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**A Review of Dialectical Behavior Therapy**



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## A Review of Dialectical Behavior Therapy

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### Abstract

**Purpose:** This review examines Dialectical Behavior Therapy (DBT), developed by Marsha M. Linehan, focusing on its theoretical foundations, treatment components, empirical efficacy, and adaptations for diverse clinical populations and settings.

**Methodology:** A synthesis of empirical studies, meta-analyses, and clinical manuals was conducted to evaluate DBT and its adaptations, including DBT for Adolescents (DBT-A) and DBT Skills Training for Emotional Problem Solving for Adolescents (DBT STEPS-A).

**Findings:** DBT is effective for borderline personality disorder, suicidality, eating disorders, depression, anxiety, and substance use across adolescents and adults. DBT-A reduces self-harm and suicidal ideation, particularly with family involvement, while DBT-STEPS-A shows promise in school settings. However, research gaps remain in cultural adaptations, social justice practices, and cost-effective delivery models.

**Unique Contribution to Theory, Practice, and Policy:** The review highlights the need for culturally responsive DBT protocols, school-based and telehealth delivery, and policies supporting equitable access. Future research should examine culturally adapted interventions, evaluate cost-effectiveness, and compare DBT with other evidence-based treatments to enhance its global relevance and impact.

**Keywords:** *Dialectical Behavior Therapy; Borderline Personality Disorder; Emotion Regulation; Skills Training; Multicultural Adaptation*

## **A Review of Dialectical Behavior Therapy**

### **Biography of the Theory's Originator: Dr. Marsha Linehan**

Marsha Linehan was the third of six children born to an oilman and his wife in Tulsa, Oklahoma in 1943. She was bright and studious from an early age, but struggled with severe bouts of depression, self-harm, and suicidality. Her parents, at a loss for what to do with their 17-year-old daughter, admitted her to the Institute of Living. This psychiatric hospital is where she remained for 26 months, spending much of that time in a seclusion room in a unit reserved for the most severely mentally ill patients. She was kept in seclusion due to her severe violent outbursts against herself. During the course of her treatment, she was diagnosed with schizophrenia and treated with several antipsychotics as well as shock therapy. She was considered to be beyond hope by her doctors. Other patients noted that Linehan was incredibly compassionate toward other patients during her time at the Institute of Living, even in the midst of her own darkness. In a 2011 interview for the New York Times, Linehan recalls her in-patient experience: "I was in hell," she said. "And I made a vow: when I get out, I'm going to come back and get others out of here" (Carey, 2011).

She was released at the age of 20 and had several suicide attempts throughout the course of her adult life, as well as a significant struggle with self-harm behaviors including cutting and burning. After a second hospitalization, she refocused on her Catholic faith. In her autobiography, Linehan recalls a critical moment in her mental health journey: While praying in the chapel she was suddenly overcome by a sense of self-love for the first time in her life (Linehan, 2020). This newfound self-love strengthened her ability to weather her emotional storms. Even through another bout of severe depression after the end of a romantic relationship, Linehan was able to refrain from suicide attempts and self-harm. It was this new reality, this newfound acceptance of self, that informed Linehan as she worked her way through her college and graduate degrees. Her work was fueled by a passion to help those who seemed beyond help, who shared her experience of darkness, loneliness, and desire to die. She focused much of her early research on clients with severe suicidality, particularly those with a borderline personality disorder (BPD) diagnosis, a diagnosis she would have given her younger self (Linehan, 2020).

Linehan eventually earned her doctorate in psychology from Loyola University in Chicago in 1971, and was a faculty of the University of Washington from 1977 until her retirement as professor emeritus in 2019. It was not until 2011 that Linehan decided to "come out" as having suffered with borderline personality disorder. She recalls feeling as if she owed her honesty to the client she worked her whole life to serve. She chose to share her story of pain, darkness, and "hell" in an address to colleagues and loved ones at the Institute of Living, where she had been hospitalized as a teen.

Marsha Linehan has been noted as one of the most "influential clinical innovators" in mental health, along with Aaron Beck (Frances, 2020). She not only developed the highly efficacious clinical approach, DBT, but has authored and co-authored over 200 books, chapters,

and peer reviewed journal articles. Her dedication to clients who feel hopeless, particularly her decades-long focus on suicidal and BPD client has saved and transformed countless lives.

### **The Foundational Components of Dialectical Behavior Therapy**

Dialectical Behavior Therapy (DBT) involves four primary treatment modes: individual therapy, group-based skills training, as-needed consultations between the client and therapist outside regular sessions, and therapist consultation team meetings. Through these modes, five key functions are addressed (Linehan, 1993). These functions include increasing the client's motivation for change, strengthening their skills and capabilities, helping them apply what they have learned to real-life situations, shaping the environment to support positive outcomes, and maintaining therapist motivation and competence (Rizvi et al., 2013). Additionally, DBT is guided by three main theoretical perspectives: the biosocial theory explaining the development and continuation of borderline personality disorder (BPD) behaviors, behavioral theory, and dialectical philosophy.

Using the biosocial perspective, chronic emotion dysregulation, considered the central feature of BPD, arises from repeated interactions between a biological vulnerability in the emotion regulation system and an invalidating environment, where an individual's emotional experiences and expressions are consistently disregarded or rejected (Linehan, 1993). This biological vulnerability may appear as heightened emotional sensitivity, stronger emotional reactions, and a slower return to baseline after emotional arousal (Crowell et al., 2009; Rizvi et al., 2013). Behavioral theory is the second theoretical influence on DBT. Here, behavior refers to anything a person does, including actions, thoughts, and emotions. This perspective shapes how problems are defined, how behaviors are assessed, what interventions are chosen, and how a case is conceptualized. Interventions aim to increase adaptive behaviors while decreasing maladaptive ones (Linehan, 1993). For example, chronic self-injury may be described in terms of its form, intensity, frequency, triggers, and consequences, with treatment focusing on reducing the frequency of such behaviors. The third theoretical influence, dialectical philosophy, views reality as interconnected, ever-changing, and composed of opposing forces. This means contradictory experiences or desires can coexist in one person, such as "I want to die" and "I want to live," or "I want to stay sober" and "I want to keep using substances", creating internal tension that can lead to change (Rizvi et al., 2013). In DBT, dialectics serve both as a worldview and as communication strategies that therapists use to encourage change. When therapy reaches an impasse, therapists adopt a dialectical stance, holding both opposing perspectives at once and seeking truth in each. The primary dialectic in DBT lies between acceptance and change, helping clients accept themselves and their reality while learning new behaviors to improve their lives (Linehan, 1993; Rizvi et al., 2013).

These three theories, the biosocial model, behavioral theory, and dialectical philosophy, inform the structure of DBT treatment, which unfolds across five stages: pre-treatment followed by stages one through four (Rizvi et al., 2013). In the pre-treatment stage, therapy goals are discussed, commitment to the process is established, and a prioritized list of problem behaviors is

created. The first stage focuses on reducing behavioral dyscontrol by addressing life-threatening behaviors, actions that interfere with therapy, and behaviors affecting quality of life while building behavioral skills. Stage two addresses the sense of “quiet desperation” that may emerge once behavioral control is established, focusing on unresolved issues such as the effects of invalidation, suppressed grief, boredom, or feelings of emptiness. In stage three, clients shift toward less severe problems, working to enhance self-respect and improve quality of life. Finally, in stage four, the focus turns to self-awareness, resolving feelings of incompleteness, and pursuing spiritual fulfillment (Linehan, 1993). It is important to note that these stages may overlap, do not always progress in a linear order, and clients may revisit earlier stages after making progress.

### ***Key Concepts and Constructs of Dialectical Behavior Therapy***

Dialectical Behavioral Therapy is a modular therapy consisting of four key modules: interpersonal effectiveness, emotion regulation, mindfulness, and distress tolerance (Linehan, 2014). These modules work together to help clients accept themselves, their reality, and the reality of their behaviors while also helping clients work toward changing their realities by modifying behaviors. For each of the four modules there is a set of goals. A DBT therapist will guide the client through sets of worksheets, exercises, and role plays to meet these goals. The two primary texts used for DBT are the *DBT Skills Training Manual* (Linehan, 2014) and the *DBT Skills Manual for Adolescents* (Rathus & Miller, 2015). Each volume can be purchased by clinicians electronically or as a spiral-bound copy, and contains dozens of activities and worksheets for each of the modules, as well as other supplemental resources such as lists of mnemonic devices, acronyms, and images to help keep clients engaged and to help clients remember the steps and goals for each module. These manuals can be used in individual and group therapy settings.

#### **Interpersonal Effectiveness**

For clients who struggle with communication in relationships, interpersonal effectiveness is critical. There are three goals of interpersonal effectiveness in DBT. First is to *be skillful in getting what you want and need from others*. The goal is to help clients understand that healthy relationships require clear communication of needs and wants from both parties, and require both parties' willingness to compromise. *Second is to build relationships and end destructive ones*. Toward this goal, clients learn to communicate hurt feelings instead of letting them build up, repair relationships when ruptures have occurred, and resolve conflict before they become overwhelming. Clients will also learn to end toxic relationships. Third is to *walk the middle path*. Clients who struggle with interpersonal effectiveness, particularly those clients with borderline personality disorder, often oscillate from one extreme to another, sometimes in rapid succession. This can create emotional whiplash for the other person in the relationship. The goal of walking the middle path is to help the client find balance in their relationships.

#### **Emotion Regulation**

In this module, clients learn that on one hand they may act out of *emotion mind* and on the other extreme they may act out of *rational mind*, but that the ideal is to act out of *wise mind*. There are four goals in the emotion regulation module. First is to *understand and name your own*

*emotions*. This includes naming emotions and identifying how those emotions help, hinder, or inform the client. Second is to *decrease the frequency of unwanted emotions*. This includes stopping unwanted emotions from starting, and changing unwanted emotions once they have started. Third is to *decrease emotional vulnerability*. This includes decreasing vulnerability to emotion mind and increasing resilience. Fourth and finally is to *decrease emotional suffering*. This includes reducing suffering when painful emotions occur as well as managing extreme emotions to prevent escalation.

### **Mindfulness**

There are three goals of mindfulness. First is to *reduce suffering and increase happiness* including reducing pain, tension, and stress. Second is to *increase control of your mind* focused on preventing the client from being controlled by their thoughts. Third is to *experience reality as it is*, including connecting to the world around them and accepting their essential “goodness.”

### **Distress Tolerance**

The final module of DBT has three goals. First is to *survive crisis situation* without exacerbating the situation, including but not limited to self-harm and suicidal thoughts and behaviors. Second is to *accept reality* in part by shifting the thought pattern universalizing and catastrophizing to remembering the temporal nature of most things. Third is to *become free* including the need to please and appease others or self, as well as becoming free from intense or overwhelming desires, urges, and intense emotions.

### **Organic Development of Dialectical Behavioral Therapy**

Linehan’s primary goal in developing DBT was to help clients struggling with suicidality and borderline personality disorder (Linehan, 2020). Her clinical practice and research started with a focus on behavioral techniques and theories like cognitive behavioral therapy (CBT). However, she found that clients often felt that therapists using a behavioral approach were implying that the client was the problem, and that the therapist was not acknowledging the depths of the client’s suffering. Linehan then began incorporating more and more humanistic theory to inform her practice. She focused on radical acceptance of reality including self, circumstances, and behaviors. This helped course-correct and made clients feel more understood and accepted by therapists. This acceptance from the therapist and guided practice to accept self-increased clients’ motivation to change their circumstances by their changing behaviors. Linehan also infused Zen practices and philosophy into her clinical practice and research. The mindfulness principles she developed and infused into DBT are the result. Linehan notes that DBT was an organic and ever-evolving clinical theory over the course of her 40+ year career (Linehan, 2020).

Today, DBT is recognized as being efficacious in treating not only borderline personality disorder (Koons et al., 2001; Linehan et al., 2015; Panepinto et al., 2015) and suicidality (Adrien et al., 2019; DeCou et al., 2019; Fox et al., 2020), but has also been shown to be efficacious for use with other diagnoses and presenting concerns including disordered eating (Chen et al., 2008; Vogel et al., 2021), depression and anxiety (Wyman, 2014), and substance use disorders (Linehan

et al., 1999). DBT has shown to be efficacious in treating both adults and adolescents (Kothgossner et al., 2021; Miller et al., 2017).

### **Dialectical Behavior Therapy and Multicultural Considerations**

In response to increasing calls for culturally responsive interventions (Rathod et al., 2018), researchers have focused on cultural adaptations of evidence-based treatments, which involve tailoring interventions to align with clients' cultural contexts (Bernal et al., 2009). For example, Hall and colleagues (2016) conducted a meta-analysis revealing that culturally adapted treatments are about five times more likely to result in remission from psychological disorders compared to control conditions. While DBT is categorized as a behavioral, idiographic treatment, approaches that are generally considered culturally responsive (O'Donohue, 2005), it was originally developed within a Western, educated, industrialized, rich, and democratic (WEIRD) framework (Henrich et al., 2010). Consequently, it may not fully meet the needs of diverse cultural or racial and ethnic groups. It is also important to acknowledge that the original DBT studies included limited representation of various racial and ethnic populations (Koons et al., 2001; Linehan et al., 1999; Springer et al., 1996), highlighting the need to investigate DBT's applicability across diverse cultural settings.

Research indicates that DBT can accommodate cultural adaptations, offering flexibility while maintaining fidelity across different client populations and contexts (Hayes et al., 2011). This balance allows DBT to remain consistent with the treatment model while integrating clients' cultural backgrounds (Domenech Rodriguez & Bernal, 2012). Moreover, DBT incorporates practices influenced by Zen Buddhism and other contemplative traditions, including Eastern meditation and Christian reflective practices (Dimidjian & Linehan, 2003). During the pre-treatment phase, DBT also emphasizes a thorough evaluation of clients' cultural values and beliefs (Linehan, 2014). Importantly, DBT encourages ongoing collaboration between therapist and client to examine how cultural contexts influence treatment, requiring clinicians to develop a comprehensive understanding of each client's cultural environment (Bolden et al., 2020; Haft et al., 2022).

Although DBT has the potential to integrate cultural perspectives, several elements may need further adaptation to enhance inclusivity (Haft et al., 2022). For example, in the pre-treatment phase, the biosocial theory could explicitly address issues such as historical and intergenerational trauma, acculturative stress, cultural differences, and systemic discrimination (Haft et al., 2022). Pierson and colleagues (2022) noted that racism can hinder the development of adaptive behaviors, yet this factor is not directly addressed in DBT skills training. Similarly, Kinsey (2014) emphasized incorporating the intergenerational effects of historical trauma when applying DBT with Native American populations. Research also suggests that maladaptive behaviors like eating disorders may arise as responses to racial stressors among Black adolescents, differing from the pursuit of thinness often observed among white adolescents (Kamody et al., 2020). For immigrant clients, acculturative stress can be validated and explored within the DBT framework (Cheng & Merrick, 2017). Additionally, therapists should consider whether DBT skills align with clients'

cultural contexts, including factors like geographic location, cultural traditions, and significant relationships (Linehan, 2014). For instance, when teaching interpersonal effectiveness skills, therapists may need to emphasize interdependent relationships for clients from collectivist cultures (Linehan, 2014). Ultimately, clinicians must remain attentive to clients' cultural needs, recognize their own cultural assumptions, and consider how these may impact the therapeutic process to ensure culturally responsive care.

## **Implementing Dialectical Behavior Therapy in Diverse Settings and Populations**

### ***Adolescents***

Researchers have proposed that adolescents can be classified into three groups: typical, moderately asymptomatic, and severely emotionally and behaviorally dysregulated adolescents who may require intensive settings such as inpatient or residential treatment (Rathus & Miller, 2015). These groups exist along a continuum, with each requiring varying levels of support. Scholars suggest that DBT skills can benefit youth across this spectrum, from middle school through early college, including those with normal mood fluctuations, occasional relationship challenges, and infrequent risk behaviors. In addition, DBT skills can be adapted for at-risk adolescents showing early signs of mental health concerns such as academic difficulties, attentional challenges, anxiety or depressive symptoms, and family conflicts (Rathus & Miller, 2015).

The *DBT Skills Manual for Adolescents* serves as a practical guide for clinicians working with youth struggling to manage emotions and behaviors effectively. Emotional and behavioral dysregulation frequently interfere with an adolescent's ability to develop a stable identity and maintain healthy, meaningful relationships with family and peers. Moreover, impulsive or avoidant behaviors often arise as outcomes of emotion dysregulation or as attempts to regain emotional balance (Rathus & Miller, 2015). The table below outlines DBT treatment stages along with their primary therapeutic goals.

### **Standard DBT Stages and Their Hierarchies of Primary treatment Targets**

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*Pretreatment stage: Orientation and commitment to treatment, agreement on goals*

Targets:

1. Inform adolescent about, and orienting adolescent to, DBT.
2. Inform adolescent's family about, and orienting family to, DBT.
3. Secure adolescent's commitment to treatment.
4. Secure adolescent's family's commitment to treatment.
5. Secure therapist's commitment to treatment.

*Stage 1: Attaining basic capacities, increasing safety, reducing behavioral dyscontrol*

Primary targets in individual DBT:

1. Decrease life-threatening behaviors.
2. Decrease therapy-interfering behaviors.

3. Decrease quality-of-life-interfering behaviors.
4. Increase behavioral skills.

Primary targets in DBT skills training:

1. Decrease behaviors likely to destroy therapy.
2. Increase skill acquisition, strengthening, and generalization.
  - a. Core mindfulness
  - b. Interpersonal effectiveness
  - c. Emotion regulation
  - d. Distress tolerance
  - e. Walking the middle path
3. Decrease therapy-interfering behaviors.

*Stage 2: Increasing non-anguished emotional experiencing, reducing traumatic stress*

Primary target in individual DBT:

1. Decrease avoidance of emotional experience and posttraumatic stress.

*Stage 3: Increasing self-respect and achieving individual goals, addressing normal problems in living*

Primary targets in individual DBT:

1. Increase respect for self.
2. Achieve individual goals.

*Stage 4: Finding joy, meaning, connection, and self-actualization*

Primary targets in individual DBT:

1. Resolve a sense of incompleteness.
2. Find freedom and joy.

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*From Linehan (1993, Table 6.1, p. 167)*

### **Self-harm and Suicidal Ideation**

Research indicates that key mental health concerns among adolescents include self-injury, suicidal thoughts, and suicide attempts (Kothgassner et al., 2021). Adolescence is considered a critical developmental stage for the onset of both self-harm and suicidality (Wyman, 2014). Therefore, interventions designed for this age group must be carefully evaluated and, if necessary, adapted to effectively address the mental health needs of adolescents.

One approach that has gained considerable attention from both clinicians and researchers is Dialectical Behavior Therapy for Adolescents (DBT-A). Although DBT was originally created for women diagnosed with borderline personality disorder who were at high risk for suicide (Chapman, 2006; Linehan et al., 1993), it was later modified for adolescents, with self-harm and suicidal ideation identified as the primary focus in therapy (Miller et al., 2017). As explained by

Kothgassner and colleagues (2021), DBT-A is a structured, manualized therapy typically provided in outpatient settings and includes weekly individual sessions alongside group-based skills training. DBT-A focuses on developing skills in mindfulness, distress tolerance, interpersonal effectiveness, and emotion regulation as essential tools for managing emotional dysregulation and suicidal thinking (Miller et al., 2017; Rathus & Miller, 2015).

Research findings on the effectiveness of DBT in reducing suicide and self-harm have been mixed. A 2020 meta-analysis reported no significant impact of DBT on suicidal ideation but a small positive effect on self-harming behaviors (Fox et al., 2020). Similarly, DeCou and colleagues (2019) observed a modest reduction in self-harm but no significant change in suicidal ideation. However, a more recent meta-analysis reviewing 21 studies with 1,673 participants aged 12-19 found DBT-A to be effective in reducing both self-harm and suicidal ideation as primary outcomes (Kothgassner et al., 2021). This study also indicated that longer durations of DBT-A treatment were linked to greater improvements, particularly in reducing suicidal thoughts (Kothgassner et al., 2021). Importantly, DBT-A involves family members in the therapeutic process to address maladaptive behaviors within the family system. This comprehensive approach helps reduce problematic behaviors by targeting the family's behavioral and communication patterns (Kothgassner et al., 2021). Moreover, Adrian and colleagues (2019) found that adolescents with higher initial levels of emotional dysregulation, along with caregivers reporting greater psychopathology and emotion regulation difficulties, showed the most significant reductions in self-harm six months after completing DBT-A. Despite these encouraging findings regarding DBT-A for self-harm and suicidal ideation in youth (Kothgassner et al., 2021), further research is necessary to better understand the mechanisms through which DBT-A achieves these outcomes.

### **Eating Disorders**

Research has shown a strong connection between eating disorders, elevated rates of co-occurring psychiatric conditions, and serious medical risks, including mortality (Iwajomo et al., 2020; van Hoeken et al., 2020; Yao et al., 2019). Despite the seriousness of the condition and the potential irreversibility of certain medical complications resulting from adolescent malnutrition (Chidiac, 2019), current evidence-based treatments for youth with eating disorders demonstrate only moderate effectiveness. However, studies indicate that DBT may be particularly suitable for adolescents whose eating disorders stem from and are maintained by mechanisms addressed in this therapy, such as emotion regulation difficulties, whether through inhibited emotional expression commonly seen in Anorexia Nervosa or emotional intensity and dysregulation often present in Bulimia Nervosa and Binge Eating Disorder (Wisniewski & Kelly, 2003). Moreover, because DBT targets multiple problem behaviors at once, it may be especially valuable for adolescents with eating disorders who frequently experience co-occurring conditions and related symptoms, including suicidal ideation, self-harm, and substance abuse. The capacity to address several areas of concern within a comprehensive, structured framework while maintaining strong fidelity to the

treatment model is a distinctive advantage of DBT compared to other approaches like Cognitive Behavioral Therapy or Family-based Treatment (Linardon et al., 2017).

Vogel and colleagues (2021) conducted a systematic review on the use of DBT for adolescent eating disorders and found that both DBT and DBT-informed treatments show high feasibility, acceptability, and effectiveness, with reductions in overall eating pathology across various eating disorder diagnoses. Their findings suggested that DBT and DBT-informed interventions are particularly effective for Bulimia Nervosa and Binge Eating Disorder, leading to significant decreases in binge eating behaviors or full abstinence by the conclusion of treatment. Vogel et al. (2021) emphasized the need for further research, particularly randomized controlled trials and studies in inpatient settings with a focus on follow-up outcomes, to better understand the long-term efficacy of DBT for this population.

### ***Rural Schools***

Research has shown that adolescents living in low-income communities often face poverty and trauma, combined with limited access to essential resources, which increases their need for mental health support (Chugani et al., 2021). School-based socio-emotional learning (SEL) programs have emerged as a promising approach to ensuring universal access to mental health services (Chugani et al., 2021). One such program is Dialectical Behavior Therapy Skills Training for Emotional Problem Solving for Adolescents (DBT STEPS-A). This initiative equips teachers to provide instruction in mindfulness (i.e., cultivating self-awareness, reducing judgmental attitudes, and improving attention control), emotion regulation (i.e., lowering distressing emotions and enhancing positive ones), distress tolerance (i.e., enduring emotional discomfort without worsening the situation through impulsive behaviors), and interpersonal effectiveness (i.e., making requests or declining them while preserving relationships and self-respect) based on dialectical behavior therapy principles (Mazza et al., 2016).

DBT STEPS-A draws from the skills training component of DBT (Linehan, 1993), which has demonstrated effectiveness across various mental health conditions (Neacsiu et al., 2014; Ritschel et al., 2015), including depression and anxiety (Panepinto et al., 2015), suicidality (Linehan et al., 2015), addiction (Wilks et al., 2017), and eating disorders (Chen et al., 2008). This program specifically addresses mental health needs by combining mindfulness practices with strategies for emotion regulation, distress tolerance, and interpersonal skills (Chugani et al., 2021). For example, Flynn and colleagues (2018) found preliminary evidence that DBT STEPS-A helped reduce emotional symptoms and internalizing difficulties, such as anxiety and depression, among high school students. Similarly, Martinez Jr. and colleagues (2021) reported improvements in social resilience and emotion regulation challenges among racially diverse ninth-grade students in rural areas who participated in the program.

Although initial findings are promising, Chugani and colleagues (2021) concluded that DBT STEPS-A is both feasible and acceptable for educators to implement. However, further

research is needed to ensure the program's content is appropriate for students from diverse racial and socioeconomic backgrounds and to make necessary adaptations if required.

### ***Latino/a/x Spanish Speaking Clients***

As noted earlier, psychological interventions tend to be more effective when they incorporate clients' unique characteristics and needs (Barlow, 2004; Mercado & Hinojosa, 2017). The cultural match theory (CMT) proposes that when clients' cultural values align with therapeutic approaches, treatment outcomes improve (La Roche et al., 2006; Mercado & Hinojosa, 2017). Applying CMT to evaluate whether DBT aligns with the cultural values of Latino/a/x Spanish-speaking clients, research suggests that familism, a strong sense of commitment and loyalty toward family, should be carefully addressed in DBT. Furthermore, the interpersonal effectiveness skills taught in DBT can help foster healthy relationships and enhance communication, supporting this central cultural value. However, because DBT emphasizes emotion regulation while some individuals may value open emotional expression, this could lead to cultural differences in treatment. Both clients and clinicians must therefore explore how emotion regulation relates to cultural expectations (Mercado & Hinojosa, 2017).

La Roche (2013) argued that clinical interventions should examine underlying cultural assumptions. For example, within DBT, aspects such as familism, personalism in interpersonal effectiveness, fatalism (i.e., the belief that life events are beyond one's control), and traditional gender roles in distress tolerance should be carefully considered. Emphasizing family unity and respect in culturally appropriate ways, ideally with bilingual clinicians who share similar cultural backgrounds, can help clients maintain cultural values while developing healthier communication skills to express needs without disregarding respect for family and peers (Mercado & Hinojosa, 2017). Additionally, studies highlight that DBT's structured format and homework assignments support effective delivery of DBT skills and psychoeducation in Latin cultural contexts (Santiago-Rivera et al., 2012). Finally, clinicians must assess differences between a treatment's cultural assumptions and the target group's cultural norms (La Roche, 2013). This includes recognizing when to approach therapy from an individualistic versus collectivistic perspective. Given that Latin culture is strongly collectivistic, this knowledge can guide culturally appropriate adaptations while preserving DBT's core principles (Mercado & Hinojosa, 2017). Moreover, incorporating culturally relevant communication styles, such as Dichos (sayings), Cuentos (storytelling), and Platicas (to chat, informal conversations), within DBT skills groups may further enhance treatment effectiveness for this population (McFarr et al., 2014). It is noteworthy that a review of the literature on DBT shows that its effectiveness among diverse populations and settings, as well as the ways it can be adapted for cultural sensitivity, remain underexplored. Future studies should therefore focus on evaluating DBT's efficacy with underrepresented groups, including young men, gender-diverse individuals, and Black populations.

**Dialectical Behavior Therapy, Social Justice, and Advocacy**

The paucity of research in the realm of investigating or discussing the cultural responsiveness of DBT to the needs of Black clients is unfortunately evident (Pierson et al., 2022). In addition, there is no guidance for clinicians on how to practice antiracism within the context of DBT. Therefore, it is essential to elaborate on the incorporation of antiracist adaptations to DBT for therapists, particularly White therapists. For instance, problem-solving skills taught in DBT emphasize accurately defining the current problem situation. This is a critical step to warrant that the produced solution can effectively address the problem (Pierson et al., 2022). However, it is a complex task to identify the current problem situation as racism for many therapists who either do not have appropriate skills or may experience difficulties with emotion regulation that interfere with their ability to engage in antiracist therapeutic practice. Moreover, Pierson and colleagues (2022) believed that the current literature related to the cultural responsiveness of DBT for racially marginalized clients only offers one side of a dialectic, helping clients overcome the detrimental effects of racism and not addressing how the exploitation of non-White individuals by White-dominant institutions through power manipulation may have led to the current problem situation (Delgado & Stefanic, 2001). Ergo, White DBT therapists should actively work to improve their antiracist competencies, gain more skills, and diminish their own racist agenda that prevent them from rendering effective treatments to racially marginalized clients. Accordingly, the antiracist adaptation of DBT should encompass an explicit agreement that therapists will commit to recognizing and identifying their own racist ideas, beliefs, and behaviors and seek out consultations to foster competency in this area, which is consistent with tenets of Critical Race Psychology (Salter & Adams, 2013), requiring the admittance and non-defensive acceptance that racism is omnipresent. The fallibility agreement is the initial yet crucial step toward progressive change for greater racial equity for Black clients in therapy (Pierson et al., 2022).

**Assessment of Dialectical Behavior Therapy and Conclusion**

DBT is an efficacious therapeutic approach to treating a myriad of mental health concerns, including those that clinicians had deemed hopeless cases only a few decades before, namely suicidality and BPD. However, DBT has several shortcomings. First is the dangerous gap in the research regarding antiracist practice with Black clients and clients with other minoritized identities. Second is the cost barrier. DBT is most effective when clients attend weekly sessions for six months to one year, and sometimes more. Because of the need for repetition to rewire and reframe behavior and thought patterns, DBT is not a short-term friendly therapeutic approach. Finally, DBT, though a composite of behavioral and humanistic theories with a Zen infusion, is still largely prescriptive, which can be difficult to effectively adapt in multicultural settings. Even with these deficits, DBT continues to prove efficacious with a wide variety of diagnoses and presenting concerns, and has been used to save countless lives from suicide.

**Recommendations**

Based on the comprehensive review of the literature and the critical analysis of Dialectical Behavior Therapy (DBT), several recommendations emerge for clinical practice and future

research. In clinical contexts, DBT should be expanded through intentional cultural adaptations that incorporate antiracist frameworks and address systemic oppression directly within the biosocial model. Explicitly integrating content on historical trauma, acculturative stress, and racial discrimination into DBT protocols would ensure that the treatment responds adequately to the lived experiences of marginalized clients. Training for DBT practitioners must therefore include cultural humility, antiracist competencies, and strategies for adapting treatment materials to the cultural values and communication styles of diverse populations, such as incorporating storytelling or culturally familiar metaphors in therapy groups.

Accessibility also remains a pressing concern. Because standard DBT is resource-intensive and requires sustained client participation, mental health systems should explore stepped-care approaches and community-based adaptations to reach underserved populations in rural areas, low-income settings, and schools. Technology-assisted interventions, such as telehealth formats and DBT mobile applications, may reduce barriers to care while maintaining treatment fidelity. These adaptations could be especially valuable for adolescents and their families, where early intervention has the potential to disrupt trajectories of emotion dysregulation before they escalate into severe psychiatric crises.

Another area for clinical emphasis lies in the integration of families and caregivers into the therapeutic process. Evidence from DBT for adolescents (DBT-A) suggests that including family members in psychoeducation and skills training enhances treatment outcomes by addressing dysfunctional interaction patterns and reinforcing skill use in naturalistic environments (e.g., Kothgassner et al., 2021; Miller et al., 2017; Rathus & Miller, 2015). Similarly, embedding DBT within educational settings through programs such as DBT STEPS-A holds considerable promise for universal prevention efforts. Collaborations between school psychologists, educators, and DBT-trained clinicians may promote emotional regulation and distress tolerance skills as essential components of socio-emotional learning curricula, thereby promoting mental health literacy and reducing stigma around help-seeking. Finally, professional development for DBT therapists must remain a priority. Ongoing consultation teams, advanced training in cultural adaptation, and supervision that addresses therapist burnout and implicit biases are necessary to sustain treatment quality and therapist well-being over time.

In terms of research, future studies should prioritize identifying the mechanisms through which DBT exerts its effects. Longitudinal and experimental designs are needed to test whether changes in mindfulness, distress tolerance, or interpersonal effectiveness mediate reductions in suicidality, self-harm, and emotion dysregulation across diverse populations. Moreover, randomized controlled trials should rigorously evaluate culturally adapted DBT protocols, particularly for Black, Latino/a/x, Indigenous, and immigrant communities that remain underrepresented in clinical research. Such studies must not only assess clinical outcomes but also examine how adaptations influence treatment engagement, therapeutic alliance, and perceived cultural relevance.

Economic analyses are also warranted to evaluate the cost-effectiveness of low-intensity or technology-assisted DBT interventions. Public health systems and schools require evidence

regarding the scalability and sustainability of these formats before large-scale implementation can occur. Comparative effectiveness trials that directly compare DBT with other evidence-based interventions for conditions such as eating disorders or suicidality would further clarify DBT's unique contributions relative to alternative approaches. Finally, research must investigate the explicit integration of social justice principles into DBT training and supervision. Measuring therapist competence and client outcomes when these commitments are operationalized will advance both the empirical and ethical foundations of DBT in increasingly diverse clinical landscapes.

### Conclusion

This review has demonstrated that DBT's theoretical synthesis of behavioral science, dialectical philosophy, and mindfulness practice provides a robust and flexible framework for addressing complex clinical presentations across individual, family, and systems levels. Its efficacy with adolescents, clients with co-occurring disorders, and individuals in diverse settings such as schools and inpatient units underscores its broad applicability and life-saving potential. Nevertheless, the analysis also reveals critical limitations that must inform DBT's future evolution. Standard protocols insufficiently address cultural and systemic factors, leaving gaps in responsiveness to the lived realities of diverse populations. Cost and duration barriers continue to restrict access for clients in under-resourced settings, while inconsistent findings regarding outcomes such as suicidality reduction highlight the need for further methodological rigor. Moreover, the lack of explicit guidance on integrating social justice principles into DBT training and practice represents a significant oversight in a sociopolitical context where mental health disparities remain pervasive.

The future of DBT therefore depends on a dialectical synthesis: preserving the treatment's core principles of acceptance and change while embracing innovations in cultural adaptation, technological delivery, and implementation science. By committing to inclusivity, scalability, and empirical precision, clinicians and researchers can ensure that DBT remains not only an effective intervention for individuals presenting concerns but also a vehicle for advancing health equity and social justice. Ultimately, DBT's ongoing development must balance fidelity with flexibility, scientific rigor with cultural humility, and symptom reduction with systemic transformation. In doing so, the field can honor Marsha Linehan's original vision of bringing hope and healing to those once considered beyond help, while extending that promise to increasingly diverse and complex clinical realities.

### References

- Adrian, M., McCauley, E., Berk, M. S., Asarnow, J. R., Korslund, K., Avina, C. & Linehan, M. M. (2019). Predictors and moderators of recurring self-harm in adolescents participating in a comparative treatment trial of psychological interventions. *Journal of child psychology and psychiatry*, 60(10), 1123-1132. <https://doi.org/10.1111/jcpp.13099>
- Barlow, D. H. (2004). Psychological treatments. *American Psychologist*, 59(9), 869-879. <https://doi.org/10.1037/0003-066X.59.9.869>

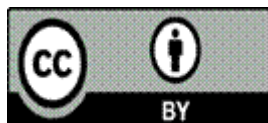
- Bernal, G., Jiménez-Chafey, M. I., & Domenech Rodríguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology, Research and Practice*, 40(4), 361-368. <https://doi.org/10.1037/a0016401>
- Bolden, L. S., Gaona, L., McFarr, L., & Comtois, K. (2020). DBT–ACES in a multicultural community mental health setting: implications for clinical practice. In J. Bedics (Ed.), *The handbook of dialectical behavior therapy* (pp. 307-324). Elsevier. <https://doi.org/10.1016/B978-0-12-816384-9.00014-2>
- Carey, B. (2011, June 23). Expert on mental illness reveals her own fight. *The New York Times*, A1.
- Chapman, A. L. (2006). Dialectical behavior therapy: Current indications and unique elements. *Psychiatry*, 3(9), 62-68.
- Chen, E., Matthews, L., Allen, C., Kuo, J., & Linehan, M. (2008). Dialectical behavior therapy for clients with binge eating disorder or bulimia nervosa and borderline personality disorder. *International Journal of Eating Disorders*, 41(6), 505-512. <https://doi.org/10.1002/eat.20522>
- Cheng, P.-H., & Merrick, E. (2017). Cultural adaptation of dialectical behavior therapy for a Chinese international student with eating disorder and depression. *Clinical Case Studies*, 16(1), 42–57. <https://doi.org/10.1177/1534650116668269>
- Chidiac, Carole Wehbe. (2019). An update on the medical consequences of anorexia nervosa. *Current Opinion in Pediatrics*, 31(4), 448-453. <https://doi.org/10.1097/MOP.0000000000000755>
- Chugani, C. D., Murphy, C. E., Talis, J., Miller, E., McAneny, C., Condosta, D., ... & Mazza, J. J. (2022). Implementing dialectical behavior therapy skills training for emotional problem solving for adolescents (DBT STEPS-A) in a low-income school. *School Mental Health*, 14(2), 391-401. <https://doi.org/10.1007/s12310-021-09472-4>
- Crowell, S. E., Beauchaine, T. P., & Linehan, M. M. (2009). A biosocial developmental model of borderline personality: Elaborating and extending Linehan's theory. *Psychological Bulletin*, 135(3), 495-510. <https://doi.org/10.1037/a0015616>
- DeCou, C. R., Comtois, K. A., & Landes, S. J. (2019). Dialectical behavior therapy is effective for the treatment of suicidal behavior: A meta-analysis. *Behavior Therapy*, 50(1), 60-72. <https://doi.org/10.1016/j.beth.2018.03.009>
- Delgado, R., & Stefancic, J. (2017). *Critical race theory: An introduction*. NyU press.
- Dimidjian, S., & Linehan, M. M. (2003). Defining an agenda for future research on the clinical application of mindfulness practice. *Clinical Psychology: Science and Practice*, 10(2), 166-171. <https://doi.org/10.1093/clipsy.bpg019>
- Domenech Rodríguez, M. M., & Bernal, G. (2012). Bridging the gap between research and practice in a multicultural world. In G. Bernal & M. M. Domenech Rodríguez (Eds.), *Cultural adaptations: Tools for evidence-based practice with diverse populations* (pp. 265-287). American Psychological Association. <https://doi.org/10.1037/13752-013>

- Flynn, D., Joyce, M., Weihrauch, M., & Corcoran, P. (2018). Innovations in practice: Dialectical behavior therapy - skills training for emotional problem solving for adolescents (DBT STEPS- A): Evaluation of a pilot implementation in Irish post-primary schools. *Child and Adolescent Mental Health*, 23(4), 376-380. <https://doi.org/10.1111/camh.12284>
- Fox, K. R., Huang, X., Guzman, E. M., Funsch, K. M., Cha, C. B., Ribeiro, J. D., & Franklin, J. C. (2020). Interventions for suicide and self-injury: A meta-analysis of randomized controlled trials across nearly 50 years of research. *Psychological Bulletin*, 146(12), 1117-1145. <https://doi.org/10.1037/bul0000305>
- Frances, A. (2020). Forward. In M. M. Linehan, *Building a life worth living: A memoir* (pp. xi-xii). Random House.
- Haft, S. L., O'Grady, S. M., Shaller, E. A. L., & Liu, N. H. (2022). Cultural Adaptations of Dialectical Behavior Therapy: A Systematic Review. *Journal of Consulting and Clinical Psychology*. Advance online publication. <http://dx.doi.org/10.1037/ccp0000730>
- Hall, G. C. N., Ibaraki, A. Y., Huang, E. R., Marti, C. N., & Stice, E. (2016). A meta-analysis of cultural adaptations of psychological interventions. *Behavior Therapy*, 47(6), 993-1014. <https://doi.org/10.1016/j.beth.2016.09.005>
- Hayes, S. C., Villatte, M., Levin, M., & Hildebrandt, M. (2011). Open, aware, and active: Contextual approaches as an emerging trend in the behavioral and cognitive therapies. *Annual Review of Clinical Psychology*, 7, 141-168. <https://doi.org/10.1146/annurev-clinpsy-032210-104449>
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2-3), 61-83. <https://doi.org/10.1017/S0140525X0999152X>
- Kamody, R. C., Thurston, I. B., & Burton, E. T. (2020). Acceptance-based skill acquisition and cognitive reappraisal in a culturally responsive treatment for binge eating in adolescence. *Eating Disorders: The Journal of Treatment & Prevention*, 28(2), 184-201. <https://doi.org/10.1080/10640266.2020.1731055>
- Kinsey, K. M. (2014). *A critical ethnography of the compatibility of a culturally modified dialectical behavior therapy with Native American culture and context*. The University of Arizona.
- Koons, C. R., Robins, C. J., Lindsey Tweed, J., Lynch, T. R., Gonzalez, A. M., Morse, J. Q., Bishop, G. K., Butterfield, M. I., & Bastian, L. A. (2001). Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. *Behavior Therapy*, 32(2), 371-390. [https://doi.org/10.1016/S0005-7894\(01\)80009-5](https://doi.org/10.1016/S0005-7894(01)80009-5)
- Kothgassner, O., Goreis, A., Robinson, K., Huscsava, M., Schmahl, C., & Plener, P. (2021). Efficacy of dialectical behavior therapy for adolescent self-harm and suicidal ideation: A systematic review and meta-analysis. *Psychological Medicine*, 51(7), 1057-1067. <https://doi.org/10.1017/S0033291721001355>
- La Roche, M. J. (2013). *Cultural psychotherapy; theory, methods, and practice*. Sage.

- La Roche, M. J., D'Angelo, E., Gualdron, L., & Leavell, J. (2006). Culturally sensitive guided imagery for allocentric Latinos: A pilot study. *Psychotherapy: Theory, Research, Practice, Training*, 43(4), 555-560. <https://doi.org/10.1037/0033-3204.43.4.555>
- Linardon, J., Fairburn, C. G., Fitzsimmons-Craft, E. E., Wilfley, D. E., & Brennan, L. (2017). The empirical status of the third-wave behavior therapies for the treatment of eating disorders: A systematic review. *Clinical psychology review*, 58, 125-140. <https://doi.org/10.1016/j.cpr.2017.10.005>
- Linehan, M. M. (2020). *Building a life worth living: A memoir*. Random House.
- Linehan, M. (2014). *DBT skills training manual*. Guilford Press.
- Linehan, M. M. (1993). *Cognitive behavioral treatment of borderline personality disorder*. Guildford Press.
- Linehan, M. M., Korslund, K. E., Harned, M., Gallop, R., Lungu, A., Neacsiu, A., McDavid, J., Comtois, K. A., & Murray-Gregory, A. (2015). Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder: A randomized clinical trial and component analysis. *JAMA Psychiatry*, 72(5), 475-482. <https://doi.org/10.1001/jamapsychiatry.2014.3039>
- Linehan, M. M., Schmidt, H., Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *American Journal on Addictions*, 8(4), 279-292. <https://doi.org/10.1080/105504999305686>
- Martinez Jr., R. R., Marraccini, M. E., Knotek, S. E., Neshkes, R. A., & Vanderburg, J. (2021). Effects of dialectical behavior therapy skills training for emotional problem solving for adolescents (DBT STEPS-A) program of rural ninth-grade students. *School Mental Health*, 14, 165-178. <https://doi.org/10.1007/s12310-021-09463-5>
- Mazza, J., Dexter-Mazza, E., Miller, A., Rathus, J., & Murphy, H. (2016). *DBT skills in schools: Skills training for emotional problem solving for adolescents (DBT STEPS-A)*. Guilford Press.
- McFarr, L., Gaona, L., Barr, N., Ramirez, U., Henriquez, S., Farias, A., & Flores, D. (2014). Cultural considerations in dialectical behavior therapy. In A. Masuda (Ed.), *Mindfulness and acceptance in multicultural competency: A contextual approach to sociocultural diversity in theory and practice* (pp. 75-92). Context Press/New Harbinger Publications.
- Mercado, A., & Hinojosa, Y. (2017). Culturally adapted dialectical behavior therapy in an underserved community mental health setting: A Latina adult case study. *Practice Innovations*, 2(2), 80-93. <https://doi.org/10.1037/pri0000045>
- Miller, A. L., Rathus, J. H., & Linehan, M. M. (2017). *Dialectical behavior therapy with suicidal adolescents*. Guilford Press.
- Neacsiu, A., Eberle, J., Kramer, R., Wiesmann, T., & Linehan, M. (2014). Dialectical behavior therapy skills for transdiagnostic emotion dysregulation: A pilot randomized controlled

- trial. *Behavior Research and Therapy*, 59, 40-51.  
<https://doi.org/10.1016/j.brat.2014.05.005>
- O'Donohue, W. T. (2005). Cultural sensitivity: A critical examination. In R. H. Wright & N. Cummings (Eds.), *Destructive trends in mental health* (p. 29-44). Routledge.
- Panepinto, A., Uschold, C., Olandese, M., & Linn, B. (2015). Beyond borderline personality disorder: dialectical behavior therapy in a college counseling center. *Journal of College Student Psychotherapy*, 29(3), 211-226. <https://doi.org/10.1080/87568225.2015.1045782>
- Pierson, A. M., Arunagiri, V., & Bond, D. M. (2022). "You didn't cause racism, and you have to solve it anyways": Antiracist adaptations to dialectical behavior therapy for White therapists. *Cognitive and Behavioral Practice*, 29(4), 796-815.  
<https://doi.org/10.1016/j.cbpra.2021.11.001>
- Rathod, S., Gega, L., Degnan, A., Pikard, J., Khan, T., Husain, N., Munshi, T., & Naeem, F. (2018). The current status of culturally adapted mental health interventions: A practice-focused review of meta-analyses. *Neuropsychiatric Disease and Treatment*, 14(1), 165-178. <https://doi.org/10.2147/NDT.S138430>
- Rathus, J. H., & Miller, A. L. (2015). *DBT skills manual for adolescents*. Guilford Publications.
- Ritschel, L., Lim, N., & Stewart, L. (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>
- Rizvi, S. L., Steffel, L. M., & Carson-Wong, A. (2013). An overview of dialectical behavior therapy for professional psychologists. *Professional Psychology: Research and Practice*, 44(2), 73-80. <https://doi.org/10.1037/a0029808>
- Salter, P., & Adams, G. (2013). Toward a critical race psychology. *Social and Personality Psychology Compass*, 7(11), 781-793. <https://doi.org/10.1111/spc3.12068>
- Santiago-Rivera, A. L., Arredondo, P., & Gallardo-Cooper, M. (2002). *Counseling Latinos and la familia; A practical guide*. Sage.
- Smythe, J., Colebourn, C., Prisco, L., Petrinic, T., & Leeson, P. (2021). Cardiac abnormalities identified with echocardiography in anorexia nervosa: Systematic review and meta-analysis. *The British Journal of Psychiatry*, 219(3), 477-486.  
<https://doi.org/10.1192/bjp.2020.1>
- Springer, T., Lohr, N. E., Buchtel, H. A., & Silk, K. R. (1996). A preliminary report of short-term cognitive-behavioral group therapy for inpatients with personality disorders. *The Journal of Psychotherapy Practice and Research*, 5(1), 57-71.
- van Hoeken, D., & Hoek, H. W. (2020). Review of the burden of eating disorders: mortality, disability, costs, quality of life, and family burden. *Current opinion in psychiatry*, 33(6), 521-527. <https://doi.org/10.1097/YCO.0000000000000641>
- Vogel, E. N., Singh, S., & Accurso, E. C. (2021). A systematic review of cognitive behavior therapy and dialectical behavior therapy for adolescent eating disorders. *Journal of eating disorders*, 9(1), 1-38. <https://doi.org/10.1186/s40337-021-00461-1>

- Wilks, C., Ang, S., Matsumiya, B., Lungu, A., & Linehan, M. (2017). Internet-delivered dialectical behavioral therapy skills training for suicidal and heavy episodic drinkers: Protocol and preliminary results of a randomized controlled trial. *JMIR Research Protocols*, 25(6), e207. <https://doi.org/10.2196/resprot.7767>
- Wisniewski, L., & Kelly, E. (2003). The application of dialectical behavior therapy to the treatment of eating disorders. *Cognitive and Behavioral Practice*, 10(2), 131-138. [https://doi.org/10.1016/S1077-7229\(03\)80021-4](https://doi.org/10.1016/S1077-7229(03)80021-4)
- Wyman, P. A. (2014). Developmental approach to prevent adolescent suicides: Research pathways to effective upstream preventive interventions. *American Journal of Preventive Medicine*, 47(3), S251-S256. <https://doi.org/10.1016/j.amepre.2014.05.039>
- Yao, S., Kuja-Halkola, R., Martin, J., Lu, Y., Lichtenstein, P., Noring, C., ... & Strengman, E. (2019). Associations between attention-deficit/hyperactivity disorder and various eating disorders: a Swedish nationwide population study using multiple genetically informative approaches. *Biological psychiatry*, 86(8), 577-586. <https://doi.org/10.1016/j.biopsych.2019.04.036>



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