

CBT FOR ADULT ADHD: UPDATED REVIEW

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LEARNING OBJECTIVES

At the end of the webinar, attendees will be able to:

- 1) Summarize the contemporary understanding of ADHD beyond the diagnostic criteria.
- 2) Recognize the main intervention domains within the CBT model presented for adult ADHD.
- 3) Summarize the state of research on CBT for adult ADHD, including at least one innovative topic.

WHY IS THIS TOPIC IMPORTANT:
FUNCTIONAL IMPAIRMENTS ASSOCIATED
WITH ADULT ADHD

“Show me where it hurts.”

From: Trends in the Prevalence and Incidence of Attention-Deficit/Hyperactivity Disorder Among Adults and Children of Different Racial and Ethnic Groups

Chung et al. JAMA Netw Open. 2019;2(11):e1914344. doi:10.1001/jamanetworkopen.2019.14344

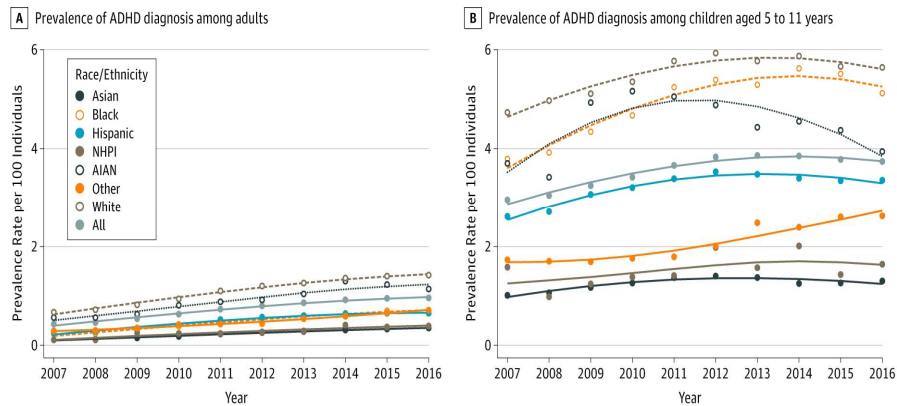
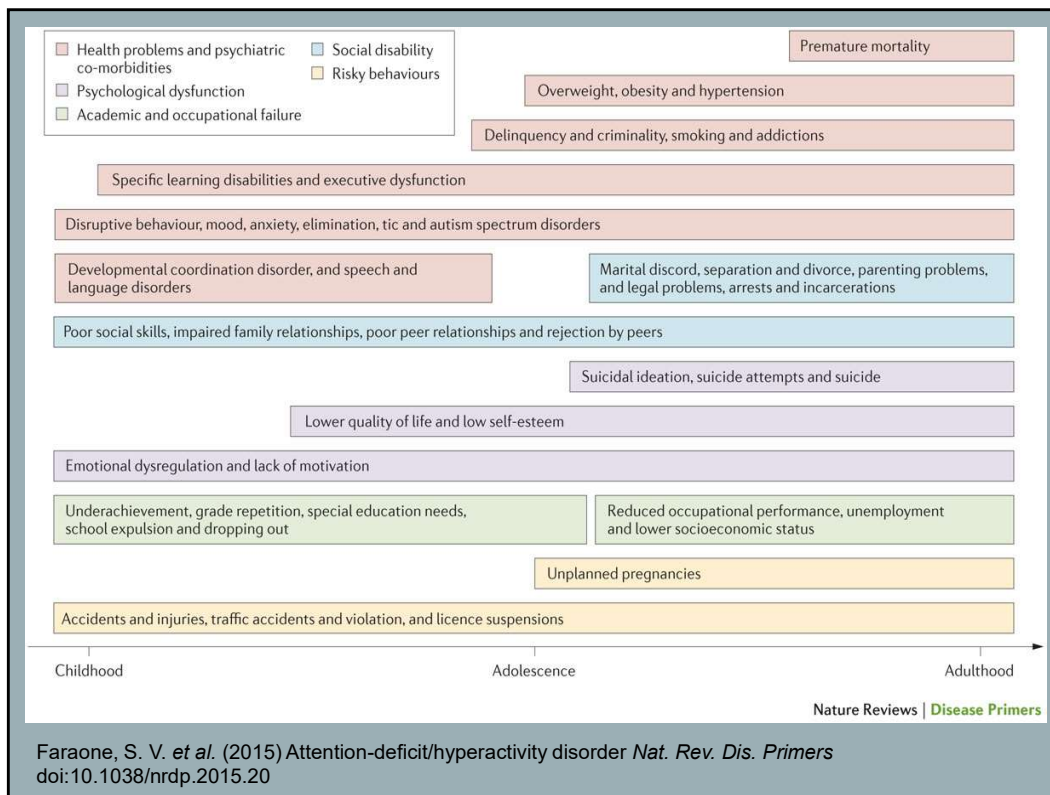


Figure Legend:

Prevalence Rates of Attention-Deficit/Hyperactivity Disorder (ADHD) Among Adults and Children in the Kaiser Permanente Northern California System, 2007-2016. Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) was published in 2013.

Race/ethnicity was self-identified as 1 of the following: African American or black (black), American Indian or Alaska Native (AIAN), Native Hawaiian or other Pacific Islander (NHPI), Latino or Hispanic (Hispanic), non-Hispanic white (white), Asian American (Asian), or other.

Date of download: 11/6/2021



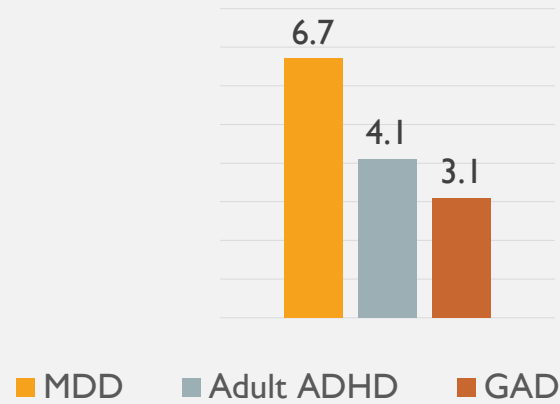
ADULT ADHD: UPDATED CDC DATA 10.10.24

- **8.0%** of US adult population with previous or current adult ADHD diagnosis
- **6.0%** of US adults have a current diagnosis of ADHD (past year)
- 50% of adults with ADHD were first diagnosed in adulthood.
 - 40% of males with ADHD were first diagnosed in adulthood
 - 61% of women with ADHD were first diagnosed in adulthood
- 45% of males with ADHD were diagnosed before age 11 years old
- 25% of women with ADHD were diagnosed before age 11 years old
- 70% experienced interruption of care due to stimulant medication shortages
- 46% received at least some treatment via telehealth

Staley et al. (2024). *CDC Morbidity and Mortality Weekly Report*, 73(40), 890-895.
Mattingly & Childress (2024). *J Clin Psychiatry*, 85(4), 1-3,

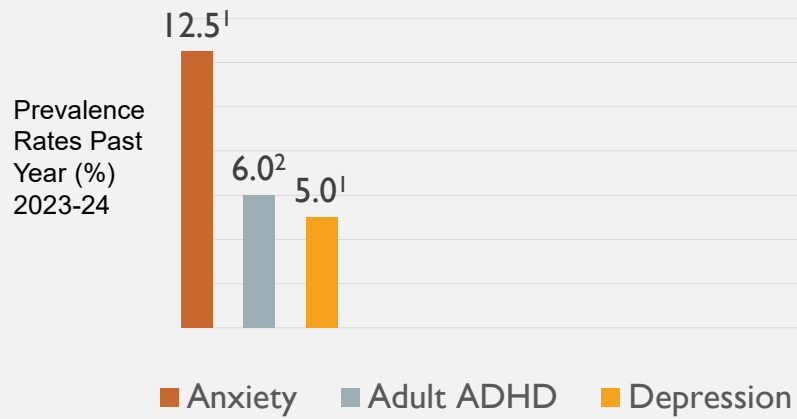
WHERE DOES ADULT ADHD RANK IN TERMS OF
PREVALENCE?
(US NATIONAL COMORBIDITY SURVEY REPLICATION)

Diagnostic
Prevalence
Rates (%)
2005



Kessler et al. (2005). *Archives of General Psychiatry*, 62, 617-627.

WHERE DOES ADULT ADHD RANK IN TERMS OF PREVALENCE?



¹ Norris et al. (2024). *CDC National Center for Health Statistics, National Health Interview Survey*. <https://www.cdc.gov/nchs/data/nhis/earlyrelease/earlyrelease202405.pdf>

² Staley et al. (2024). *CDC Morbidity and Mortality Weekly Report*, 73(40), 890-895.

IMAGINE IF PRIMARY CARE PHYSICIANS WERE NOT
TRAINED IN THE #2 REASON FOR MEDICAL VISITS?

- Essential hypertension
- **Diabetes mellitus** (“Sorry, we did not cover that in med school.”)
- Osteoarthritis
- Acute respiratory infections

... and imagine if many PCPs did not
recognize it as a valid complaint?

https://www.cdc.gov/nchs/data/ahcd/namcs_summary/2018-namcs-web-tables-508.pdf

PSYCHOLOGICAL EFFECTS

- Anxiety – apprehension
- Anxiety – social
- Mood
- Emotional dyscontrol
- Shame, guilt, embarrassment, jealousy, envy, resentment (social emotions)
- Regret
- Substance use
- Suicide risk
- Fewer positive life experiences
- Risky behaviors
- Low motivation, initiation
- Poor self-esteem, identity, self acceptance
- Impostor syndrome, criticisms
- Reputation within social network
- Rejection Sensitive Dysphoria (or *Recognition Sensitive Euphoria*; Hallowell & Ratey, 2021, *ADHD 2.0*)
- 15:1 neg comment (ADHD:non child)?
- “Brain shaming”/poor “brain image,” personal agency

CBT MODEL FOR ADULT ADHD

“What are the premises of the CBT model adapted to adult ADHD that guide psychosocial interventions?”

WHAT IS COGNITIVE BEHAVIOR THERAPY (CBT)?

- CBT is a form of “talk therapy” initially developed for depression.
- CBT is derived from the Behaviorism and Social Learning backgrounds
- The “cognitive” was an addition and deviation from strict behaviorism
- “Third Wave” behavioral approaches include Dialectical Behavior Therapy (DBT) and Acceptance and Commitment Therapy (ACT)
- Emerging “Process-Based CBT” represents cutting edge integration: “(E)mbrace core processes that are common to many empirically supported approaches.”

CBT FOR ADULT ADHD: ADAPTED MODEL FOR ADULT ADHD CONCEPTUALIZATION

1. Individuals experience symptoms falling along a continuum of severity and impact, in some form, starting in childhood or adolescence.
2. ADHD makes a direct and causal contribution to functional difficulties, ranging from interference to impairment, with variation within and across domains and settings, as well as secondary skills deficits and co-existing emotional or learning issues.
3. ADHD symptoms influence experience and performance in various life roles and endeavors, with effects on sense of self, identity, and efficacy.
4. There is an ongoing, reciprocal interaction between an individual and their contexts and relationships that can magnify and/or attenuate difficulties, coping strengths, and sense of belongingness and social capital.
5. The experience of ADHD, both cumulatively and in discrete instances, has effects on information processing in the form of thoughts and beliefs, as well as concurrent emotional and behavioral experiences that affect how one acts in and reacts to various contexts and roles and relationships (including stress from impairments and actual or perceived devaluation by others [B. Rosenfield, personal communication]).

Ramsay (2020). *Rethinking adult ADHD*. APA

CBT MODEL FOR ADULT ADHD

“Implementing CBT for adult ADHD”

CBT FOR ADULT ADHD: PREMISES FOR THE ADAPTED MODEL PSYCHOSOCIAL INTERVENTION

1. ADHD is a **quantitative** (and not a qualitative) difference in functioning, falling at the disordered end of a continuum of normative functioning (in terms of frequency and magnitude of sx's and impairments)
2. ADHD is an **implementation** problem related to difficulties performing the necessary skills and strategies needed to effectively manage a task, endeavor, role, or situation (and not a lack of knowledge of what needs to be done or inability to perform the skills).
3. These implementation problems stem from **chronic developmental difficulties related to impaired self-regulation**. Overall, these self-regulation problems involve difficulties organizing, initiating, and sustaining actions over time in order to achieve a future-focused outcome that is personally salient and desired by an individual. **The self-regulation deficits also contribute to:**
 - i. Procrastination
 - ii. Poor motivation for behavior (both initiating and sustaining over time)
 - iii. Poor task endurance
 - iv. Difficulties sustaining efforts across time, working towards a deferred reward
 - v. Tendency to discount deferred rewards, which are experienced as less salient than proximal rewards
 - vi. Corresponding difficulties with initiating and sustaining attention, disorganization, poor working memory, and emotional dysregulation which **punctuate** experience and efforts
 - vii. Difficulties executing otherwise known + effective coping strategies for managing these problem areas

Ramsay (2020). *Rethinking adult ADHD*. APA.

Ramsay & Rostain (2016). *Practice Innovations*, 1, 36-52.

**CBT FOR ADULT ADHD:
PREMISES FOR THE ADAPTED MODEL
PSYCHOSOCIAL INTERVENTION (2)**

4. These difficulties magnify and are magnified by co-existing psychiatric and learning disorders, as well as other life stressors and that result in **“disengagement”** from what are otherwise feasible and personally-salient tasks, endeavors, roles, duties, goals, and other objectives.
5. These self-regulatory deficits and impairments affect different levels of patient experience, which are targets for interventions¹:
 - a) *Cognitive/Justification*: self- and other-directed thoughts (self-mistrust)
 - b) *Behavioral/Investment*: meeting goals, needs, and obligations (engagement)
 - c) *Emotional/Experiential*: affective reactions + goal-value motivations (discomfort)
 - d) *Implementation*: targeted self-regulatory tactics, coping strategies (execute)
 - e) *Relationships/Influence*: social capital with others to meet needs (roles, belong)
6. The tx alliance is a vital source of empathy, support + focus (effecting)

Ramsay (2020). *Rethinking adult ADHD*. APA.

Ramsay & Rostain (2016). *Practice Innovations*, 1, 36-52.

¹Henriques (2011). *A new unified theory of psychology*. Springer.

BRIEF SUMMARY OF INTERVENTION DOMAINS

- **Cognitive** modification, self-regulatory efficacy
 - Build self-trust, efficacy, define task in “doable” terms, enough-ness, valuation
- **Behavioral** modification, establish habits, and coping skills
 - Engagement, “touch the task,” “go to” stations, time bounding, priming
- **Emotional** acceptance, mindfulness, persistence
 - Tolerate “discomfort,” uncertainty, emotional labelling/granularity, “willing vs want”
- **Implementation** strategies, navigate pivot point between “not doing” and “doing”
 - “If I face or do X, then I will respond with goal-consistent behavior Y” – execute intention
- **Social/Interpersonal** self-advocacy, specific role actions, self compassion, ask for/accept help
 - Assertiveness (“define/fulfill your roles”), fulfill roles, wield social capital
- **Therapeutic alliance** source of support, understanding, empathic fortitude

THERAPY-RELEVANT FACTORS IN ADULT ADHD (CBT PERSPECTIVE)

- **Cognitive/Schema/Core Beliefs**
- **Self-esteem**
- **Self-efficacy**
- **Coping strategies**
- **Resources (personal strengths, others, environment, and outsourcing)**

Newark & Stieglitz (2010). *ADHD Atten Def Hyp Disord*, 2, 59-72.

PROCESS BASED TREATMENT/CBT^{1,2,3}

- Psychological flexibility emerged as the #1 mediator of psychological treatment outcomes (followed by mindfulness and dysfunctional thoughts)¹
- Psychological Flexibility Model: Pillars
 - Openness: Augment or diminish cognitive control over behavior based on context
 - Awareness: Voluntary attention to the moment
 - Engagement: Values-based life engagement

¹Hayes et al. (2022). *Behaviour Research and Therapy*, 156.,104155

<https://doi.org/10.1016/j.brat.2022.104155>

²Hayes & Hofmann (Eds.) (2018). *Processed-based CBT*. Context Press.

³Hofmann, Hayes, & Lorscheid (2021). *Learning process-based therapy*. Context Press.

EXPANDED THOUGHTS ON COGNITION

- **4e Cognition:**
- “Cognition is shaped and structured by dynamic interactions between the brain, body, and both the physical and social environments.”
- Cognition is:
 - Embodied (in senses and lived, physical reality)
 - Embedded (in cultural, social context)
 - Enactive (through experiential problem-solving)
 - Extended (across tools, devices, and collaborators)

Newen et al. (Eds.) (2020). *The Oxford handbook of 4e cognition*. OUP.
Paul, A. M. (2022). *The extended mind*. Mariner Books.

THE NINE LAWS OF COGNITION

- First Law: There are no benefits without costs.
- Second Law: Action molds perception.
- Third Law: Feeling comes first.
- Fourth Law: The mind can override perception.
- Fifth Law: Cognition mirrors perception.
- Sixth Law: Spatial thinking is the foundation of abstract thought.
- Seventh Law: The mind fills in missing information.
- Eighth Law: When thought overflows the mind, the mind puts it into the world.
- Ninth Law: We organize the stuff in the world the way we organize the stuff in the mind.

Tversky, B. (2019). *Mind in action: How action shapes thoughts*. Basic Books.

CENTRAL COPING ISSUES FOR ADULTS WITH ADHD

“I know what I need to do, I just don’t do it.”

COPING DOMAINS FOR ADULT ADHD

- To Do List
- Daily Planner/Planning
- Prioritize/Choreograph
- Break down tasks
- Get started (Procrast.)
- Keep going
- “Manufacture” motivation
- Thoughts, emotions, escape behaviors
- Outsource coping
- Data management
- Materials mgt.
- Environmental Engineering
- Prob mgt./Dec. making
- College, Work
- Relationships/Social**
- Health, well-being
- Technology

Ramsay & Rostain (2015). *The adult ADHD tool kit: Using CBT to facilitate coping inside and out*. Routledge.

DUAL NATURE OF ADHD

CHARACTER STRENGTHS

- Cognitive dynamism*
- Courage
- Energy*
- Humanity
- Resilience
- Transcendence

(* = not in existing CS list)

OTHER BEHAVIORAL TRAITS

- Divergent thinking
- Hyper-focus
- Non-conformist
- Adventurousness
- Self-acceptance
- Sublimation

Sedgwick, J. A., Merwood, A., & Asherson, P. (2019). *ADHD Attention Deficit Hyperactivity Disorder*, 11:241–253
doi: 10.1007/s12402-018-0277-6

FLOURISHING AND STRENGTHS ASSOCIATED WITH FEATURES OF ADHD

- 42% of adults with ADHD achieved “complete mental health (vs 73.8% controls)”¹
- No differences b/w adults with ADHD and community controls in highest income group in study of impairments (> \$100,000/year)²
- Individuals with learning differences (dyslexia) might be desensitized to possible failure and take chances that pay off.³
- Respond well to support, understanding
- Did not fully understand symptoms until treated⁴
- Experiences of doctor-in-training losing access to meds⁴
- Better empathy with clients⁴
- Better off in “objective sense”⁴
- ADHD trade-offs, benefit-loss
- “‘(H)igh-functioning’ does not exclude dysfunction.”⁴

1 Fuller-Thompson et al. (2022). *Intl Jnl of Appl Pos Psychology*. Doi: 10.1007/s41042-022000062-6

2 Biederman et al. (2006). *J Clin Psychiatry*, 67(4), 524-540.

3 Gladwell, M. (2013). *David and Goliath*. Little, Brown, and Co.

4 Klein, E. J. (2020). *Psychological Services*, 19(1), 29-31. 10.1037/scr0000446 (psychiatry resident w/ ADHD)

DIGNITY IN “MUDDLING THROUGH:” DUAL NATURE OF ADHD COPING MINDSETS

SURVIVE

- Suffer
- Barely exist
- Weather
- Scrape by
- Get along
- Manage somehow
- Get by
- Grin and bear it
- Bear up
- Hang on

THRIVE

- Endure
- Persist
- Struggle through
- Do alright
- Manage
- Come through
- Make the grade
- Make it work
- Acquit yourself well
- Achieve, prosper
- Flourish

Synonyms from: https://www.wordhippo.com/what-is/another-word-for/muddle_through.html

EVIDENCE BASE FOR CBT FOR ADULT ADHD



Lukas/Pexels

CBT **MUST!!** BE ADAPTED TO ADULT ADHD

- NIH and NICE recommend CBT for adult ADHD in UK
- Survey of 46 surveys and 10 in-depth interviews of the experience of clients who received CBT for adult ADHD (NHS, private, or other providers)
- Key themes from participants' (clients') experiences
 - Difficulties with the CBT framework
 - Difficulties with the therapists
 - Difficulties with the consequences of CBT (little gain, feeling worse off, “what now”?)
- Description of CBT framework
 - Rigid
 - Too short
 - CBT therapist unspecialized, unempathetic, not sufficiently adapting CBT to adult ADHD experiences

William S, Horrocks M, Richmond J, Hall CL and French B (2024). Experience of CBT in adults with ADHD: a mixed methods study. *Front. Psychiatry* 15:1341624.doi: 10.3389/fpsy.2024.1341624

CBT FOR ADULT ADHD: META-ANALYSES + SYSTEMATIC REVIEWS

- Moriyama et al. (2013). *CNS Spectrums*, 18, 296-306. doi: 10.1017/S109285291300031X
- Jensen et al. (2016). *Atten Def Hyper Dis*, 8, 3-11. doi: 10.1007/s12402-016-0188-3
- Young et al. (2016). *Journal of Attention Disorders*, 24(6), 875-888. doi: 10.1177/1087054716664413
- Knouse et al. (2017). *J of Clinical and Consulting Psychology*, 85(7), 737-750. doi: 10.1037/ccp0000216
- Lopez-Pinar et al. (2020). *J of Attention Disorders*, 24(3), 456-478. doi: 10.1177/1087054719855685 (benefits for internalizing symptoms)
- Fullen et al. (2020). *Journal of Psychopathology and Behavioral Assessment*, 42, 500-518. doi: 10.1007/s10862-020-09794-8

CBT FOR ADULT ADHD: META-ANALYSES + SYSTEMATIC REVIEWS (2)

- Nimmo-Smith et al. (2020). *Psychological Medicine*. 50(4), 529-541. doi: 10.1017/s0033291720000069
- Lambez et al. (2022). *J of Psychiatric Research*, 120, 40-50.
<https://doi.org/10.1016/j.jpsychires.2019.10.007>
- Tourjman et al. (2022). *Brain Sciences*, 12, 1023.
<https://doi.org/10.3390/brainsci12081023> (CADDRA)
- Liu et al. (2023). *Psychology and Psychotherapy: Theory, Research, and Practice*.
<https://doi.org/10.1111/papt.12455> (benefits with emotions)
- Li et al. (2024). *J of Attention Disorders*, 28(3), 279-292.
<https://doi.org/10.1177/10870547231214969> (CBT+M better than M alone)

RECENT STUDIES

Strålin et al. (2022) Cognitive-behavioral **group therapy for ADHD predominantly inattentive** presentation: A feasibility study of a new treatment protocol, *Nordic Psychology*, 74:4, 325-339, DOI: 10.1080/19012276.2021.2020683

Eddy, Anastopoulos et al. (2021): An RCT of a CBT intervention for **emerging adults with ADHD attending college**: Functional outcomes, *Journal of Clinical Child & Adolescent Psychology*, DOI: 10.1080/15374416.2020.1867989

Anastopoulos et al. (2021). A randomized controlled trial examining **CBT for college students with ADHD**. *Journal of Consulting and Clinical Psychology*, 89(1), 21–33.
<https://doi.org/10.1037/ccp0000553>

Corrales et al. (2024). Long-term efficacy of a **new 6-session cognitive behavioral therapy** for adults with attention-deficit/hyperactivity disorder: A randomized controlled trial. *Psychiatry Research*, 331, 115642. <https://doi.org/10.1016/j.psychres.2023.115642>

RECENT STUDIES (2)

Knouse et al. (2022). Usability and feasibility of a cognitive-behavioral **mobile app for ADHD in adults**. *PLOS Digital Health*, 1(8). DOI: 10.1371/journal.p.dig.0000083

Nasri et al. (2023). **Internet delivered** cognitive behavioral therapy for adults with ADHD – A randomized controlled trial. *Internet Interventions*, 33, 100636.
<https://doi.org/10.1016/j.invent.2023.100636>

Seery et al. (2023). The understanding and managing adult ADHD programme: A qualitative evaluation of **online psychoeducation with acceptance and commitment therapy** for adults with ADHD. *Journal of Contextual Behavioral Science*, 29, 254-263.
<https://doi.org/10.1016/j.jcbs.2023.08.005>

RECENT STUDIES (3)

Knouse et al. (2022). Usability and feasibility of a cognitive-behavioral **mobile app for ADHD in adults**. *PLOS Digital Health*, 1(8). DOI: 10.1371/journal.p.dig.0000083

Nasri et al. (2023). **Internet delivered** cognitive behavioral therapy for adults with ADHD – A randomized controlled trial. *Internet Interventions*, 33, 100636.
<https://doi.org/10.1016/j.invent.2023.100636>

Seery et al. (2023). The understanding and managing adult ADHD programme: A qualitative evaluation of **online psychoeducation with acceptance and commitment therapy** for adults with ADHD. *Journal of Contextual Behavioral Science*, 29, 254-263.
<https://doi.org/10.1016/j.jcbs.2023.08.005>

RECENT STUDIES (4)

Weibel et al. (2022). **Practical considerations** for the evaluation and management of Attention Deficit Hyperactivity Disorder (ADHD) in adults. *L'Encéphale*, 46(1). 30-40. <https://doi.org/10.1016/j.encep.2019.06.005> ([overview of nonmedical approaches](#))

Champ et al. (2021) The **impact of psychological theory** on the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in adults: A scoping review. *PLoS ONE* 16(12): e0261247. <https://doi.org/10.1371/journal.pone.0261247>