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Abstract

Adolescence is marked by significant emotional challenges, with mood disorders becoming increasingly prevalent, necessitating effective interventions. Dialectical Behavioral Therapy (DBT) skills have emerged as promising tools for addressing emotional dysregulation in adolescents. This systematic literature review aims to evaluate the effectiveness of DBT skills in managing emotional dysregulation and reducing mood disorder symptoms among adolescents. Through meticulous analysis of existing research, this review highlights the substantial impact of DBT interventions in decreasing the frequency and intensity of maladaptive behaviors associated with emotional dysregulation. Drawing from studies involving 908 adolescents aged 12 to 18, compelling evidence suggests notable improvements in mood and related symptoms following participation in DBT skills programs. These findings underscore the potential of DBT interventions as valuable resources in supporting adolescents through their emotional challenges. Furthermore, this review emphasizes the urgent need to integrate DBT approaches into mental health interventions tailored to the unique needs of this vulnerable population. Overall, this review contributes to the growing body of literature on adolescent mental health, providing insights into the efficacy of DBT skills in promoting emotional regulation and enhancing overall well-being during this critical developmental phase.

Introduction

Adolescence, often characterized as a period of profound transition, represents a critical phase in human development fraught with a myriad of challenges. Amidst the physical and psychological upheavals, adolescents navigate the intricate interplay of peer influence while grappling with the complexities of asserting autonomy amidst societal and familial expectations (Crockett & Silbereisen, 2000; Guyer et al., 2016). It is within this context that emotions surge, with adolescents experiencing heightened sensitivity to both external stimuli and internal conflicts, thereby amplifying emotional volatility (Gasol et al., 2022; Kessler et al., 2001).

During adolescence, individuals face significant emotional stress due to various demands typical of this stage. These include academic pressures, navigating dating and intimacy, dealing with bullying and peer rejection, exploring alcohol and drug use, concerns about physical appearance, and striving for independence from parents.

Given these challenges, adolescents often have a heightened need to regulate their emotions effectively. Emotional regulation is crucial for coping with stressors and successfully navigating the key steps involved in shaping their identity and personality during this critical developmental period (Pedrini et al., 2021).

Moreover, adolescence embodies a phase characterized by heightened potentialities intertwined with amplified vulnerabilities. The emergence of intricate social interactions and the promise of future rewards can elevate motivation toward proactive endeavors. However, the inability to attain these aspirations may evoke feelings of frustration, disillusionment, and trigger a prolonged suppression of the brain's reward system. This suppression, compounded by an excess of rewards, can foster the onset of internalizing psychopathologies such as Major Depression. A thorough understanding of these intricacies is indispensable for formulating efficacious interventions aimed at bolstering adolescent mental well-being (Paus et al., 2009).

Adolescence witnesses significant transformations in neural systems governing higher cognitive functions, reasoning, interpersonal interactions, emotional regulation, risk-vs-reward appraisal, and motivation (Paus et al., 2009). Predictably, inadequately addressing these challenges heightens the susceptibility to cognitive, affective, and addictive disorders. Research underscores the alarming susceptibility of adolescents to mood disorders, attributed in part to the incomplete development of crucial brain regions governing emotional regulation (Ahmed et al., 2015). As neurological structures continue to mature during adolescence and young adulthood, effective emotion management becomes paramount for mental well-being (Casey et al., 2008; Guyer et al., 2016).

In fact, longitudinal MRI studies, as highlighted by Poletti (2009), reveal that the human cerebral cortex undergoes significant maturation during adolescence. This maturation is particularly pronounced in the prefrontal cortex (PFC), which is one of the last cortical regions to reach its final form at the onset of adulthood. The development of the brain during this period supports the cognitive and emotional maturation of adolescents, guiding them toward adult-like thinking and behavior (Poletti, 2009).

Consequently, when adolescents fail to navigate these developmental hurdles effectively, the risk of developing mood disorders such as major depressive disorder increases significantly. While significant strides have been made in unraveling the complexities of the adolescent brain, there is still much to uncover in this intricate domain of study (Paus et al., 2009).

In this context, Dialectical Behavioral Therapy (DBT) emerges as a promising strategy. Originating in 1993 as an outpatient program for individuals with borderline personality disorder (BPD), DBT has evolved into an evidence-based intervention for treating emotion dysregulation and maladaptive behaviors (Gasol et al., 2020; Haynos et al., 2016). By providing structured techniques and coping mechanisms, DBT equips adolescents with essential skills to navigate their emotions and cultivate resilience (Marco et al., 2013; Saito et al., 2020).

Moreover, societal and cultural factors significantly influence adolescent emotional experiences and the development of emotional regulation strategies. Cultural norms, family dynamics, peer relationships, and socioeconomic status all play crucial roles in shaping an adolescent's emotional landscape and their ability to regulate emotions effectively (García-Coll et al., 1996; McLeod & Nonnemaker, 2000). Understanding the

intersectionality of these factors is essential for designing interventions that resonate with the diverse needs and experiences of adolescents across different cultural and social contexts.

Additionally, emerging research delves into the impact of digital technologies on adolescent emotional well-being. The ubiquity of social media platforms and digital communication tools introduces novel challenges and opportunities for emotional regulation among adolescents (Twenge & Campbell, 2018; Odgers & Jensen, 2020). Excessive screen time, cyberbullying, and the pressure to curate an idealized online persona contribute to heightened emotional distress among adolescents (Primack et al., 2017; Orben & Przybylski, 2019). Conversely, digital platforms also serve as spaces for social support, self-expression, and access to mental health resources, highlighting the nuanced role of technology in shaping adolescent emotional experiences (Hollis et al., 2015; Radovic et al., 2017). Understanding these dynamics is critical for developing holistic approaches to promoting adolescent emotional well-being in the digital age.

Method

Data Collection

To comprehensively explore the landscape of emotional dysregulation among adolescents, a systematic literature search was conducted across multiple academic databases, including ProQuest Psychological Journal, PsycARTICLES, PsycBOOKS, ScienceDirect, and PsycINFO. This systematic review followed a rigorous and structured approach, aiming to gather and analyze existing research to provide an extensive overview of the topic. The search process utilized a combination of keywords such as "DBT skills," "emotional dysregulation," "dialectical behavioral therapy," and "emotion regulation" to ensure the inclusion of relevant studies. Initially, 21 articles were identified through database searches, and after thorough screening based on predefined criteria, ten articles were selected for inclusion in this systematic literature review.

Data Analysis

For this review, studies conducted between 2000 and 2024 were included, focusing on participants aged 12 to 18 years old who experienced mood dysregulation, mood disorders, suicidal ideation, self-harm, and oppositional defiant behavior. Studies conducted in the United States, Canada, or Europe were considered for analysis to ensure a diverse representation of cultural contexts and healthcare systems. The final selection comprised a total of 908 participants across the retained studies, reflecting a heterogeneous sample representative of the adolescent population experiencing emotional challenges during the specified timeframe.

This systematic literature review aims to provide a comprehensive synthesis of the current research landscape on emotional dysregulation among adolescents, with a specific focus on the effectiveness of DBT skills in addressing these challenges. Through a meticulous examination of the selected studies, this review seeks to elucidate the potential benefits and limitations of DBT interventions in promoting emotional well-being and resilience among adolescents.

Results

Prevalence of Mood Disorders among Adolescents

Adolescents are grappling with escalating levels of emotional dysregulation, which coincide with a concerning surge in mood disorders such as major depressive disorder and disruptive mood dysregulation disorder. The onset of the COVID-19 pandemic has further compounded these challenges, evident in the notable increase in youth psychiatric inpatient hospitalizations (Park et al., 2024; Racine et al., 2021). Depression rates have seen a worrying rise, soaring from 8.1% in 2009 to a staggering 15.8% in 2019, indicating a troubling trajectory (Wilson & Dumornay, 2022). According to the Centers for Disease Control and Prevention (2023), this surge in emotional distress is particularly pronounced among female students, with 60% reporting feelings of sadness or hopelessness in 2021, and an alarming 25% reporting suicidal ideation. The distress is even more pronounced among LGBTQ+ students, with an astonishing 70% experiencing symptoms of depression.

Additionally, adolescents are likely engaging in self-harm at rates significantly higher than officially reported figures suggest. Many instances of self-harm do not result in hospital presentations, as adolescents often engage in these behaviors without causing severe injuries. This underreporting underscores the complexity of addressing mental health challenges among adolescents (Hawton et al., 2012). Moreover, suicide stands as the second leading cause of death in adolescents worldwide. This sobering statistic underscores the urgent need for comprehensive intervention and support strategies to address the mental health vulnerabilities faced by adolescents (Hawton et al., 2012).

Moreover, insights from the National Comorbidity Survey Replication study, encompassing over 9,000 individuals across the United States from February 2001 to April 2003, reveal that the peak onset age for any mental health disorder is approximately 14 years old (Paus et al., 2009). During adolescence, a plethora of mental health issues, including anxiety disorders, bipolar disorder, depression, eating disorders, schizophrenia, and substance abuse emerge (Paus et al., 2009). This pivotal developmental phase is marked by a convergence of psychosocial and biological factors, including shifts in school dynamics, evolving relationships, pubertal hormonal changes, and exposure to substance use. These factors, which include anomalies or exaggerations of typical adolescent maturation processes acting in concert with psychosocial (e.g., school, relationships) and/or biological environmental factors, are intertwined and may potentially contribute to the emergence of various psychopathologies (Pedrini et al., 2021; Paus et al., 2009).

The widespread prevalence of mood disorders and emotional dysregulation presents a global crisis, with the World Health Organization estimating that 1 in 7 children aged 10-19 grapple with a mental health disorder (2021). Adolescents navigating this developmental stage encounter various adversities, including bullying, discrimination, engagement in risky behaviors, academic struggles, and pervasive stigma, exacerbating their mental health vulnerabilities.

Self-harm and suicide often stem from underlying mood disorders and emotional dysregulation in adolescents. When facing intense emotional distress, adolescents may resort to self-harming behaviors as maladaptive coping

mechanisms to alleviate overwhelming emotions or assert control over their internal turmoil. While providing temporary relief, self-harm poses significant risks, including escalating to suicidal ideation and attempts (Hawton et al., 2012; Wilson & Dumornay, 2022).

The presence of mood disorders exacerbates vulnerability to both self-harm and suicide, amplifying feelings of hopelessness and emotional dysregulation (Hawton et al., 2012; Wilson & Dumornay, 2022). Shockingly, suicide ranks as the leading cause of death for female adolescents and the third highest for males in the Western world (Collaboration GBoDP, 2016; Hawton et al., 2012 as cited in Kothgassner et al., 2021). Additionally, meta-analyses suggest that approximately 22.9% of adolescents engage in self-harm, regardless of suicidal intent (Gillies et al., 2018).

Despite ongoing debate about the precise relationship between self-harm and suicidal tendencies (Hamza et al., 2012 as cited in Kothgassner et al., 2021), evidence indicates a significant correlation between the two (Gillies et al., 2018). These findings underscore the pressing need for comprehensive mental health interventions targeting emotional regulation and mood disorders among adolescents (Kothgassner, 2021).

Yet, prevention plays a crucial role in addressing self-harm and suicide among teenagers (Hawton et al., 2012). Early identification of at-risk individuals, coupled with comprehensive mental health education and accessible support systems, can mitigate the incidence of self-harm and suicidal ideation. Promoting proactive intervention and fostering supportive environments that encourage open dialogue and help-seeking behaviors are essential steps in safeguarding adolescent well-being.

Emotional dysregulation serves as a common underlying factor linking mood disorders, self-harm, and suicide in adolescents. Those grappling with emotional dysregulation struggle to manage and modulate their emotions effectively, leading to heightened vulnerability to mood disorders and maladaptive coping strategies. These challenges in emotion regulation contribute to the development and maintenance of mood disorders, exacerbating emotional distress and increasing the risk of engaging in self-harming behaviors and suicidal thoughts (Guyer et al., 2016; Kessler et al., 2001). Addressing emotional dysregulation is crucial for mitigating the risk of self-harm and suicide in adolescents and promoting their mental health and well-being.

Amidst the prevalence of mood disorders and emotional dysregulation, there exists a notable disparity in access to mental health resources among adolescents. Despite the evident need for intervention and support, many adolescents face significant barriers to accessing adequate mental health care. These barriers include financial constraints, limited availability of mental health professionals, stigma surrounding mental illness, and cultural barriers that may inhibit help-seeking behaviors (Gulliver et al., 2010). Additionally, systemic issues within healthcare systems contribute to these disparities, further exacerbating the challenges faced by vulnerable populations. Addressing these barriers is paramount in ensuring equitable access to mental health services for all adolescents, regardless of socioeconomic status or cultural background.

Furthermore, the pervasive influence of social media and digital technologies on adolescent mental health cannot

be overlooked. While these platforms offer avenues for connection and support, they also expose adolescents to various stressors, including cyberbullying, social comparison, and excessive screen time, which can detrimentally impact mental well-being (Twenge & Campbell, 2018). Moreover, the COVID-19 pandemic has accelerated the reliance on digital platforms for social interaction and academic pursuits, potentially exacerbating existing mental health challenges among adolescents (Odgers & Jensen, 2020). As such, understanding the nuanced interplay between digital technology use and adolescent mental health is imperative in developing holistic approaches to support their well-being in an increasingly digitalized world.

Evolution of Dialectical Behavioral Therapy (DBT)

Dialectical Behavioral Therapy (DBT) originated in 1993 as a groundbreaking outpatient treatment program crafted by Marsha Linehan to cater specifically to the intricate needs of individuals diagnosed with borderline personality disorder (BPD) who were chronically suicidal (Gasol et al., 2020). Initially, DBT was structured around a comprehensive treatment model consisting of individual therapy sessions, group skills training, phone coaching, and therapist consultation teams (Linehan, 1993; Haynos et al., 2016; Marco et al., 2013).

The group skills training component of DBT, an integral part of the treatment approach, typically involves weekly sessions focused on teaching four sets of behavioral skills: mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance (Linehan, 1993). These skills are imparted through a combination of didactic instruction, group discussion, and experiential exercises, allowing participants to learn and practice techniques for managing emotions, improving relationships, and coping with distressing situations.

Furthermore, DBT groups are structured to provide a supportive and validating environment where participants can share their experiences, learn from one another, and receive feedback from both peers and facilitators. The group format fosters a sense of camaraderie and mutual understanding among participants, reducing feelings of isolation and promoting a collaborative approach to skill-building and recovery (Linehan, 1993)

Within the last few years, several adaptations to specific settings have been developed to extend the reach of DBT interventions. These adaptations aim to address the diverse needs of individuals across different contexts, including schools, community centers, and primary care settings. By tailoring DBT interventions to these settings, mental health professionals can effectively reach a broader population and provide timely support for emotional regulation and mental well-being (Gasol et al., 2022). Such adaptations underscore DBT's versatility and its potential to serve as a valuable resource in promoting resilience and coping skills among individuals facing a range of emotional challenges beyond the scope of BPD (Haynos et al., 2016; Saito et al., 2020). Despite these adaptations, the core principles and techniques of DBT remain consistent, emphasizing the importance of mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance in promoting mental well-being and resilience (Linehan, 1993; Gasol et al., 2022).

Evaluation of DBT Interventions in Adolescent Emotional Regulation

Recent studies have illuminated promising pathways through Dialectical Behavioral Therapy (DBT) skills for

assisting adolescents in regulating their emotions (Berk et al., 2020; Nelson-Gray, 2006). This literature review seeks to evaluate the effectiveness of DBT skills in addressing emotional dysregulation and symptoms linked to mood disorders among adolescents (McCauley et al., 2018; Rathus & Miller, 2002). By conducting a thorough examination of existing research, this review endeavors to unveil the potential of DBT interventions as invaluable tools for aiding adolescents in navigating their emotional struggles.

DBT offers a comprehensive approach to addressing emotional dysregulation by providing adolescents with a structured framework to develop adaptive coping strategies and enhance emotional management skills. Through techniques such as mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness, DBT equips adolescents with practical tools to recognize, understand, and regulate their emotions effectively (Linehan, 2018). By learning to identify and tolerate distressing emotions without resorting to maladaptive behaviors, adolescents can cultivate resilience and cope more effectively with the challenges they face.

Moreover, DBT interventions are tailored to meet the unique needs of adolescents, incorporating age-appropriate strategies and interactive activities to engage this demographic effectively. Adolescents participating in DBT programs have shown significant improvements in emotional regulation, reduced frequency of maladaptive behaviors, and enhanced overall well-being (McCauley et al., 2018; Rathus & Miller, 2002). By providing adolescents with the skills and support they need to navigate their emotional challenges, DBT interventions hold promise as effective tools for promoting mental health and resilience in this vulnerable population.

Discussion

Recent research has highlighted the escalating prevalence of emotional dysregulation and mood disorders among adolescents, presenting a pressing challenge to mental health professionals. In response to this growing concern, Dialectical Behavioral Therapy (DBT) skills have emerged as a promising intervention, offering effective strategies for mitigating maladaptive behaviors associated with emotional dysregulation (Berk et al., 2020; Katz et al., 2004). The systematic literature review identified 10 studies that met the inclusion criteria and were deemed suitable for analysis. These studies collectively investigated the effectiveness of Dialectical Behavioral Therapy (DBT) skills in addressing emotional dysregulation among adolescents experiencing mood disorders, suicidal ideation, self-harm, and oppositional defiant behavior. The results of these studies provided valuable insights into the impact of DBT interventions on various outcomes related to emotional well-being and behavioral functioning among adolescents. Studies involving 908 participants aged 12 to 18 years revealed notable improvements in mood and mood disorder-related symptoms following completion of DBT skills programs (Rathus & Miller, 2002; Saito et al., 2020; Gasol et al., 2022). Overall, the results of the systematic literature review provide compelling evidence supporting the effectiveness of DBT skills in addressing emotional dysregulation and symptoms associated with mood disorders among adolescents. The findings highlight the potential of DBT interventions as valuable tools for promoting emotional well-being, enhancing coping skills, and fostering resilience in this vulnerable population.

The observed escalation in emotional dysregulation and mood disorders among adolescents underscores the urgent

need for effective interventions. DBT skills have shown efficacy in reducing dysfunctional behaviors associated with emotional dysregulation (Berk et al., 2020; James et al., 2008; Mehlum et al., 2019). The reviewed studies, encompassing a diverse range of participants, consistently reported significant improvements in mood and mood disorder-related symptoms following participation in DBT skills programs (McCauley et al., 2018; Mehlum et al., 2016). This suggests that DBT interventions hold considerable promise in enhancing emotional regulation and promoting mental well-being among adolescents (Asarnow et al., 2021; Gasol et al., 2022; Tørmoen et al., 2014).

The effectiveness of DBT interventions in addressing emotional dysregulation among adolescents is further underscored by their ability to equip individuals with adaptive coping strategies and emotion regulation skills. By providing adolescents with tools to identify and manage their emotions, DBT interventions empower them to navigate challenging situations more effectively and build resilience in the face of adversity (Asarnow et al., 2021; Goldstein et al., 2015). However, it is important to acknowledge the limitations of the existing literature. While the reviewed studies provide valuable insights into the effectiveness of DBT skills programs, the majority were conducted in controlled settings with specific populations, potentially limiting the generalizability of the findings. Additionally, the variability in study methodologies and outcome measures across the reviewed literature necessitates caution when interpreting the results.

Future research efforts should aim to address these limitations by conducting longitudinal studies with larger and more diverse samples to better understand the long-term efficacy and generalizability of DBT interventions for adolescent emotional dysregulation. Furthermore, exploring the mechanisms underlying the effectiveness of DBT skills in improving emotional regulation could provide valuable insights for optimizing intervention strategies.

Moreover, the integration of DBT interventions into existing mental health frameworks and educational curricula holds promise for enhancing accessibility and dissemination. By incorporating DBT principles into school-based interventions and community outreach programs, mental health professionals can reach a broader population of adolescents and provide timely support for emotional regulation and mental well-being (Saito et al., 2020; Nelson-Gray, 2006). Overall, this systematic review underscores the importance of continued research and investment in evidence-based interventions, such as DBT skills programs, to effectively address the growing challenges of emotional dysregulation and mood disorders among adolescents. By prioritizing the mental health needs of adolescents and implementing targeted interventions, we can strive toward fostering healthier emotional development and improving overall well-being in this vulnerable population.

Conclusion

In conclusion, this systematic literature review highlights the urgent need for effective interventions to address the escalating rates of emotional dysregulation and mood disorders among adolescents. The findings underscore the significant impact of these mental health challenges on the well-being of adolescents, emphasizing the importance of targeted interventions to mitigate their adverse effects.

Throughout the review, it became evident that DBT offers adolescents a structured framework to develop adaptive

coping strategies and enhance emotional management skills. Techniques such as mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness equip adolescents with practical tools to recognize, understand, and regulate their emotions effectively. By learning to identify and tolerate distressing emotions without resorting to maladaptive behaviors, adolescents can cultivate resilience and cope more effectively with the challenges they face. Moreover, the reductions in symptoms of mood disorders and suicidal ideation following DBT interventions highlight the potential of DBT as an effective therapeutic approach for addressing mental health concerns in adolescents. The improvements in interpersonal relationships and social functioning further emphasize the broader impact of DBT interventions on social integration and relational dynamics. Additionally, efforts to integrate DBT principles into existing mental health frameworks and educational curricula can enhance accessibility and dissemination, ensuring that adolescents receive timely support for emotional regulation and mental well-being. Overall, by prioritizing evidence-based interventions such as DBT skills programs and investing in comprehensive mental health support systems, we can effectively address the complex challenges of emotional dysregulation and mood disorders among adolescents, ultimately fostering healthier emotional development and improving overall well-being in this vulnerable population.

Recommendations

Based on the findings of this systematic literature review, several recommendations can be made to guide future research and clinical practice in the use of Dialectical Behavioral Therapy (DBT) interventions for adolescents. Firstly, further research is needed to enhance the robustness of evidence regarding the effectiveness of DBT interventions. This includes conducting additional randomized controlled trials with larger sample sizes and longer follow-up periods to investigate the mechanisms underlying the therapeutic effects of specific components of DBT.

Secondly, there is a need to adapt and tailor DBT interventions to meet the unique needs of diverse populations of adolescents. This involves developing age-appropriate strategies and interactive activities to engage adolescents effectively in DBT programs and exploring the adaptation of DBT interventions for adolescents with co-occurring mental health conditions and marginalized communities. Additionally, integrating DBT interventions into routine clinical practice in mental health settings, schools, and community centers can provide timely support for adolescents experiencing emotional dysregulation and mood disorders. Training mental health professionals in DBT techniques and ensuring ongoing supervision and fidelity monitoring are crucial for maintaining treatment quality.

Lastly, collaborative approaches involving mental health professionals, educators, parents, and community stakeholders are essential for promoting the dissemination and implementation of DBT interventions for adolescents. Developing interdisciplinary approaches that combine DBT with other evidence-based practices and implementing preventive strategies aimed at promoting emotional well-being and resilience among adolescents can further enhance the accessibility and equity of DBT interventions. By continuously evaluating and improving DBT interventions based on feedback from participants and stakeholders, researchers, clinicians, and policymakers can advance the use of DBT interventions as effective tools for promoting mental health and

resilience among adolescents.

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References

- Ahmed, S. P., Bittencourt-Hewitt, A., & Sebastian, C. L. (2015). Neurocognitive bases of emotion regulation in adolescence. *Developmental Cognitive Neuroscience, 15*, 11–25. <https://doi.org/10.1016/j.dcn.2015.07.006>
- Asarnow, J. R., Berk, M. S., Bedics, J., Adrian, M., Gallop, R., Cohen, J., Korslund, K., Hughes, J., Avina, C., Linehan, M. M., & McCauley, E. (2021). Dialectical behavior therapy for suicidal self-harming youth: Emotion regulation, mechanisms, and mediators. *Journal of the American Academy of Child and Adolescent Psychiatry, 60*(9), 1105–1115.e4. <https://doi.org/10.1016/j.jaac.2021.01.016>
- Berk, M. S., Starace, N. K., Black, V. P., & Avina, C. (2020). Implementation of dialectical behavior therapy with suicidal and self-harming adolescents in a community clinic. *Archives of Suicide Research: Official Journal of the International Academy for Suicide Research, 24*(1), 64–81. <https://doi.org/10.1080/13811118.2018.1509750>
- Centers for Disease Control and Prevention. (2023). Youth risk behavior survey: Data summary and trends report. Retrieved from: https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBS_Data-Summary-Trends_Report2023_508.pdf
- Crockett, L. J., & Silbereisen, R. K. (2000). Social change and adolescent development: Issues and challenges. *Faculty Publications, Department of Psychology, 243*.
- García-Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*(5), 1891-1914.
- Gasol, X., Navarro-Haro, M. V., Fernández-Felipe, I., García-Palacios, A., Suso-Ribera, C., & Gasol-Colomina,

- M. (2022). Preventing emotional dysregulation: Acceptability and preliminary effectiveness of a DBT skills training program for adolescents in the Spanish school system. *International Journal of Environmental Research and Public Health*, *19*(1), 494. <https://doi.org/10.3390/ijerph19010494>
- Goldstein, T. R., Fersch-Podrat, R. K., Rivera, M., Axelson, D. A., Merranko, J., Yu, H., Brent, D. A., & Birmaher, B. (2015). Dialectical behavior therapy for adolescents with bipolar disorder: Results from a pilot randomized trial. *Journal of Child and Adolescent Psychopharmacology*, *25*(2), 140–149. <https://doi.org/10.1089/cap.2013.0145>
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry*, *10*, 113. <https://doi.org/10.1186/1471-244X-10-113>
- Guyer, A. E., Silk, J. S., & Nelson, E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. *Neuroscience and Biobehavioral Reviews*, *70*, 74–85. <https://doi.org/10.1016/j.neubiorev.2016.07.037>
- 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>
- Hawton, K., Saunders, K. E., & O'Connor, R. C. (2012). Self-harm and suicide in adolescents. *Lancet (London, England)*, *379*(9834), 2373–2382. [https://doi.org/10.1016/S0140-6736\(12\)60322-5](https://doi.org/10.1016/S0140-6736(12)60322-5)
- Hollis, C., Falconer, C. J., Martin, J. L., Whittington, C., Stockton, S., Glazebrook, C., & Davies, E. B. (2017). Annual research review: Digital health interventions for children and young people with mental health problems - a systematic and meta-review. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *58*(4), 474–503. <https://doi.org/10.1111/jcpp.12663>
- James, A. C., Taylor, A., Winmill, L., & Alfoadari, K. (2008). A preliminary community study of dialectical behaviour therapy (DBT) with adolescent females demonstrating persistent, deliberate self-harm (DSH). *Child and Adolescent Mental Health*, *13*(3), 148–152. <https://doi.org/10.1111/j.1475-3588.2007.00470.x>
- Katz, L. Y., Cox, B. J., Gunasekara, S., & Miller, A. L. (2004). Feasibility of dialectical behavior therapy for suicidal adolescent inpatients. *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*(3), 276–282. <https://doi.org/10.1097/00004583-200403000-00008>
- Kessler, R., Avenevoli, S., & Merikangas, K. (2001). Mood disorders in children and adolescents: An epidemiologic perspective. *Biological Psychiatry*, *49*, 1002–1014. [https://doi.org/10.1016/S0006-3223\(01\)01129-5](https://doi.org/10.1016/S0006-3223(01)01129-5)
- Linehan, M. M. (2018). *DBT® Skills Training Handouts and Worksheets, Second Edition*. Guilford Publications.
- Marco, J. H., García-Palacios, A., & Botella, C. (2013). Dialectical behavioural therapy for oppositional defiant disorder in adolescents: A case series. *Psicothema*, *25*(2), 158–163. <https://doi.org/10.7334/psicothema.2012.119>
- McCauley, E., Berk, M. S., Asarnow, J. R., Adrian, M., Cohen, J., Korslund, K., Avina, C., Hughes, J., Harned, M., Gallop, R., & Linehan, M. M. (2018). Efficacy of dialectical behavior therapy for adolescents at high risk for suicide: A randomized clinical trial. *JAMA Psychiatry*, *75*(8), 777–785. <https://doi.org/10.1001/jamapsychiatry.2018.1109>
- McLeod, J. D., & Nonnemaker, J. M. (2000). Social stratification and inequality among US children: A historical

- and structural analysis. In *Handbook of Child Psychology and Developmental Science* (pp. 452-500). Wiley.
- Mehlum, L., Ramberg, M., Tørmoen, A. J., Haga, E., Diep, L. M., Stanley, B. H., Miller, A. L., Sund, A. M., & Grøholt, B. (2016). Dialectical behavior therapy compared with enhanced usual care for adolescents with repeated suicidal and self-harming behavior: Outcomes over a one-year follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, *55*(4), 295–300. <https://doi.org/10.1016/j.jaac.2016.01.005>
- Mehlum, L., Ramleth, R. K., Tørmoen, A. J., Haga, E., Diep, L. M., Stanley, B. H., Miller, A. L., Larsson, B., Sund, A. M., & Grøholt, B. (2019). Long term effectiveness of dialectical behavior therapy versus enhanced usual care for adolescents with self-harming and suicidal behavior. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *60*(10), 1112–1122. <https://doi.org/10.1111/jcpp.13077>
- Nelson-Gray, R. O., Keane, S. P., Hurst, R. M., Mitchell, J. T., Warburton, J. B., Chok, J. T., & Cobb, A. R. (2006). A modified DBT skills training program for oppositional defiant adolescents: Promising preliminary findings. *Behaviour Research and Therapy*, *44*(12), 1811–1820. <https://doi.org/10.1016/j.brat.2006.01.004>
- Odgers, C. L., & Jensen, M. R. (2020). Annual Research Review: Adolescent mental health in the digital age: facts, fears, and future directions. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *61*(3), 336–348. <https://doi.org/10.1111/jcpp.13190>
- Orben, A., & Przybylski, A. K. (2019). Screens, teens, and psychological well-being: Evidence from three time-use-diary studies. *Psychological Science*, *30*(5), 682–696. <https://doi.org/10.1177/0956797619830329>
- Paus, T., Keshavan, M., & Giedd, J. N. (2008). Why do many psychiatric disorders emerge during adolescence?. *Nature reviews. Neuroscience*, *9*(12), 947–957. <https://doi.org/10.1038/nrn2513>
- Poletti, M. (2009). Adolescent brain development and executive functions: A prefrontal framework for developmental psychopathologies. *Clinical Neuropsychiatry: Journal of Treatment Evaluation*, *6*(4), 155-165.
- Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. Y., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventive Medicine*, *53*(1), 1–8. <https://doi.org/10.1016/j.amepre.2017.01.010>
- Radovic, A., Gmelin, T., Stein, B. D., & Miller, E. (2017). Depressed adolescents' positive and negative use of social media. *Journal of Adolescence*, *55*, 5–15. <https://doi.org/10.1016/j.adolescence.2016.12.002>
- Rathus, J. H., & Miller, A. L. (2002). Dialectical behavior therapy adapted for suicidal adolescents. *Suicide & Life-Threatening Behavior*, *32*(2), 146–157. <https://doi.org/10.1521/suli.32.2.146.24399>
- Saito, E., Tebbett-Mock, A. A., & McGee, M. (2020). Dialectical behavior therapy decreases depressive symptoms among adolescents in an acute-care inpatient unit. *Journal of Child and Adolescent Psychopharmacology*, *30*(4), 244–249. <https://doi.org/10.1089/cap.2019.0149>
- Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, *12*, 271-283. <https://doi.org/10.1016/j.pmedr.2018.10.003>

- Tørmoen, A. J., Grøholt, B., Haga, E., Brager-Larsen, A., Miller, A., Walby, F., Stanley, B., & Mehlum, L. (2014). Feasibility of dialectical behavior therapy with suicidal and self-harming adolescents with multi-problems: Training, adherence, and retention. *Archives of Suicide Research: Official Journal of the International Academy for Suicide Research*, 18(4), 432–444. <https://doi.org/10.1080/13811118.2013.826156>
- Wilson, S., & Dumornay, N. M. (2022). Rising rates of adolescent depression in the United States: Challenges and opportunities in the 2020s. *Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 70(3), 354–355. <https://doi.org/10.1016/j.jadohealth.2021.12.003>
- World Health Organization. (2021). *Mental health of adolescents*. Retrieved from: <https://www.who.int/newsroom/fact-sheets/detail/adolescent-mental-health>

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