists based in Singapore emphasised the importance of cross-cultural application of therapeutic interventions, their narratives also highlight that organisational pretreatment, previously described by Michaela Swales (2010), might be applicable across various cultures and imperative for the success of DBT implementation efforts. It is recommended that service providers look into preparing their organisation prior to making the clinical decision to provide DBT treatment.

training (Hazelton et al., 2006). Qualitative analyses revealed that the workers were more reflective after incorporating mindfulness practice into their lives, reported increased awareness of their own negative beliefs and actively improved their attitudes towards patients. Others found that mental health professionals tended to report less stigma towards individuals with BPD after attending DBT training (Clarke et al., 2015; Haynos et al., 2016). A cross-sectional study involving nurses at a residential facility who attended a 12-week DBT training (Haynos et al., 2016) found a significant decrease in stigma towards patients with BPD. However, since there was no control group, increased exposure to the patients over 12 weeks might account for this finding (Knaak et al., 2017). In a randomised controlled trial conducted by Clarke et al. (2015), participants who attended acceptance and commitment therapy-based training and DBT training did not report significant differences in stigma towards patients with personality disorders. Without a passive control group, Clarke et al. (2015) could not attribute the effects of DBT training to training itself. None of these studies utilised controls, which precludes ruling out other confounding factors on training outcomes.

While no studies have directly examined the effects of DBT training on therapeutic alliance, there is some evidence to suggest it has the potential to improve the alliance. In a randomised controlled trial, DBT-trained therapists not only had a stronger therapeutic alliance with their patients than non-DBT therapists, but also their patients were less likely to attempt suicide (Bedics et al., 2015). Furthermore, therapeutic alliance mediated the relationship between exposure to DBT and suicide attempts. These findings suggest that DBT training could enhance therapeutic alliance, possibly through employment of DBT-specific strategies such as validation.

1.2 | Implementation of DBT

Beyond assessing training effects on clinicians, existing research has evaluated DBT implementation following training, given that programme implementation is a key goal in the DBT Intensive™. As DBT is a multimodal treatment that requires considerable resources in its implementation, establishing DBT services in resource-limited clinical settings can be challenging. The lack of organisational support is commonly cited as a main obstacle. For example, 42% of clinicians surveyed by Carmel et al. (2014) reported that their healthcare institutions prioritised other treatment programmes over DBT. Among 97 DBT treatment programmes in the UK, Swales et al. (2012) also identified this as one of the primary reasons for discontinuation of DBT programmes, with many programmes not surviving beyond 2 years.

In relation to the above, time constraint has been cited as another factor limiting implementation of DBT in certain clinical settings. Within a study involving 107 college counselling centre employees, 60.5% of the employees reported that they could not implement a DBT programme in their college due to insufficient time (Chugani & Landes, 2016). Carmel et al. (2014) also identified increased workload as a barrier faced by clinicians in their implementation of DBT. The extent to which DBT could be implemented following intensive training in Singapore's context, as well as potential challenges that may emerge in this process, remains to be examined.

1.3 | The present study

In 2018, efforts were initiated to provide DBT as a treatment option to adult outpatients at the Institute of Mental Health (IMH), a public psychiatric hospital in Singapore. Singapore is a multicultural city state with a population of 5.6 million, consisting primarily of Chinese, Malay, Indians and Eurasian ethnicities. While public hospitals in the country offer psychological services, IMH is the only governmental hospital dedicated to mental health care (Chong, 2007). Clinicians treat a variety of psychiatric concerns with various therapeutic approaches, such as cognitive behavioural therapy, schema therapy, acceptance and commitment therapy and psychodynamic therapy. At the time of this study, there were no registered DBT programmes in Singapore found on the list of BTECH-Trained teams (Behavioural Tech, 2019b).

This study aimed at examining the impact of a 5-day DBT training programme on several therapist-rated outcomes, namely stigma towards patients with BPD, burnout and therapeutic alliance with patients. Based on past research, we hypothesised that participation in DBT training would be associated with greater reductions in stigma and improved therapeutic alliance with patients. There was no a priori hypothesis regarding burnout, given the mixed research findings related to immediate effects of DBT training on burnout. Additionally, this study aimed at understanding trainees' perceptions of the training, as well as experiences of completing training homework assignments via a focus group discussion and an email interview. These assignments largely involved implementing a DBT programme in their clinical setting in consultation with a mentor.

2 | METHODS

2.1 | Design

This study adopted a mixed-methods design (Creswell & Plano Clark, 2007), involving collection of both quantitative and qualitative data to assess the impact of DBT training on participants. Self-report data assessed using validated measures were collected prior to a focus group discussion, followed by email interviews. This approach allowed for interpretation of the full data by capturing aspects of phenomenological experiences that may have otherwise been overlooked by quantitative measures alone.

2.2 | Procedure

A total of 14 practising psychologists working at the IMH were recruited through convenience sampling. Participants in the DBT

training group ($n = 7$) attended the DBT Intensive™ training programme delivered by Behavioral Tech. An in-depth description of the training model has been published by Landes and Linehan (2012). The control group ($n = 7$) consisted of other psychologists who did not attend the training and were matched in terms of their age, gender and clinical experience to the DBT training group.

Participants completed a battery of questionnaires up to 1 month before (pretraining) and 3 months after (post-training) the DBT training group attended Part 1 of the DBT Intensive™. Five months after the training, two external researchers held a focus group discussion with the DBT training group over a video conferencing platform. The session was recorded for audio transcription and analysis. A follow-up email interview was conducted individually with participants from the DBT training group, inviting them to elaborate on their responses on challenges faced in implementing a local DBT programme. The response rate was 100%. This study was initially planned to be part of a larger study with a convergent design, where further quantitative data would be collected after Part 2 of the DBT Intensive™. However, training arrangements for Part 2 were disrupted due to the onset of the COVID-19 pandemic in 2020 and subsequent attrition of control group participants due to staff changes in the organisation.

2.3 | Participants

Sample characteristics are presented in Table 1. The average age of the sample was 32.86 years ($SD = 4.77$), and all participants were female. There were no significant differences between groups in terms of biological sex, age, highest education level, years of clinical experience, weekly caseload, ethnicity and prior level of training in DBT, $ps > 0.05$. There was, however, a significantly higher number of participants in the DBT training group who identified DBT as one of their therapeutic orientations compared with controls, and a significantly higher number of control group participants who indicated psychodynamic therapy as one of their therapeutic orientations compared with the DBT training group, $p < 0.05$.

2.4 | Measures

2.4.1 | Demographic data questionnaire

Information on age, gender, ethnicity, education level, clinical experience, weekly caseload, experience with DBT and participants' primary theoretical orientation was collected.

2.4.2 | Attitudes towards Borderline Personality Disorder Questionnaire (ABPDQ)

The ABPDQ was adapted from Bowers and Allan's (2006) 37-item measure to assess clinicians' attitudes towards patients with personality disorders. Based on factor analysis of the original ABPDQ, five subscales were obtained: Enjoyment, Security, Acceptance, Purpose and Enthusiasm (Bowers & Allan, 2006).

2.4.3 | Copenhagen Burnout Inventory (CBI)

The CBI is a 19-item measure that accounts for burnout experienced by mental health professionals (Kristensen et al., 2005). Factor analysis identified three subscales: Personal Burnout (emotional and physical exhaustion), Work-related Burnout (extent to which the exhaustion is related to work) and Client-related Burnout (extent to which exhaustion could be attributed to working with patients).

2.4.4 | Working Alliance Inventory-Short Revised Therapist (WAI-SRT)

The WAI-SRT is a 10-item clinician-rated measure developed to assess the therapeutic alliance (Hatcher & Gillaspy, 2006). Participants were asked to identify three patients being treated for emotion dysregulation, each for whom they completed a WAI-SRT for. These patients' identities were not disclosed to the researchers. This measure contains three subscales: Goal (therapist–patient agreement about the goals of therapy), Task (therapist–patient agreement about the tasks during therapy) and Bond (relationship between therapist and patient). A WAI-SRT rating was obtained for each patient by averaging all three subscales. In this study, an overall therapeutic alliance rating for each participant was obtained by averaging their three WAI-SRT ratings.

2.4.5 | Transcripts from focus group discussion and email interviews

An interview schedule was developed for the focus group discussion, which aimed at exploring participants' experiences of attending the DBT training and implementing a DBT service in their clinical setting. Questions were adapted from a study by Carmel et al. (2014) and are available in Appendix S1.

2.5 | Data analyses

Participants across both conditions were first compared on their demographic characteristics and outcome measures at baseline (Table 2). A 2 (Condition) x 2 (Time) mixed factorial ANOVA was run to examine the effects of Condition on changes in each measure from pre- to post-training.

For qualitative analyses, thematic analysis (Braun & Clarke, 2006) was employed. A de-identified data set was compiled from verbatim transcriptions of the video recording and email responses. Three study team members conducted the thematic analysis, two of whom were insider researchers from the DBT training group. This was in

TABLE 1 Demographics of the study sample

	DBT practitioner group			Non-DBT practitioner group						
Demographic variable	***n***	***M***	***SD***	***n***	***M***	***SD***	***t***	***Df***	χ^2	***p***
Age	7	33.43	6.27	7	32.29	3.04	−0.43	8.67		0.68
Years of clinical experience	7	7.57	4.50	6*	6.50	3.73	−0.45	11		0.67
Number of direct patient contacts per week	6*	17.83	3.20	7	22.14	9.34	1.15	7.58		0.29
Gender	***n***	%		***n***	%					
Male	0	0		0	0					
Female	7	100		7	100					
Ethnicity								1	1.08	0.30
Chinese	6	85.7		7	100					
Others	1	14.3		0	0					
Highest educational level								2	3.82	0.15
Bachelor's degree	1	14.3		0	0					
Master's degree	4	57.1		7	100					
Doctorate	2	28.6		0	0					
Prior DBT training										
Online course	3	42.9		1	14.3			1	1.40	0.24
Reading the DBT manual	5	71.4		3	42.9			1	1.17	0.28
On-the-job training, or supervision from a DBT-trained supervisor	3	42.9		2	28.60			1	0.31	0.58
DBT training/workshop	3	42.9		0	14.3			1	3.82	0.05
Others	1	14.3		1				1	<0.001	1.00
Primary theoretical orientation										
Cognitive-behavioural therapy (CBT)	6	85.7		5	71.4			1	0.42	0.52
Acceptance and commitment therapy (ACT)	1	14.3		2	28.6			1	0.42	0.52
Psychodynamic therapy	0	0		4	57.1			1	5.60	<0.05
Emotion-focussed therapy (EFT)	2	28.6		2	28.6			1	<0.001	1.00
Dialectical behavioural therapy (DBT)	5	71.4		0	0			1	7.78	<0.05
Schema therapy	2	28.6		4	57.1			1	1.17	0.28
Humanistic	3	42.9		1	14.3			1	1.40	0.24
Others	1	14.3		1	14.3			1	<0.001	1.00

*One participant declined to provide this information.

line with recommendations by Stringer (2014) for study participants to be included in the coding process, providing them agency in assessing and interpreting the study's results. Following guidelines by Saldaña (2009) and Charmaz (2006), initial coding was conducted separately by raters before multiple joint reviews, co-creation of a codebook and secondary-cycle coding. Another member of the study team facilitated a peer review by adopting a "devil's advocate" role in the analysis (Creswell & Plano Clark, 2007). Identified themes were then analysed, interpreted and synthesised into broad categories.

3 | RESULTS

3.1 | Quantitative findings

An independent samples *t*-test indicated that, at baseline, there were no significant between-group differences in participants' stigma and burnout, all *ps* > 0.50. However, compared with control group participants ($M = 3.94$, $SD = 0.53$), participants who received DBT training ($M = 3.38$, $SD = 0.41$) reported lower levels of therapeutic alliance at baseline, $t(11) = -2.11$, $p = 0.059$. Upon further examination of the

TABLE 2 Descriptive statistics of outcome variables from pre- to post-training across groups, and test statistics for the time x group interaction term for mixed ANOVA examining the effects of DBT training on each outcome variable

	DBT training group ($n = 7$)		Control group ($n = 7$)				
	Pre-training	Post-training	Pre-training	Post-training			
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F*(time x group)	*p*	η^2_p
Copenhagen Burnout Inventory							
Personal burnout	47.02 (14.17)	48.81 (13.55)	47.02 (15.92)	45.83 (16.84)	0.48	0.50	0.04
Work-related burnout	43.88 (11.24)	46.43 (11.48)	47.96 (18.31)	44.90 (14.26)	2.71	0.13	0.18
Client-related burnout	44.64 (13.33)	42.86 (11.96)	44.05 (16.47)	35.71 (13.36)	1.37	0.27	0.10
Total	135.54 (35.54)	139.10 (48.88)	139.03 (48.88)	126.45 (43.21)	1.65	0.22	0.12
Working Alliance Inventory - Short Revised - Therapist							
Goal	3.24 (0.56)	3.38 (0.62)	3.70 (0.50)	3.63 (0.34)	0.35	0.56	0.03
Task	3.18 (0.63)	2.97 (0.64)	3.65 (0.52)	3.38 (0.52)	0.03	0.87	0.00
Bond	3.69 (0.31)	4.05 (0.62)	4.33 (0.66)	4.49 (0.64)	0.60	0.46	0.05
Total	3.38 (0.41)	3.53 (0.62)	3.94 (0.53)	3.90 (0.43)	0.51	0.49	0.04
Attitudes towards Borderline Personality Disorder Questionnaire							
Enjoyment	3.52 (1.05)	3.27 (0.67)	3.53 (0.92)	3.42 (0.77)	0.62	0.45	0.05
Security	4.56 (0.82)	4.63 (0.35)	4.81 (0.66)	4.81 (0.69)	0.06	0.81	0.01
Acceptance	5.09 (0.61)	5.46 (0.25)	5.11 (0.58)	4.94 (0.54)	5.01	0.05*	0.30
Purpose	4.95 (0.89)	4.81 (0.50)	5.24 (0.60)	4.85 (0.65)	0.13	0.73	0.01
Enthusiasm	3.93 (0.89)	3.93 (0.61)	3.86 (0.69)	4.29 (0.57)	2.40	0.15	0.17
Total	22.05 (3.66)	22.09 (1.42)	22.56 (2.39)	22.41 (2.66)	0.03	0.86	0.003

*$p < 0.05$.

WAI-SRT subscales, those in the control group ($M = 4.33$, $SD = 0.66$) reported marginally significantly higher scores on the bond subscale than the DBT training group ($M = 3.69$, $SD = 0.31$), $t(11) = -2.17$, $p = 0.053$.

Results from a mixed factorial ANOVA showed no significant main or interaction effects on any of the outcome measures, except for the Acceptance subscale of the ABPDQ. There was a significant interaction effect of Time by Condition, $F(1,12) = 5.01$, $p < 0.05$, $\eta^2_p = 0.30$, on the Acceptance subscale of the ABPDQ. A follow-up independent samples *t*-test found that, at post-training, the DBT training group ($M = 5.46$, $SD = 0.25$) reported significantly higher levels of acceptance towards patients with BPD than the control group ($M = 4.94$, $SD = 0.54$), $t(12) = 0.11$, $p < 0.05$.

3.2 | Qualitative findings

Codes were generated and organised into three domain summary themes related to the impact of DBT training on psychologists in the focus group: the experience of the training sessions, experience of homework assignments from the training and experience of the self as a DBT therapist (see Figure 1). A fourth domain summary theme was identified, involving suggestions for effective implementation of DBT. This arose from DBT training group participants' discussion of homework completion as part of the training process. Themes are outlined below (also see Table 3).

3.2.1 | Experience of training sessions

Impact of the training on team members

Overall, participants reported that the DBT training increased their knowledge of and preparedness to use DBT in their clinical work and personal lives. Time spent in training also enhanced therapists' ability to adopt a non-judgemental perspective towards clients, and facilitated team bonding and an improved sense of safety within the team.

Reflections on teaching methods used in the training

Participants reported that they benefitted most from experiential learning and observed parallels between how trainers taught a large group of DBT practitioners and how DBT therapists run skills training groups for clients. Three participants stated that being offered opportunities for interactions with overseas teams was helpful. One participant elaborated that this facilitated mutual encouragement

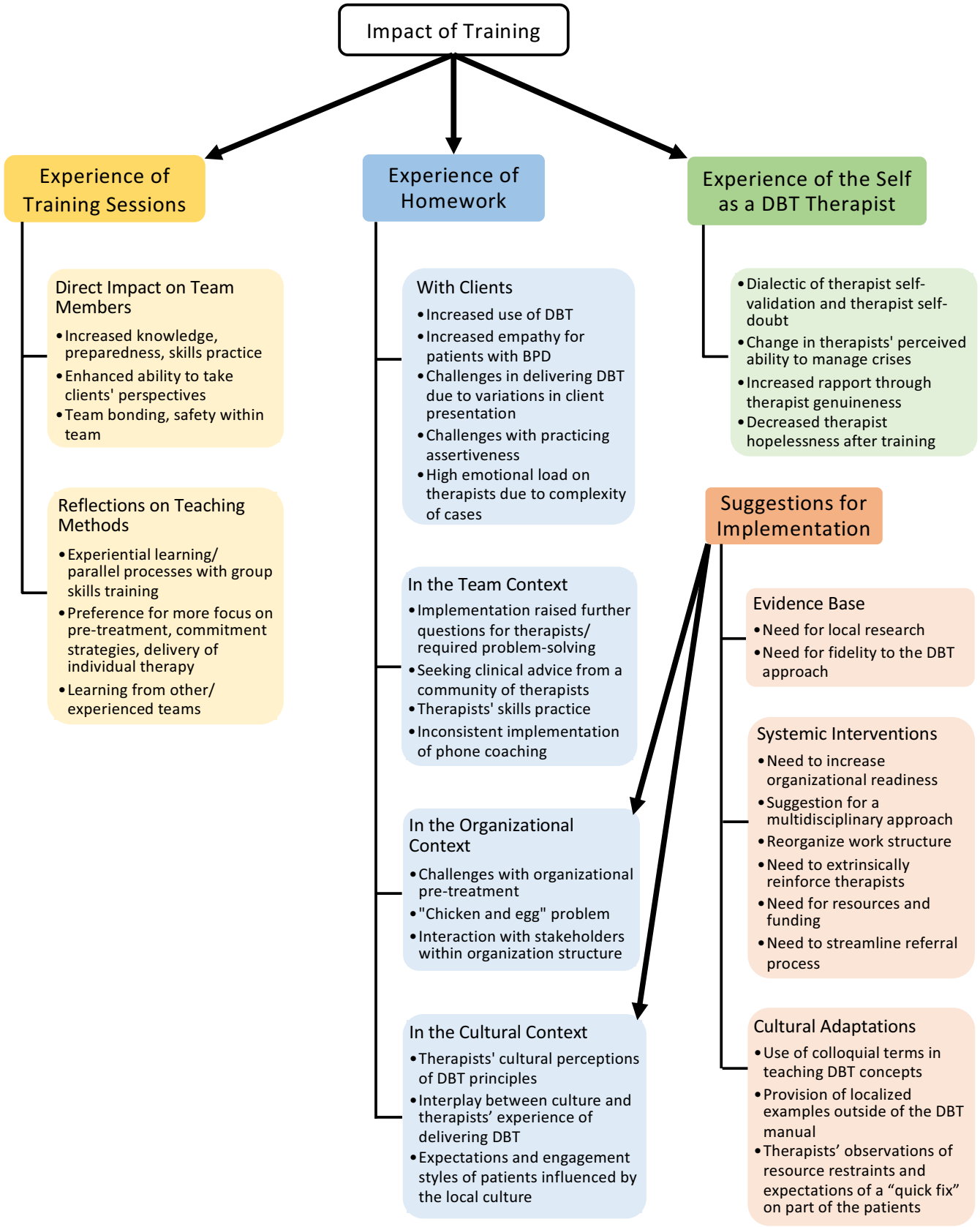

FIGURE 1 Themes derived from the focus group discussion

TABLE 3 Experiences during and after the DBT training session identified by therapists in the DBT training group through the focus group discussion and follow-up email

Domain summary	Themes	Subthemes	Example quotes
Experience of training sessions	Training had a direct impact on team members	Increased knowledge, preparedness to use DBT, and therapists' skills practice Enhanced ability to take clients' perspectives Team bonding and an improved sense of safety within team	"Prior to the training, I had certain ideas of how a mindfulness practice should look like… after going for the training, actually I realised that it's not as boring as I thought [laughs] it would be." "… and before that [training], actually, we were, or at least I was quite lost; I didn't know whether what, um, I was doing was right or not." "It helps me understand why things are done the way they are… we also did bring that learning back to the consultation team… so, and it's, it's making sense to me now." "…And we felt safe enough that people [team members] would respond to the feedback and of course these discussion carried on after that, when we came back to Singapore, then we had discussions on our team-interfering behaviours, and so on."
	Reflections on teaching methods used in the training	Experiential learning; parallel processes between large-group training (for clinicians) and group skills training (for clients) Opportunities for interaction with other practitioners during training Preference for more focus on pre-treatment, commitment strategies, and delivery of individual therapy	"Because we know the DBT principles… like having no hierarchy, calling out the elephant in the room, but we aren't always very conscious of them… because it was a 5-day training, we were immersed in an environment where everybody was [being] mindful of the principles." "I think the one [thing] that we did everyday was the mindfulness practice… I guess it changes the way I think about mindfulness. And that helps, because mindfulness is something I struggle to, I guess, do with my clients from time to time. So being on the receiving end of that was actually helpful." "Like what some of us shared… this was a lot more interactive… especially when everyone came from different countries, yeah, and we got to hear from other people's experiences." "For me, I learnt a lot from both the trainers as well as everyone else [participants from other DBT teams] who attended the training." "I think one of the things that we really wanted a little bit more time on was, I guess, the stylistic aspect of it?… In terms of content – what to say, what to do in sessions – I think that is something you can read up on, but… how to deliver it?" "…how do I, what does it [the first session of individual DBT therapy being conducted] look like? We have no clue aside from reading a manual. We are not sure how it's supposed to look like."

(Continues)

TABLE 3 (Continued)

Domain summary	Themes	Subthemes	Example quotes
Experience of homework completion in between Parts 1 and 2 of the training	Changes in direct work with patients following the training	Increased use of DBT Increased empathy for patients with BPD Challenges in delivering DBT due to variations in client presentation Challenges with practicing assertiveness High emotional load on therapists due to complexity of cases	"I think when I keep the biosocial theory in mind, I do notice that… I can empathise… with my clients more, especially when I am trying to map a certain behaviour to its function. So I think the training probably helped in terms of remembering that… I can make assumptions about them if I am not mindful of it." "… do you think it [DBT training] adequately prepared me for the work that I am going to do?… [more] questions came as I was seeing the clients, some with very challenging behaviours. Because no client is the same, I'd always get new questions…" "And a lot of us struggle with being more assertive. I think that has been the common feedback throughout our supervision [sessions] …" "The load is very high, and it's not just about [a] quantitative load, but [the] qualitative load is very high." "… I think the other challenge is that people just indiscriminately give us BPD patients which… how do I put this, the actual… it's more like the emotional load that comes along with [providing] therapy."
	Emphasis on role of the DBT team in doing DBT	Implementation raised further questions for therapists/ required problem-solving Seeking clinical advice from a community of therapists Therapists' skills practice Inconsistent implementation of phone coaching	"… it's a never-ending cycle of finding out and problem-solving." "So at least you know that, okay, I can refer you to [a DBT skills] group and see you on an individual basis, you know, and so forth. So that has, in a way, I mean I felt that in terms of clinical practice has changed… in the way that I don't feel like I'm [working] solo." "Closer mentorship and supervision from more experienced practitioners would also be important as there are often many teething issues for new DBT programs." "No, that's really funny because, now that you've [directed towards another focus group participant] mentioned it, yes, I have caught myself practising the skills last week and I'm not sure what I would have done if I didn't practice them on myself." "So in terms of readiness, and willingness to provide this service [phone coaching], I think some of us are working through our own boundaries… how flexible are we going to be about our own limits and our own time." "… with clients that I'm doing like phone check-ins or phone coaching with, and the calls are short, then I realised that actually, what's really working over the phone is really that generalisation of the skills."

TABLE 3 (Continued)

Domain summary	Themes	Subthemes	Example quotes
	Challenges were faced in the organisational context	Challenges with organisational pre-treatment "Chicken and egg" problem Interaction with stakeholders within the organisational structure	"…so how, you know, can you prepare your organisation for something like this… but that was a struggle we had that, and I think we, we sort of left the training with that question still quite unanswered?" "While at the same time, we'll need to show its effectiveness locally before we can push for it as a service in place of some of our current workload, so it's like a chicken and egg situation." "So it's not just about how I manage patients in the therapy room, but also how I relate to the rest of the care team that is involved in this patient's care."
	Navigating DBT within the cultural context	Therapists' cultural perceptions of DBT principles Interplay between culture and therapists' experience of delivering DBT Expectations and engagements styles of patients influenced by the local culture	"Singaporean or Asian practitioners seem to tend towards validation." "That's what I was thinking. And a lot of us struggle with being more assertive." "Some of the DBT principles (e.g., clients do not fail at therapy) were interpreted as invalidating to Asian therapists in the past, where our colleagues perceived this to be blaming of the therapist instead, and most of the therapists I know have high/unrelenting standards of themselves and their practice." "I have observed in Australia that clients would share more about their struggles and provide support to each other outside of group sessions. In contrast, patients here generally appear to be guarded and is very careful about what to share in a group setting." "I hypothesize that it may be because standing out amongst a group of people (even if it's for something positive) is something that is sometimes frowned upon in our culture, and individuals with BPD can be particularly sensitive to this." "Singaporean clients in general want a 'quick fix', for example, EMDR over talktherapies, and it is important to repeatedly emphasize the need for consistent skills practice over the expected, immediate changes in one's feeling state."
Experience of the self as a DBT therapist	Internal changes within therapists through the training process	Therapist self-validation and therapist self doubt Change in therapists' perceived ability to manage crises Improved rapport with clients through therapist genuineness Decreased therapist hopelessness	"… because the more I know about DBT, the more I realised I don't know, and the more questions I have. That makes me question, do I really know what I am doing?" "I find that after the training, I ride through the rough patches [in client work] a little bit easier? I mean, It's not that it's fantastic or anything like that, I still get angry and frustrated sometimes, but I find that I ride through that patch a little bit faster and a little bit with, with less resistance I think, on my end… so I guess the change is within me…"

(Continues)

TABLE 3 (Continued)

Category	Themes	Summary	Example Quotes
			"… someone [a Behavioral Tech trainer] told me this but it stuck with me to not fragilise the patients… I think that not fragilising them and being quite candid is actually helpful in terms of rapport, as well because you seem a little more genuine." "I notice I feel less hopeless and less stuck about, you know, the [client's] therapy progress."
Suggestions for Implementation	Local evidence base	Need for local research Need for fidelity to the DBT approach	"There needs to be more local research in order to evaluate whether this is a treatment that is suited for our local population, although there is sufficient research from other parts of the world to safely say that it is an evidence-based practice." "There are often questions about whether the therapy is being provided in a way that is consistent with what has been proven to work in the literature."
	Systemic Interventions	Need to increase organisational readiness Suggestion for a multidisciplinary approach Reorganise work structure Need to extrinsically reinforce therapists Need for resources and funding, especially protected time Need to streamline referral processes	"Organizational readiness needs to first be established, for local programs to be set up." "A re-organization of job scope for the individual therapists in the team, such that there is protected time for DBT work." "[It's] not so easy to call on 8 psychologists [from a department], because we are quite a large team. And, and if we step back to do DBT, then our other work needs to be filled in by other colleagues as well." "On our end, we have gathered a team of clinicians who are intrinsically motivated to do this work, putting in additional work hours for DBT, self-funding trainings as well as materials for skills training groups and research… but have not often been rewarded for… work, time, effort."
			"Full DBT is challenging unless the hospital is able to provide more support and resources, such as protected time for the work. Which would be necessary if we are to provide DBT, and ideally [involved] staff from the multi-disciplinary teams. Australian DBT teams consisted of nurses, social workers and psychologists, supported by clinic administrators." "Managing the types of case allocation could also help with implementation of DBT, given that we get a wide variety of case types."

TABLE 3 (Continued)

Category	Themes	Summary	Example Quotes
	Suggestions for cultural adaptations when implementing DBT in Singapore	Use of colloquial terms in teaching DBT concepts Provision of localised examples outside of the DBT manual Therapists' observations of resource restraints and expectations of a "quick fix" on part of the patients	"It would also help if the worksheets on emotion words include more colloquial terms (e.g. 'paiseh', 'malu') as these terms carry along with it nuances that are not entirely captured by the standard English words used in the worksheets." "It might be helpful to adapt the examples being used to make it click better for our local context." "… format of the group sessions are way too long, from both a time commitment and cost perspective, given that there isn't funding/insurance for such group participation." "Singaporean clients in general want a 'quick fix' and it is important to repeatedly emphasize the need for consistent skills practice over expected, immediate changes in one's feeling state."

within a shared experience of learning DBT. Another participant compared her experience to attending an entry-level DBT training workshop by another training provider and found the learning environment in the DBT Intensive™ helpful, where attendees were already part of existing DBT teams and familiar with DBT treatment manuals (both of which were training prerequisites).

When asked about unmet learning needs, participants articulated a preference for the training to focus more on several areas that were important to their team. These topics included conducting pretreatment sessions, commitment strategies and stylistic approaches in delivering individual DBT.

3.2.2 | Experience of homework assignments

3.2.2.1 | *Changes in clinical work following the training*

Participants reported that they considered using a DBT approach with new clients more often, and increased their overall use of DBT. In therapy, they were able to employ DBT techniques more flexibly, involved clients more in joint case formulation and found themselves modelling DBT skills use to clients. They noticed having increased empathy for individuals with BPD, and an increased willingness to manage challenging behaviours exhibited by clients. Nevertheless, participants reported difficulties with delivering DBT due to encountering wide variability in client presentations. In particular, therapists needed more learning and practice to apply their knowledge transdiagnostically while accounting for individual patient differences. One participant observed feeling overwhelmed when managing multiple crises during individual therapy. There was agreement among the focus group participants regarding "a high emotional load" from treating highly complex cases. Lastly, four participants experienced challenges with using certain DBT strategies (e.g., motivational and commitment strategies) that required them to behave more assertively with clients.

Emphasis on the role of the DBT team in doing DBT

Therapists reported that implementation efforts raised further questions for their team and programme, necessitating ongoing problem-solving. They prioritised seeking support and clinical advice from a community of therapists, including being part of a consultation team and consulting with overseas DBT experts. Three participants opined that the team helped with facilitating therapists' own skills practice. Participants also described navigating differences within their team, such as different personal preferences related to implementing phone coaching. They highlighted the need to respect differences in individual team members' limits.

Challenges faced at the organisational level

All therapists referenced challenges related to organisational pretreatment (Swales, 2010). They spoke of teething problems while pioneering a DBT programme, largely attributed to a lack of resources (e.g., funding, protected time for DBT-specific work and manpower). These challenges were summarised in what participants described as a "chicken and egg" problem—requiring resources to do DBT, and at the same time needing to demonstrate benefits of DBT to management to secure such resources. Participants reported working overtime to complete DBT-related work (e.g., administrative tasks, research, preparation for supervision and/or consultation). They also acknowledged the importance of interacting and communicating clear expectations with stakeholders within their organisation. Specifically, several participants described experiences with working with other professionals in care teams who were unfamiliar with

DBT principles, managing inaccurate expectations of treatment processes or outcomes from referrers, and being transferred more complex cases due to other colleagues' impressions of DBT as designed for treating suicidality.

Navigating DBT within Singapore's cultural context

Participants shared their perceptions of selected DBT principles. Certain DBT assumptions were viewed as invalidating—for example, several focus group members interpreted the DBT assumption that "clients do not fail at therapy" as placing the blame and responsibility on themselves. They reported difficulties exercising assertiveness with patients along with an overuse of validation strategies, as behaving assertively may be perceived negatively in the local culture.

Simultaneously, participants opined that the expectations and engagement styles of patients receiving DBT were likely influenced by local culture. Some participants contrasted their experiences of running DBT groups abroad (e.g., during postgraduate training) with running these locally, and found that many Singaporean patients expressed discomfort with group therapies. Others shared anecdotal observations that Singaporean patients seemed to favour a didactic approach in skills training due to therapy providers being viewed as authority figures. Finally, participants agreed that generational factors appeared to influence therapy processes. For instance, older patients in a DBT skills group may hold expectations for their views to be given greater weight than younger members, due to societal norms related to honouring seniority. One participant found that older patients did not always respond well to the DBT strategy of irreverent communication (Linehan, 1993).

3.2.3 | Experience of the self as a DBT therapist

Participants reflected on internal changes within themselves as they underwent DBT training. While several continued to experience self-doubt (e.g., questioning whether they were doing DBT "right"), they also observed increased self-validation after training, along with greater incorporation of DBT skills into their own lives. One participant recognised feeling less hopeless while working with suicidal patients. Participants attributed good rapport with their clients to therapist genuineness (known as "radical genuineness" in DBT, whereby therapists convey respect for clients as equals rather than as patients).

3.2.4 | Suggestions for implementation

Evidence base

The need for local DBT research to strengthen the evidence base within Singapore and support culturally sensitive DBT implementation was identified. Participants made adaptations to the treatment from the outset (e.g., replacing analogies and metaphors created in an American context with those more suited to their context), also due to resource limitations. They expressed uncertainty regarding the effectiveness of their adaptations without empirical testing. Most participants recognised the need for fidelity in implementing DBT.

Systemic interventions

To ensure sustainability of a DBT programme, participants voiced the requisite of increasing organisational readiness. All DBT-trained therapists provided examples of desired systemic changes, such as utilising a multidisciplinary approach where other professional groups are also given training in DBT, having protected time for DBT work, acquiring physical resources, reorganising the work structure (e.g., implementing a waitlist, establishing DBT as a specialised service and streamlining enrolment into treatment) and managing current limitations pertaining to organisational hierarchy. Participants reported that these would sustain their motivation to continue providing DBT. They expressed a need to increase the frequency of individual therapy sessions, which was difficult to facilitate during the study due to high caseloads (e.g., an average of 18 individual therapy sessions per week).

Culture-specific adaptations

One participant recommended modifying the language used in therapy to be more colloquial, to help patients understand concepts expressed differently in non-English languages (e.g., use of terms from local dialects or mother tongues such as "paiseh" or "malu" to describe embarrassment or shame). Participants discussed replacing the word "homework" with "journal" or "practice," which helped elicit patients' completion of take-home therapy tasks. Another suggestion pertained to incorporating localised examples to increase the applicability of DBT skills. While some focus group participants contemplated shortening the number of group sessions given patients' resource constraints, not everyone thought that this would fully address patients' concerns.

4 | DISCUSSION

The current study examined the impact of 5 days of DBT training on therapist-rated outcome measures. In addition, the study assessed therapists' experiences with the training, as well as implementation of DBT (as part of the training) qualitatively, which shed light on factors and outcomes that were not captured by quantitative measures alone. Qualitative analyses revealed several themes pertaining to the training's impact on therapists, as well as suggestions for implementation of DBT services in Singapore.

4.1 | Impact of DBT training on therapists

Analysis of the quantitative data indicated that participation in DBT training was associated with statistically significant improvements

in acceptance towards patients with BPD, as measured by the Acceptance subscale of the ABPDQ. This reflected reduced feelings of rejection and anger towards patients with BPD in DBT-trained therapists than in controls, although there was a lack of between-condition effects on total ABPDQ scores. This finding provides partial support for the hypothesis that negative attitudes towards patients with BPD would decrease after DBT training. Other quantitative analyses did not support the hypothesis that the DBT training group would have stronger therapeutic alliances with patients after DBT training than controls. Also, no between-condition differences were found on changes in burnout from pre- to post-training.

Qualitative data provided some possible explanations for quantitative findings. In particular, the identified theme regarding changes in clinical work following DBT training clarified reasons that may account for increases in acceptance towards BPD patients. Three focus group participants attributed a development of greater empathy with patients to the DBT training itself. One of the three reported that training increased empathy via deepened understanding that clients were deprived of developmental opportunities to learn skilful behaviours. This was highlighted during a teaching on the biosocial theory (a key component in DBT). Therefore, greater acceptance of challenging behaviours among BPD patients may stem from therapists' changed views regarding factors accounting for the patients' behaviours. This observation is consistent with results elsewhere (e.g., Hazelton et al., 2006). For example, Burke et al. (2019), who studied an intervention targeted at supporting clinicians working with BPD, described reductions in clinicians' anxiety following their realisation that patients' negative behaviours were often not directed at treatment providers.

The lack of between-condition differences on changes in burnout and therapeutic alliance was also examined more closely. The lack of effect on therapeutic alliance could be attributed to differences in ratings between conditions at baseline (with DBT training participants scoring lower on therapeutic alliance), masking potential differential changes resulting from the training. Analysis of the qualitative data provided further explanations for this—it may be that therapists who underwent DBT training had more challenges with establishing therapy alliance with patients from the outset. DBT therapists reported that they were frequently referred more complex cases in their organisation. For example, a participant who had several years of clinical experience shared, "when I first started, I put my hand up for [working with patients with] BPD, and I faced exactly what [in reference to another participant] faced… everyone would transfer all their BPD patients to me." Such narratives indicate that the DBT training group perceived having a heavier caseload to begin with, although this could not be corroborated by interviews with the control group. While their work served as motivation to pursue DBT training, the nature of their clientele might have made alliance-building more challenging. Nevertheless, qualitative analyses showed that DBT trainees developed several therapy skills for improving alliance. These included increased flexibility in their application of DBT techniques and the use of a more collaborative process in working with clients for developing case formulation.

With regard to burnout, the quantitative results contrast with Perseius et al.'s (2007) findings that burnout increased 6 months following DBT training, and eventually plateaued and returned to baseline at an 18-month follow-up. While the present study did not track participants for such a prolonged time, one participant reported feeling overwhelmed with a heavy workload in the months following DBT training. Participants received several individual- and team-based homework tasks to complete in preparation for Part 2 of the DBT Intensive™ and found this to add considerably to their existing workload. In the focus group discussion, therapists also highlighted their experience of high emotional load that corresponded with the complexity of cases that they were assigned. Apart from client-related burnout, other work-related burnout could also have occurred due to organisational challenges faced by the participants. Analysis of the qualitative data highlighted factors that could increase burnout, such as teething problems related to DBT implementation, efforts to secure resources and managing stakeholder expectations. Additionally, therapists in the DBT training group noticed that they were being transferred patients with more severe symptoms after training. Despite these experiences, participants observed that their own practice of DBT skills, reinforced by homework tasks assigned as part of the training, may have mitigated against burnout. The direct impact of DBT training on burnout therefore requires more investigation, in addition to changes in burnout levels over a longer follow-up period.

Lastly, analyses of qualitative data revealed other benefits of DBT training that were not assessed by the quantitative measures. These include enhancement in team safety, better learning of how to teach DBT skills following one's experience practising DBT skills, increased networking with other teams and increased salience of DBT in clinical practice. Qualitative analyses also generated insight not only into the direct impact of DBT training, but also into the needs of trainees and the process of implementation.

4.2 | Context-based training needs of DBT therapists in Singapore

Participants recounted their experiences of training sessions, allowing for an exploration of training needs specific to this therapy. Participants concurred that the 5-day instructor-led workshops were appropriately geared towards laying a foundation for eventual practice and increased DBT knowledge that was subsequently applied at work. At the same time, they described learning gaps in this block of the training, largely related to efficacy in navigating the early stages of DBT—both pretreatment with clients and organisational pretreatment (Swales, 2010) within their clinical setting.

Themes derived from the qualitative analyses reflected therapists' wishes to learn more about how to better employ the commitment strategies in DBT and to learn more from the trainers' style of delivering DBT. Several participants described their tendency to overuse validation and underuse assertiveness with their clients. Participants with past training in observing or running DBT groups

overseas also highlighted cultural differences in communication among patients in the Singapore DBT groups, such as tendencies to remain silent and to defer to older members when offering input.

Such observations are consistent with communication-style differences between Eastern and Western cultures (Gao et al., 1996; Hall, 1976). The former has been found to utilise—even to value—a high-context communication style that involves indirect and non-verbal communication. Expressive and open communication is perceived as unfavourable in traditional Asian cultures (Park & Kim, 2008) and may negatively impact therapist–client interactions. Nevertheless, culture could be leveraged upon to contextualise parts of the therapy, such as DBT skills taught to patients. Some participants in this study suggested that the relevance of concepts in skills training could be increased by using localised words and examples, such as culture-specific terms to describe certain emotions. The importance of cultural adaptations needs further exploration in future research—for both the purposes of clinical utility and effective implementation. A study with the Suquamish Native American tribe in the United States made a case for this, demonstrating that cultural adaptations to DBT resulted in an increase in client uptake and, consequently, an increase in funding support for the DBT programme (Kinsey & Reed, 2014).

Narratives of participants highlight that organisational pre-treatment is cross-culturally relevant and likely imperative for the success of implementation efforts. Some DBT training participants requested more coverage on the topic during training, which they felt was still not fully addressed. One participant said, "I really struggled, and I had asked them [the trainers] a few times, 'what about organisational pre-treatment?' So how [to], you know, prepare your organisation for something like this… but that was a struggle we had that, and I think we, we sort of left the training with that question still quite unanswered." Additional training beyond the 10-day DBT Intensive™ might be required to target organisational readiness.

4.3 | Insights into the implementation process

Given the structure of the DBT Intensive™, this study provided an opportunity to examine the experiences of DBT therapists who completed 5 days of instructor-led training workshops, and who were amidst the homework phase of the training programme while in preparation for the second part of the Intensive. As such, reflections generated within the focus group discussion also related to homework completion. Since a large proportion of this training phase involves designing and implementing a DBT programme in the trainees' unique clinical settings, the narratives gathered contribute to an initial understanding of the process of DBT implementation in Singapore. Participants in the focus group unanimously reported barriers to implementation across several domains, such as personal barriers, patient-related barriers, institutional barriers and other factors impacting their delivery of DBT.

Most suggestions offered by focus group participants pertained to resource distribution to ensure DBT implementation with greater fidelity and to develop expertise. Several suggestions were consistent with those raised in other DBT implementation studies, specifically protected time for DBT, lessened workload and changes in job responsibility (e.g., Carmel et al., 2014; Herschell et al., 2009). Furthermore, participants reported the need for a more nuanced patient selection process during their enrolment into DBT, echoing what has been identified in previous studies (Engle et al., 2013). In-depth discussion on the feasibility of these suggestions was outside the scope of the current study, limited by the length of our interviews. The participants did evaluate certain suggestions generated within the group—in particular, the development of a waiting list for DBT services. While waitlists may serve as a common solution to heavy referrals and high caseloads, therapists in this study shared concerns about the difficulties of implementing waitlists due to pressures to meet organisational requirements, such as seeing a fixed number of new patients each month. DBT therapists were also not part of a specialised DBT service, but rather employed to serve a broader population of psychiatric patients. Therapists provided a range of psychotherapies, evident from demographic information from the study sample.

Without adequate support resources in place, a full-scale implementation of DBT would be difficult (Fixsen et al., 2005). Systematic changes may be necessary to support long-term sustainability of DBT services. At the same time, the majority of the participants held the impression that these changes could only occur after they have demonstrated DBT's effectiveness for Singaporean clients, reinforcing the aforementioned "chicken-and-egg" problem. This situation is not unique to Singapore; overseas studies have found that resources are often allocated only when the effectiveness of DBT has been established within the context it is implemented (Kinsey & Reed, 2014; The Grove Street Adolescent Residence of The Bridge of Central Massachusetts, Inc., 2004). This is unsurprising since DBT programmes require significant resources to run—most notably, manpower and training.

4.4 | Limitations and future directions

There are several limitations to this study. First, a small sample size reduced the power of statistical analyses and generalisability of the findings. While an a priori power calculation was conducted, only a small group of clinicians could attend the DBT training due to limited organisational funding and logistical constraints. Thus, a lack of power may partially account for current findings. For example, in this study, DBT training did not improve overall stigma towards patients with BPD (but did increase therapists' acceptance towards them), but this differs from previous research (Clarke et al., 2015; Haynos et al., 2016) which found mental health professionals reported less stigma towards patients with personality disorders after DBT training.

Second, length of time between training and assessment could be another factor contributing to the lack of significant differences between DBT training and control groups. Clarke et al. (2015) and Haynos et al. (2016) both assessed their participants immediately post-training. However, this study assessed participants 3 months after their training. While this allowed time for new learning to be applied to clinical work and programme development, therapists who underwent training might have experienced other contextual events that served as workplace stressors between the extended assessment time points.

An additional consideration is the lack of random assignment to DBT training or control group, despite best efforts to match participants on key demographic variables (e.g., age, gender and clinical experience). This precludes ruling out the role of confounding factors or other pre-existing differences between the conditions. Given this study's nature, participants were also not blinded to their training conditions, possibly resulting in expectancy biases in reporting of outcomes. Notably, the sample was characterised by relatively homogenous demographic factors (e.g., all female, relatively young to middle-aged adults), which limits the generalisability of findings.

Given these limitations, future studies should recruit a larger and more diverse sample to assess the effects of DBT training more reliably. A randomised controlled design would minimise systematic differences in participant characteristics at baseline, enabling more rigorous assessment of potential effects of DBT training on therapist attitudes and burnout, and therapeutic alliance. In future, researchers could gather outcome data from patients directly to accurately evaluate the impact of DBT training on clinical practice or investigate specific factors that correlate with training outcomes.

5 | CONCLUSION

The present study is the first to investigate the impact of DBT training and the application of new learning for DBT therapists in terms of their client-related work and DBT programme development within the Singapore context. It contributes to a greater understanding of the effects of 5 days of intensive DBT training on therapist-related and implementation outcomes. In particular, the study found that training could facilitate increased acceptance towards patients with BPD in therapists, likely by changing their perspectives of patients' experiences. Although no between-condition differences were found in relation to burnout or therapeutic alliance, qualitative data analyses pointed towards dynamic factors that may have masked the short-term benefits of training—for example, organisational factors (e.g., increases in referral of BPD patients or therapists' workloads that may have also been a function of attending such training) may have increased burnout despite using DBT techniques that were intended to mitigate burnout. This highlights the need for DBT trainees and training providers to take into account the unique clinical setting and context of each team, which is typically a focus of Part 2 in the DBT Intensive™. The quantitative data itself may not fully reflect the benefits of DBT training, as multiple benefits were reported qualitatively, and it is recommended that future studies examine not only the longer term effects of DBT training but also the processes of how short-term training benefits interact with systemic factors within DBT teams' organisations. This suggests that short-term effects of the training were limited or that the effects may emerge only over a longer term. Importantly, the findings should be interpreted in the light of certain limitations, such as a small sample size.

The current study also provided early insight into implementation barriers faced by DBT therapists in Singapore and may inform strategies and policies for supporting successful implementation of DBT over time, in this part of the world. Organisational readiness emerged as a key concern to be addressed in order to increase sustainability of local DBT programmes. More specifically, organisations may need to commit adequate resources to support such programmes, especially after staff members have taken steps to undergo in-depth training. Policymakers intending to implement a DBT programme in their healthcare setting should create a comprehensive plan for this that would include both personnel training and provision of organisational resources to support implementation.

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DATA AVAILABILITY STATEMENT

The data set can be made available by contacting the corresponding authors.

PATIENT CONSENT STATEMENT

No patients were directly involved in this research.

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REFERENCES

Bachelor, A., & Horvath, A. (1999). The therapeutic relationship. In *The heart and soul of change: What works in therapy* (pp. 133–178). American Psychological Association. https://doi.org/10.1037/11132-004

Bedics, J. D., Atkins, D. C., Harned, M. S., & Linehan, M. M. (2015). The therapeutic alliance as a predictor of outcome in dialectical behavior therapy versus nonbehavioral psychotherapy by experts for borderline personality disorder. *Psychotherapy (Chicago, Ill.)*, *52*(1), 67–77. https://doi.org/10.1037/a0038457

Behavioral. (2019). *BTECH-Trained Teams*. Behavioral Tech. Retrieved from https://behavioraltech.org/resources/find-a-therapist/

Bowers, L., & Allan, T. (2006). The attitude to personality disorder questionnaire: Psychometric properties and results. *Journal of Personality Disorders*, *20*(3), 281–293. https://doi.org/10.1521/pedi.2006.20.3.281

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Burke, L., Kells, M., Flynn, D., & Joyce, M. (2019). Exploring staff perceptions of the utility of clinician connections when working with emotionally dysregulated clients. *Borderline Personality Disorder and Emotion Dysregulation*, *6*(1), 12. https://doi.org/10.1186/s40479-019-0109-0

Carmel, A., Fruzzetti, A. E., & Rose, M. L. (2013). Dialectical behavior therapy training to reduce clinical burnout in a public behavioral health system. *Community Mental Health Journal*, *50*(1), 25–30. https://doi.org/10.1007/s10597-013-9679-2

Carmel, A., Rose, M. L., & Fruzzetti, A. E. (2014). Dialectical behavior therapy training to reduce clinical burnout in a public behavioral health system. *Administration and Policy in Mental Health and Mental Health Services Research*, *41*(5), 608–614. https://doi.org/10.1007/s10488-013-0504-6

Chapman, A. L. (2006). Dialectical behavior therapy: Current indications and unique elements. *Psychiatry (Edgmont)*, *3*(9), 62–68.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE.

Chong, S. A. (2007). Mental healthcare in Singapore. *International Psychiatry: Bulletin of the Board of International Affairs of the Royal College of Psychiatrists*, *4*(4), 88–90.

Chugani, C. D., & Landes, S. J. (2016). Dialectical behavior therapy in college counseling centers: Current trends and barriers to implementation. *Journal of College Student Psychotherapy*, *30*(3), 176–186. https://doi.org/10.1080/87568225.2016.1177429

Clarke, S., Taylor, G., Bolderston, H., Lancaster, J., & Remington, B. (2015). Ameliorating patient stigma amongst staff working with personality disorder: Randomized controlled trial of self-management versus skills training. *Behavioral and Cognitive Psychotherapy*, *43*(6), 692–704. https://doi.org/10.1017/S1352465814000320

Cleary, M., Siegfried, N., & Walter, G. (2002). Experience, knowledge and attitudes of mental health staff regarding clients with a borderline personality disorder. *International Journal of Mental Health Nursing*, *11*(3), 186–191. https://doi.org/10.1046/j.1440-0979.2002.00246.x

Creswell, J. W., & Plano Clark, V. L. (2007). Chapter 4: Choosing a mixed methods design. In J. W. Creswell & V. L. Plano Clark (Eds.), *Designing and conducting mixed methods research* (pp. 58–88). SAGE Publications.

Engle, E., Gadischkie, S., Roy, N., & Nunziato, D. (2013). Dialectical behavior therapy for a college population: Applications at Sarah Lawrence College and beyond. *Journal of College Student Psychotherapy*, *27*(1), 11–30. https://doi.org/10.1080/87568225.2013.739014

Fixsen, D. L., Naoom, S., Blase, K., Friedman, R., & Wallace, F. (2005). Implementation research: A synthesis of the literature. In *The National Implementation Research Network* (p. 34). Louis de la Parte Florida Mental Health Institute.

Gao, G., Ting-Toomey, S., & Gudykunst, W. B. (1996). Chinese communication processes. In M. H. Bond (Ed.), *The handbook of Chinese psychology*. Oxford University Press.

Hall, E. T. (1976). *Beyond culture*. Anchor Press/Double Day.

Harned, M. S., Banawan, S. F., & Lynch, T. R. (2006). Dialectical behavior therapy: An emotion-focused treatment for borderline personality disorder. *Journal of Contemporary Psychotherapy*, *36*(2), 67–75. https://doi.org/10.1007/s10879-006-9009-x

Hatcher, R., & Gillaspy, A. (2006). Development and validation of a revised short version of the working alliance inventory (WAI-SR). *Psychotherapy Research*, *16*, 12–25. https://doi.org/10.1080/10503300500352500

Haynos, A. F., Fruzzetti, A. E., Anderson, C., Briggs, D., & Walenta, J. (2016). Effects of dialectical behavior therapy skills training on outcomes for mental health staff in a child and adolescent residential setting. *Journal of Hospital Administration*, *5*(2), 55–61. https://doi.org/10.5430/jha.v5n2p55

Hazelton, M., Rossiter, R., & Milner, J. (2006). Managing the 'unmanageable': Training staff in the use of dialectical behavior therapy for borderline personality disorder. *Contemporary Nurse*, *21*(1), 120–130. https://doi.org/10.5172/conu.2006.21.1.120

Herschell, A. D., Kogan, J. N., Celedonia, K. L., Gavin, J. G., & Stein, B. D. (2009). Understanding community mental health administrators' perspectives on dialectical behavior therapy implementation. *Psychiatric Services*, *60*(7), 989–992. https://doi.org/10.1176/ps.2009.60.7.989

Kinsey, K., & Reed, P. G. (2014). Linking native American tribal policy to practice in mental health care. *Nursing Science Quarterly.*, *28*, 82–87. https://doi.org/10.1177/0894318414558616

Knaak, S., Mantler, E., & Szeto, A. (2017). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. *Healthcare Management Forum*, *30*(2), 111–116. https://doi.org/10.1177/0840470416679413

Koekkoek, B., van Meijel,, B., & Hutschemaekers, G. (2006). "Difficult patients" in mental health care: A review. *Psychiatric Services*, *57*(6), 795–802. https://doi.org/10.1176/ps.2006.57.6.795

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen burnout inventory: A new tool for the assessment of burnout. *Work and Stress*, *19*(3), 192–207. https://doi.org/10.1080/02678370500297720

Landes, S. J., & Linehan, M. M. (2012). Dissemination and implementation of dialectical behavior therapy: An intensive training model. In R. K. McHugh & D. H. Barlow (Eds.), *Dissemination and implementation of evidence-based psychological interventions* (pp. 187–208). Oxford University Press. https://doi.org/10.1093/med:psych/9780195389050.003.0010

Linehan, M. (2015). *DBT skills training manual (second edition)*. The Guilford Press.

Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder.

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *68*(3), 438–450. https://doi.org/10.1037/0022-006X.68.3.438

O'Key, V. (2014). *An analysis of staff accounts of working with personality disorder diagnoses* [DClinPsy thesis]. University of Nottingham.

Panos, P. T., Jackson, J. W., Hasan, O., & Panos, A. (2014). Meta-analysis and systematic review assessing the efficacy of dialectical behavior therapy (DBT). *Research on Social Work Practice*, *24*(2), 213–223. https://doi.org/10.1177/1049731513503047

Park, Y. S., & Kim, B. S. K. (2008). Asian and European American cultural values and communication styles among Asian American and European American college students. *Cultural Diversity and Ethnic Minority Psychology*, *14*(1), 47–56.

Perseius, K. I., Kåver, A., Ekdahl, S., Åsberg, M., & Samuelsson, M. (2007). Stress and burnout in psychiatric professionals when starting to use dialectical behavioral therapy in the work with young self-harming women showing borderline personality symptoms: Stress in psychiatric professionals starting to use DBT. *Journal of Psychiatric and Mental Health Nursing*, *14*(7), 635–643. https://doi.org/10.1111/j.1365-2850.2007.01146.x

Ritschel, L. A., Lim, N. E., & Steward, L. M. (2015). Transdiagnostic applications of DBT for adolescents and adults. *American Journal of Psychotherapy*, *69*(2), 111–128. https://doi.org/10.1176/appi.psychotherapy.2015.69.2.111

Saldaña, J. (2009). *The coding manual for qualitative researchers*. Sage Publications Ltd.

Simpson, D. D., & Flynn, P. M. (2007). Moving innovations into treatment: A stage-based approach to programme change. *Journal of Substance Abuse Treatment*, *33*(2), 111–120. https://doi.org/10.1016/j.jsat.2006.12.023

Stringer, E. T. (2014). *Action research* (Fourth ed.). SAGE.

Swales, M. A. (2010). Implementing dialectical behaviour therapy: Organizational pre-treatment. *The Cognitive Behaviour Therapist*, *3*(4), 145–157. https://doi.org/10.1017/S1754470X10000115

Swales, M. A., Taylor, B., & Hibbs, R. A. B. (2012). Implementing dialectical behavior therapy: Programmeme survival in routine healthcare settings. *Journal of Mental Health*, *21*(6), 548–555. https://doi.org/10.3109/09638237.2012.689435

Swenson, C. (2000). How can we account for DBT's widespread popularity? *Clinical Psychology: Science and Practice*, *7*(1), 87–91. https://doi.org/10.1093/clipsy/7.1.87

The Grove Street Adolescent Residence of The Bridge of Central Massachusetts, Inc. (2004). 2004 APA gold award: Using dialectical behavior therapy to help troubled adolescents return safely to their families and communities. *Psychiatric Services*, *55*(10), 1168–1170. https://doi.org/10.1176/appi.ps.55.10.1168

Westen, D. (1991). Cognitive-behavioral interventions in the psychoanalytic psychotherapy of borderline personality disorders. *Clinical Psychology Review*, *11*(3), 211–230. https://doi.org/10.1016/0272-7358(91)90101-Y

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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