

Sleep Onset Anxiety: Understanding Mechanisms and Evidence-Based Approaches for Improving Sleep Onset in Clinical Practice

Abstract

Anxiety is now a major problem for the natural sleeping process. It is a physiological as well as cognitive reaction that disrupts sleep, causing insomnia and sleep disturbance. The paper presents the mechanisms of sleep onset anxiety and discusses both cognitive and somatic processes, including rumination, worry, and muscle tension and heart rate increase. Evidence-based interventions for the alleviation of sleep onset anxiety, such as Cognitive Behavioral Therapy (CBT), mindfulness-based interventions, relaxation methods, and environmental modifications, will also be reviewed. A particular emphasis will be made on its clinical use, such as case studies, cultural factors, and practical tools in the hands of therapists. The conclusion will emphasize the significance of controlling the anxiety of sleep onset in order to promote the quality of sleep and propose directions of future research in the sphere of developing therapies and digital health applications.

Keywords: Sleep onset anxiety, insomnia, cognitive-behavioral therapy, mindfulness, somatic hyperarousal, relaxation techniques, sleep quality, behavioral sleep medicine, HPA axis, environmental modifications.

1. Introduction

1.1 Sleep Onset Anxiety and Its Connection to Sleep Onset Insomnia

Anxiety of sleep onset is a mental state of fear, worry, and restlessness during the process of sleeping. Victims of such anxiety tend to have too many thoughts in their mind or racing thoughts of what happened during the day, what is going to happen tomorrow, or of fearing that they would not be able to sleep (Zhou et al., 2022). This increased alertness disrupts the natural process of falling asleep and results in a person not being able to fall asleep. This is commonly known as sleep onset insomnia. The condition is usually observed in conjunction with sleeplessness, where individuals have long periods of being awake even though they have the desire and the need to sleep. The fear that goes with falling asleep is usually accompanied by not only mental distress but also by physical tension, making it even harder to fall asleep (Locsin & Salvador, 2021).

THE STRESS-SLEEP CYCLE

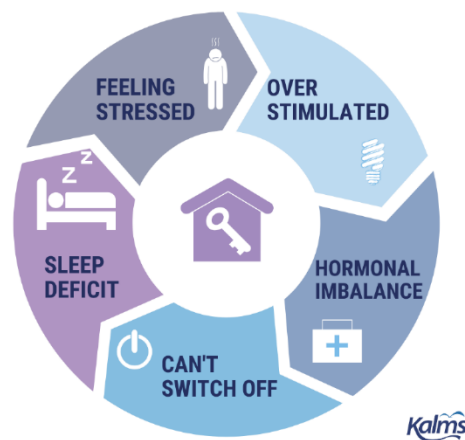


Figure 1 (How to Reduce Stress and Sleep Better, 2025)

1.2 Prevalence of Anxiety-Related Sleep Disturbances

The disturbances in sleep that are associated with anxiety are not as rare as one might think, and, in fact, a significant percentage of the population is affected. The problem of sleep issues, in particular, anxiety-related, is widespread both in adults and adolescents (López-Gil et al., 2022). Research has established that patients with chronic anxiety disorders are susceptible to sleep problems, especially failure to sleep. This is particularly true in individuals who have generalized anxiety disorder (GAD), post-traumatic stress disorder (PTSD), and panic disorder.

Both psychological and physiological focus should be considered to enhance the quality of sleep since there is sleep onset anxiety, which complicates the treatment of insomnia(Serra-Blasco et al., 2021).

1.3 Clinical Importance and Relevance to Behavioral Sleep Medicine

The significance of treating anxiety which originates in sleep is hard to measure. The reason is that sleep disturbances caused by worry levels usually transcend to worse health effects, such as mood disorders, poor emotional control and cognitive impairment. Moreover, insomnia and other sleeping related disorders are combined with weakened immunity, stress and a general lowering in quality of life(Howell et al., 2023).

Behavioral sleep medicine (BSM) aims to cure sleep problems without using prescription medications. As the method focuses on the underlying psychology and can generate effective and long-lasting therapies, the approach is especially appropriate when treating sleep-onset anxiety(Roberts & Ulmer, 2024). These methods may involve mindfulness, relaxation, cognitive-behavioral therapy, and modifying the sleeping environment so as to decrease the anxiety levels and increase the quality of sleep.

2. Mechanisms of Sleep Onset Anxiety

2.1 Cognitive Mechanisms: Rumination, Worry, and Catastrophic Thinking

Cognitive problems have a major impact on the onset and maintenance of sleep-onset anxiety. Rumination is characterized as recurring negative memories or thoughts that can create a vicious cycle of tension and worry. Many people experience sleep-onset anxiety as a result of worrying about a negative event that has been predicted or about what will happen the following day(Wong et al., 2023). A barrier to relaxation is created by this pattern of unfavorable thoughts, which prevents the person from falling asleep.

Besides rumination and worry, catastrophic thinking is also a contributor to anxiety at the onset of sleep. This is because one envisions the worst-case scenario when it comes to their sleeping problems, and this can result in more anxiety and frustration. Such mental habits will make the sleep anxiety-ridden, which will further complicate the subject's ability to sleep(Leung et al., 2022).

2.2 Somatic Hyperarousal: Physiological Responses to Anxiety

Sleep onset anxiety is also depicted in the physiological reactions that are a contributory factor to the challenge of sleeping. Somatic hyperarousal is a physical tension and an increase in the physiological state of anxious persons. This involves such symptoms as a rapid heart rate, muscle tightness, and high cortisol, a hormone of stress. These body reactions are part of the body's fight-or-flight reaction, which, though effective in dangerous circumstances, is counterproductive to sleep (Dressle & Riemann, 2023).

The sympathetic nervous system, which is the fight-or-flight response, is hyperactive in people with sleep onset anxiety. Such alertness results in the body not being able to shift to the parasympathetic state that enables the body to initiate sleep. Consequently, it causes a person to suffer physically, develop restlessness, and an inability to relax to the extent of sleeping (Bigalke & Carter, 2022).

2.3 Neurobiological Underpinnings: HPA Axis Dysregulation

A key component of the body's stress response system is the hypothalamic-pituitary-adrenal (HPA) axis. Abnormal functioning of this system is among the primary causes of anxiety, which begins at night. The fight-or-flight reaction of the body is initiated by the secretion of cortisol and other stress hormones facilitated by the HPA axis (Jurueña et al., 2021). This system is usually hyperactive, especially at night in individuals who experience sleep onset anxiety, thus elevating the level of alertness at the expense of the normal sleeping cycle.

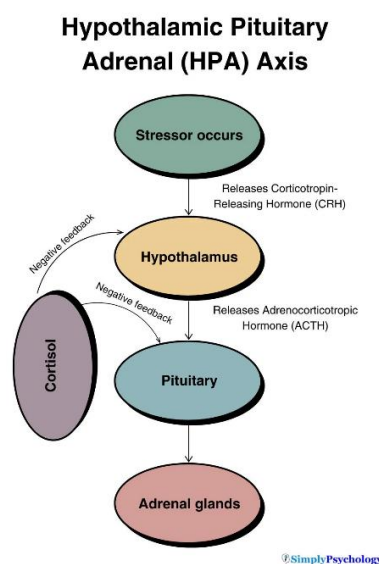


Figure 2 HPA-Axis (Simply Psychology, 2025)

The dysfunction of the HPA axis is typical of high cortisol synthesis in the evening, and this prevents the body from relaxing before sleep (Karaca et al., 2021). It is an important place of intervention in sleep-enhancing therapeutic methods because it is a dysregulation, and the dysregulation is a component of the anxiety-low quality of sleep cycle.

2.4 Interaction between Cognitive and Physiological Arousal

The vicious cycle of anxiety that starts before sleep is the interaction between cognitive and physiological arousal. Physiological arousal that is provoked by cognitive arousal, e.g., worrying and ruminations about sleep, involves elevated heart rate and muscle tension (Dindar et al., 2022). Cognitive arousal, on the other hand, is fed back by physiological arousal, where an individual feels uncomfortable and anxious about sleep. With this cycle, it keeps being a problem, and therefore, people find it hard to relax and fall asleep.

This cyclic quality of anxiety during sleep onset necessitates the fact that interventions should focus on the cognitive and physiological components of sleep and anxiety together to break the cycle (Staines et al., 2022).

Table of Cognitive and Physiological Mechanisms

It is a table that may allow summarizing the most significant cognitive and physiological processes that play a role in sleep onset anxiety and allow readers to comprehend the main factors that lead to the state, rather quickly.

Mechanism	Description	Impact on Sleep
Cognitive: Rumination	Repetitive thinking about distressing events or future concerns.	Increases anxiety and prevents relaxation, delaying sleep.
Cognitive: Worry	Anticipation of negative outcomes or fear of sleeplessness.	Heightens anxiety and prevents sleep initiation.
Somatic Hyperarousal	Physiological responses such as increased heart rate, muscle tension, etc.	Activates the fight-or-flight response, preventing sleep onset.

Neurobiological: HPA Axis Dysregulation	Abnormal cortisol release and stress hormone response.	Prevents the body from winding down, disrupting sleep cycles.
--	--	---

3. Evidence-Based Interventions

3.1 Cognitive-Behavioral Approaches

One of the best therapies for sleep onset anxiety is cognitive-behavioral therapy of insomnia (CBT-I). One of the components of CBT-I is cognitive restructuring, in which one is shown to recognize and dispute their negative thoughts and beliefs about sleep) Hertenstein et al., 2022)- CBT-I also reduces anxiety by substituting maladaptive cognitions with more balanced and realistic cognitions, as well as enhances the initiation of sleep.

Paradoxical intention is also another effective technique of CBT-I, where people are taught to attempt to stay awake instead of coercing themselves to sleep. This lowers the pressure to sleep, which tends to enhance anxiety and breaks the insomnia cycle (Jansson-Fröjmark et al., 2022).

3.2 Acceptance-Based Strategies and Mindfulness.

The mindfulness-based interventions allow one to concentrate on the current situation and lessen the mental chatter that can usually accompany the anxiety of the onset of sleep. Mindfulness meditation enables the person to be aware of his or her thoughts without being judgmental, and this makes the intrusive and worrying thoughts less significant (Howarth & Miller, 2024).

Acceptance and Commitment Therapy (ACT) teaches one to be okay with anxiety instead of attempting to manage it. ACT can also make a person understand that anxiety is a natural aspect of life, and it does not have to disrupt sleep. The emphasis on the need to lead a life that corresponds to the principles of personal values predetermines the state of relaxation and psychological flexibility that ACT encourages(Petersen, 2025).

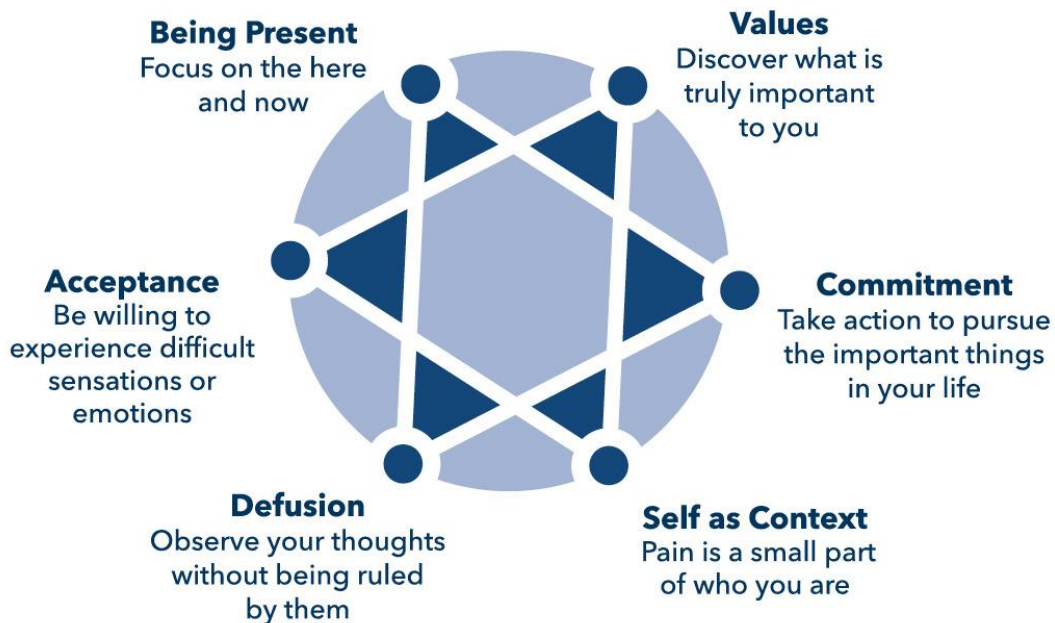


Figure 3 ACT (Center for Sports Medicine & Orthopaedics, 2022)

3.3 Relaxation Interventions

Progressive muscle relaxation, diaphragmatic breathing, and guided imagery are some of the relaxation techniques that may be effective in alleviating the physical symptoms of anxiety. Progressive muscle relaxation assists one in systematically relax his/her muscles, whereas diaphragmatic breathing is concerned with slow, deep breathing as a means of activation of the parasympathetic nervous system, as well as bringing about calmness (Toussaint et al., 2021). Guided imagery involves the use of visualization to come up with new, relaxing visual images that also help in falling asleep.

3.4 Behavioral and Environmental Modification

Another important factor in controlling sleep onset anxiety is to modify the sleep environment. It is possible to create a pre-sleep ritual, e.g., a journal or a relaxation routine, to remind the body that it is time to relax. The creation of a homely environment through controlling the amount of

light, temperature, and noise provides a favorable environment conducive to sleep(Ajibade & Boateng, 2021).

Table of Evidence-Based Interventions

An overview table of evidence-based interventions on sleep onset anxiety could be used to clear up the different therapeutic interventions and their areas of focus.

Intervention	Description	Primary Focus	Key Techniques
Cognitive-Behavioral Therapy (CBT-I)	Targets maladaptive thoughts and behaviors related to sleep.	Cognitive restructuring, thought diffusion.	Cognitive restructuring, paradoxical intention.
Mindfulness and Acceptance-Based Strategies	Encourages non-judgmental awareness and acceptance of anxious thoughts.	Acceptance and mindfulness practices.	Mindfulness meditation, Acceptance and Commitment Therapy (ACT).
Relaxation Techniques	Focus on reducing physical tension to prepare for sleep.	Physiological relaxation and calmness.	Progressive muscle relaxation, diaphragmatic breathing.
Environmental Modifications	Adjustments to the sleep environment to promote better sleep.	Sleep hygiene and environmental optimization.	Lighting control, temperature adjustment, and noise reduction.

4. Clinical Considerations and Case Applications

4.1 Individual Factors: Anxiety Disorders, Cultural Influences, and Age-Related Considerations

In managing sleep onset anxiety, therapists should consider several individual factors that may affect the way an individual experiences and reacts to the treatment. Such reasons are anxiety disorders, cultural contribution, and the age factor. All of these factors can influence the character of sleep onset anxiety and influence the optimum methods of implementation of interventions.

4.1.1 Anxiety Disorders

Sleep onset anxiety oftentimes is a fundamental feature of various anxiety disorders, and these may include Generalized Anxiety Disorder (GAD), Panic Disorder, and Post-Traumatic Stress Disorder (PTSD). Excessive worry tends to increase stress levels in patients with GAD, thus preventing them from relaxing before bedtime(Yuan et al., 2023).In Panic Disorder, nocturnal panic attacks or increased arousal in the nighttime may result in continuing fear and avoidance of sleeping, worsening sleep disturbances.

Nightmares associated with the trauma and hyperarousal play a significant role in the difficulty in sleeping in PTSD. These patients can be intrusive, hyper-vigilant, making it difficult to relax and sleep. With these relationships, sleep onset anxiety interventions should be modified to treat the underlying anxiety disorder(Lancel et al., 2021). As an example, cognitive-behavioral therapy of insomnia (CBT-I) can require the incorporation of trauma-focused therapy or anxiety-focused treatments to better address the sleep disorder as well as the anxiety symptoms.

Prevalence of Sleep Disorders According to Age

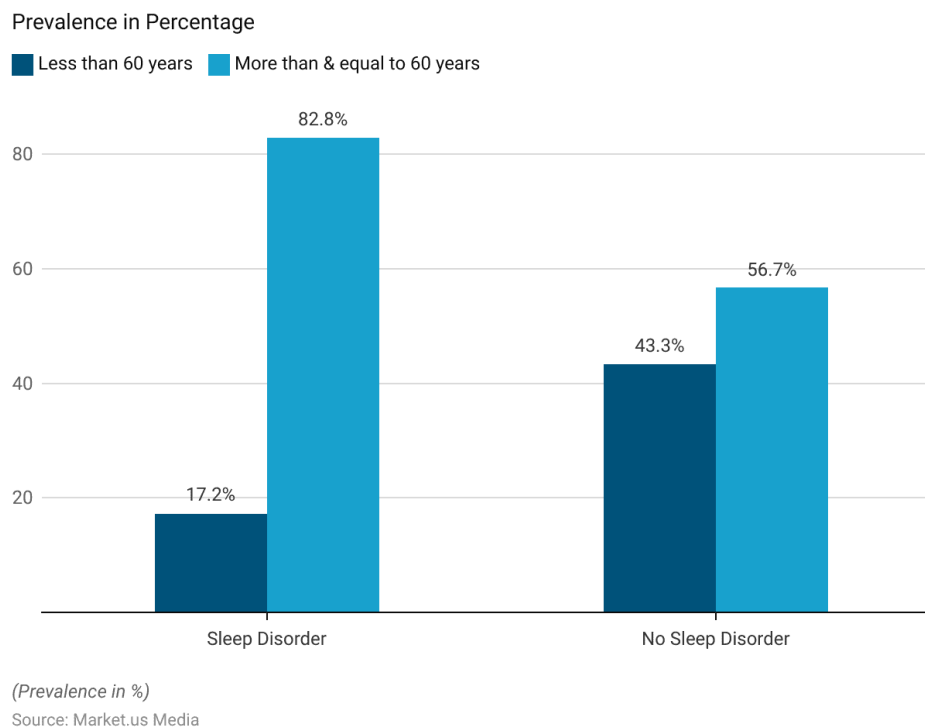


Figure 4 Sleep Disorder (Wang et al., 2025)

4.1.2 Cultural Influences

The impact of culture on the experience of anxiety and sleeping disturbances is also quite important. Various cultures can hold different beliefs and attitudes towards sleep and anxiety, and this can impact the way clients perceive their symptoms and how they respond to treatment. An example is that in certain cultures, insomnia and anxiety can be considered a social stigma, making people refuse to express their symptoms or never want to see a doctor. Conversely, other cultures can prioritize the role of community and holistic approaches to mental health, and it can influence the effectiveness with which clients react to treatment such as CBT or mindfulness (Derlic, 2022). Culture can also have an effect on anxiety symptoms. As an example, people in some cultures are more somatic in exhibiting their anxiety (e.g., headache, stomach troubles etc.) and other cultures tend to be more verbal in expressing their anxiety as worry or fear. There is a need to understand these cultural differences in order to be in a position to modify therapeutic approaches to meet the needs of different clients. One must be aware of these influences as a therapist and consider culturally sensitive practices in a treatment and ensure that a client does not feel misunderstood, unheard and upset in the context of their cultural environment.

4.1.3 Age-Related Considerations

The experience of sleep onset anxiety is also largely dependent on the age factor. Sleep onset anxiety may be developed not necessarily in the same manner in children and adolescents, often due to developmental problems such as emotional vulnerability, poor coping mechanisms, and social factors related to school or family life (Grant et al., 2023). Sleep onset anxiety may be manifested in younger clients by not being able to fall asleep due to fear of the dark, nightmares or fear of school performance or socialization. In such instances, there might be a necessity for the therapist to use age-specific interventions, including relaxation strategies adapted to children (e.g., progressive muscle relaxation), and involvement of the parents to assist in building healthy sleeping habits and routines.

The age of the individual also influences sleep patterns, and the onset of sleep is more common in older adults. With older groups, anxiety during sleep onset can be due to health issues (e.g., chronic pain, drug side effects, etc.) along with loss of independence or impaired cognition. Also, the elderly can develop increased anxiety because of fears of aging, death, or being alone, which can have a great effect on their capacity to unwind before sleep. Therapeutic interventions with this group can include both physical and psychological components of anxiety. Environmental changes, such as changing temperature, minimizing noise, or other relaxing pre-sleep procedures,

can also be critical in the management of sleep onset anxiety in older customers(Ferreira et al., 2022).

Table of Client Factors in Treatment

The table might be a summary of the personal factors that ought to be taken into consideration when treating sleep onset anxiety, particularly among various age groups or among different cultures or societies.

Factor	Considerations for Treatment	Implications for Therapy
Age	Children, adolescents, and the elderly may have different concerns.	Tailor interventions to developmental stages, such as including family for younger clients or addressing health concerns for older adults.
Cultural Influences	Cultural norms and beliefs affect how anxiety and sleep disturbances are perceived.	Adapt interventions to align with cultural values, ensuring sensitivity and relevance in therapeutic approaches.
Comorbid Anxiety Disorders	GAD, PTSD, Panic Disorder, etc., may complicate sleep onset anxiety.	Integrate trauma-focused therapies or anxiety treatment alongside sleep interventions.

4.2 Case Applications for Treating Sleep Onset Anxiety

Since the symptoms of sleep onset anxiety are unique to the individual, case applications need to be tailored to address the individual needs of the client. A few case examples are provided below, in which particular therapeutic interventions may be designed to help individuals in particular populations overcome sleep onset anxiety(Gao et al., 2022).

4.2.1 Adolescents and Sleep Onset Anxiety

The biological, emotional, and social factors combined make adolescents very susceptible to sleep onset anxiety. Anxiety in relation to school, social pressure, and peer relationships is one of the main causes of stress that may disrupt their sleep patterns. Teenagers can have racing thoughts over an upcoming test, social gathering, or worry about their future, which can provoke somatic symptoms like tension in the muscles or even a racing heart(Jamieson et al., 2021).

In the case of this age group, the initial step in the therapy can be education about sleep hygiene and stress coping techniques, e.g., mindfulness meditation or bed journals. The body manifestations of anxiety can be reduced by teaching the relaxation techniques of adolescence, such as deep breathing or guided imagery. In addition the intervention of the parents is needed to promote the creation of the positive sleeping environment and the creation of the regular bedtime schedule. Interventions designed to promote regular sleep habits (e.g. set a regular sleep schedule) are also beneficial.

4.2.2 Elderly Populations and Sleep Onset Anxiety

There are certain peculiarities of sleep anxiety among the elder population. The causes of distress include chronic health diseases, the loss of a loved one, and declining cognitive abilities. Medication side effects or pain can also occur in older people, and this may exacerbate their physical discomfort, as well as interfere with their sleep. Anxieties of death, decreased physical wellbeing, and loss of autonomy can lead to sleep-onset anxiety in the elderly (Amicucci et al., 2021).

The therapeutic interventions that will be applied to older clients should be aimed at establishing a comfortable, safe and quiet environment to sleep. This includes control of such aspects as room temperature, the level of noise and light. The physical tension leads to relaxation and relaxation can be achieved by using relaxation techniques and strategies including progressive muscle relaxation or walking breathing exercises. It may also help in cognitive restructuring of any irrational fears or anxieties over aging. Anxiety relief and encouraging the quality of sleep in geriatric clients could also be used in daily socialization and physical activity.

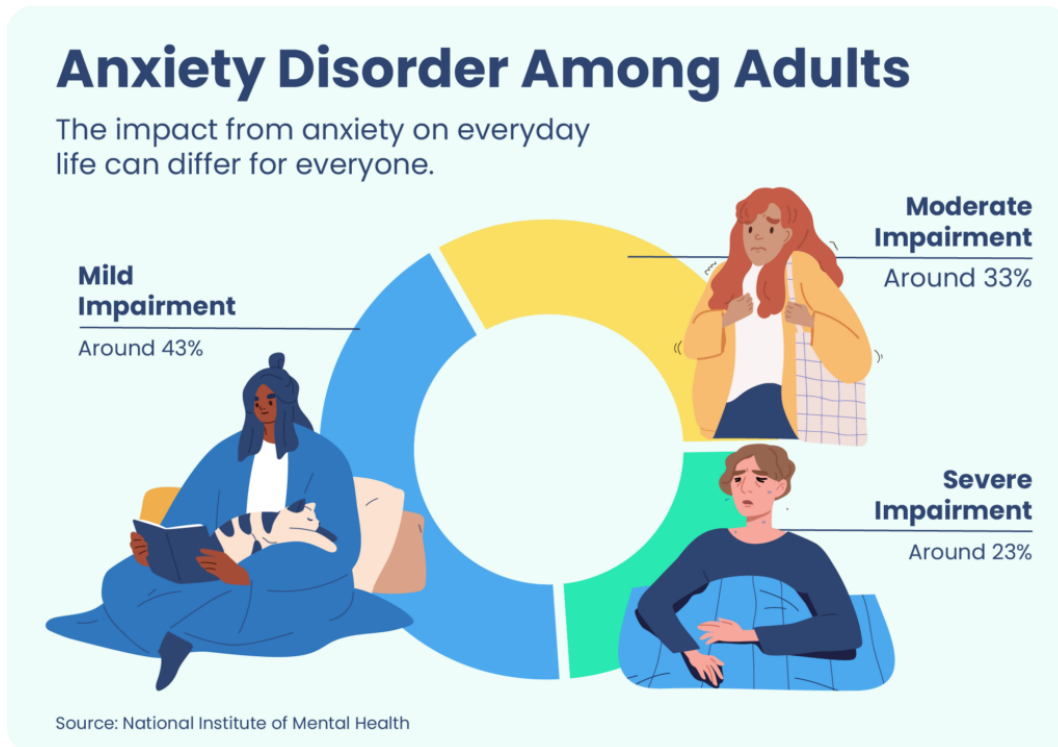


Figure 5 Anxiety among Adults(Leonardi, 2025)

4.2.3 Culturally Diverse Populations

Customers who have varying cultural orientations may have different perceptions and beliefs regarding sleep, anxiety and treatment. One can think of the situation with people in collectivist cultures that care about family harmony and other values and experience anxiety about the expectations or social conventions within the family. Individuals with individualist cultures might be oriented toward self-accomplishment and might be anxious about performance at work or in school.

To adequately treat sleep onset anxiety among such populations, therapists should initially conduct cultural contextualization of the client and acknowledge cultural variations in how sleep and mental health are perceived. An example is that in social harmony-oriented cultures where social harmony is paramount, therapy can revolve around reducing anxiety that relates to interpersonal relationships and employ methods as family therapy or support networks. In clients whose cultures value personal achievement, such strategies as goal setting and self-affirmation may be effective in this context to avoid anxiety and sleep better(Dong et al., 2023).

4.3 Integrating Trauma-Focused Therapies

In patients with PTSD or sleep disorders, which are associated with trauma, it is important to combine trauma-oriented therapies with sleep onset anxiety interventions. TF-CBT or Eye Movement Desensitization and Reprocessing (EMDR) could help the clients deal with the underlying causes of anxiety and, in that way, cope with traumatic memories and decrease the level of distress (Kline et al., 2022). Moreover, the inclusion of relaxation and mindfulness practices can be offered along with the therapies aimed at the trauma to make individuals feel that they have the power to control their emotional and physiological responses prior to their sleeping.

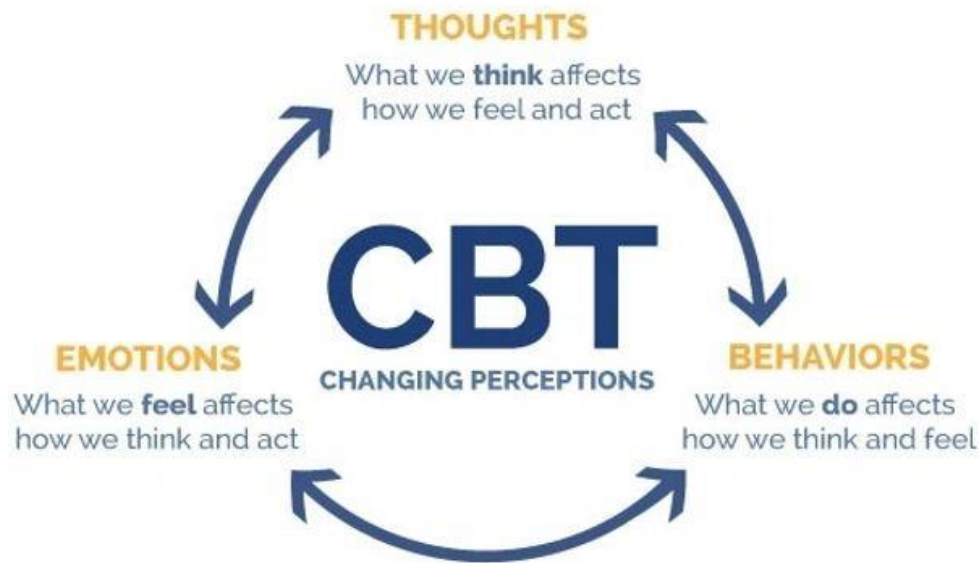


Figure 6 CBT (Happy Health Care, PLLC, 2025)

In this case, therapists must create a safe and comfortable setting where the clients feel free to talk about matters about the traumas. Sleep onset anxiety can be broken by having trauma processing interventions accompanied by sleep-centered interventions.

Clinical Considerations Summary

The therapists ought to weigh the dynamic interactions of the personal variables, culture and complications caused by age in the management of sleep onset anxiety. Differentiating the treatment to meet the specific needs of each client, adolescents, old age, or a patient dealing with trauma will enhance the efficiency of interventions (Erten Uyumaz et al., 2021). By incorporating the appropriate practices and establishing a conducive environment, the therapists will be able to help the clients overcome the fear of falling asleep and improve their lifestyle.

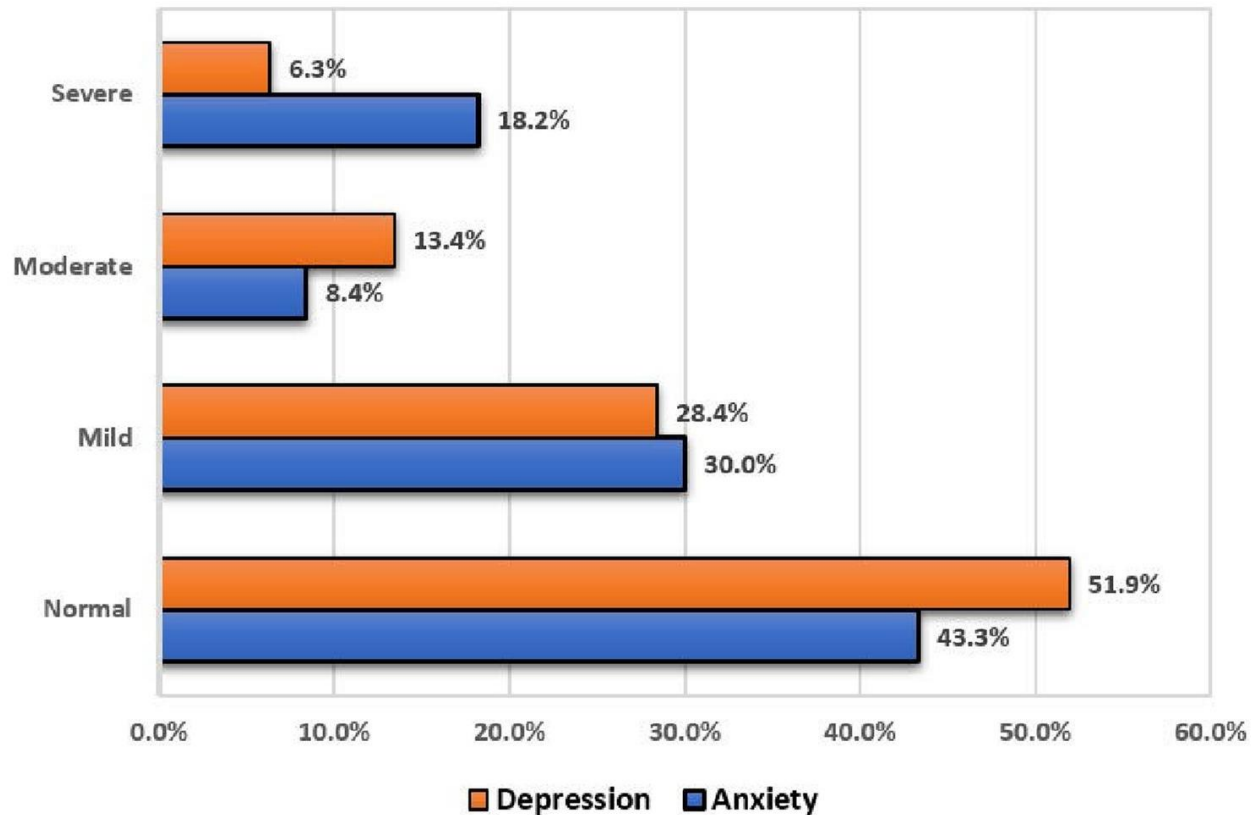


Figure 7 Depression & Anxiety Percentage(Maraqqa et al., 2024)

5. Integration into Therapy

The compilation of sleep onset anxiety interventions should be incorporated into the therapy process as a holistic approach comprising of psychoeducation, practical strategies, and engagement strategies, allowing the client to manage his/her symptoms(Chan et al., 2022). It can be combined with a set of methods during which a therapist does not only treat the cognitive and physiological causes of anxiety but also promotes a patient to follow the treatment. This combination is not only useful in alleviating sleep onset anxiety in the short term, but also provides the client with long-term tools to avoid relapse.

5.1 Client Psychoeducation

This approach will assist the company in building and selling its brand name to the target audience.

Psychoeducation plays a very significant part in the inclusion of the interventions to sleep onset anxiety. This will help the clients understand the type of anxiety they are experiencing and how it is impacting their sleep. Therapists can empower clients by making the sleep-anxiety cycle (anxiety is the cause of hyperarousal which in turn aggravates sleep disturbances) very clear so

that they can be able to help themselves to better manage their condition. Teaching the clients about the biological processes of sleep onset anxiety (including somatic hyperarousal and cognitive distortions) enables them to identify the symptoms in themselves, work with coping strategies, and minimize the influence of anxiety on their sleep(Gkintoni et al., 2025).

Also, psychoeducation can include facts on the hygiene of sleep and the need of normal sleep habit. Educating the clients on how they can achieve an optimal sleep environment (dark, quiet, and cool) and the advantages of having a routine sleep schedule reaffirms positive habits, which may enhance sleep quality in the long term. The fact that clients can alleviate anxiety-induced sleep disturbances by engaging in behavioral modifications, including decreasing the time spent in front of screens before going to sleep and minimizing the consumption of caffeine-rich products, is also an important part of psychoeducation.

5.2 Practical Tools for Managing Sleep Onset Anxiety

To ensure that the clients can make progress and eliminate anxiety, practical tools can be used as an effective intervention between the therapy sessions. Those tools allow the clients to gain a deeper understanding of their sleeping habits and anxiety triggers, not to mention giving them physical methods of reducing distress(Ogundele & Yemula, 2022).

5.2.1 Worry Journals

One of the most basic but most effective tools to use to manage sleep onset anxiety is worry journals. These journals offer a systematic manner of assisting clients to monitor their anxious thoughts and worries during the day and those that occur at bedtime. Clients can externalize their anxiety by writing about their concerns, and this decreases the internal pressure that adds to their sleep problems(Zhou et al., 2022).

Another advantage of journaling is that it facilitates the client to note patterns in their anxiety. As an example, they can find out that some anxieties (e.g., work stress, family problems) are always followed by increased anxiety at night. When such patterns are found, the therapists can assist the clients to overcome their concerns by applying cognitive restructuring methods in order to debunk the negative thinking and to substitute it with less biased thinking.

5.2.2 Guided Audio Sessions

Guided audio sessions may serve as a good practice to assist the clients in relaxing and forgetting about anxiety. These tapes can have relaxation activities, deep breathing, progressive muscle relaxation, or guided visualization. Clients can be helped to alleviate the physical symptoms of anxiety (muscle tension and increased heart rate) through listening to soothing voices or relaxing music and getting the body ready to sleep(Saiu & Grosso, 2022).

Audio sessions are also very helpful to those people who cannot unwind before sleeping. They act as a systematic distraction of the mind from anxious thoughts and help the body rest in a more relaxed state, which helps in sleep. These recordings can be listened to by the clients on a nightly basis as a pre-sleep ritual, which helps to cement the habit of falling asleep feeling relaxed.

5.2.3 Sleep Apps

Sleep apps in the digital age are becoming more and more popular in managing sleep onset anxiety. These applications usually have a variety of functions, including sleep monitoring, breathing practices, and mindfulness. Sleep apps enable clients to monitor their sleep habits, establish objectives regarding better sleep habits, and get personal feedback on their unique data.

An example is that numerous apps provide services such as guided meditation, deep breathing, and sleep aids (e.g., white noise or nature sounds) to allow clients to sleep. Also, a few of the apps incorporate cognitive behavioral tools to assist the user in recognizing and disputing negative thoughts about sleep. Considering the ease of carrying these tools on a smartphone, it can be easier for the clients to introduce these practices into their nightly routine(Robinson et al., 2023).

Sleep apps facilitate lasting change in behavior by giving the clients convenient access to relaxation methods and sleep monitoring. They also assist clients in remaining motivated by providing a concrete means of tracking their progress in due course.

5.3 Motivational Interviewing and Behavioral Contracts

Although psychoeducation and practical tools play crucial roles in the treatment process, the engagement strategies are equally crucial in attaining success in the treatment in the long term to manage sleep onset anxiety. Two models that can be used to maximize client adherence to treatment plans and encourage motivation toward lasting changes include the use of motivational interviewing and behavioral contracts(Hara et al., 2022).

5.3.1 Motivational Interviewing

Motivational interviewing (MI) is a client-oriented, empathic pattern that assists people to explore and overcome ambivalence regarding making changes in their behavior. MI can assist the client in addressing sleep onset anxiety by not only determining the personal motivations of their sleep habits but also seeking the obstacles that render them unable to engage in healthier sleep habits. During therapy, MI assists clients in discussing their objectives, the value of good sleep, and the challenges that they encounter in sleep (Buckner, 2024). Therapists can help the clients see themselves ready to change with the help of open-ended questions, reflective listening, and affirmations. MI may be especially effective with people who distrust the power of treatment or with people who struggle with commitment to treatment.

5.3.2 Behavioral Contracts

A behavioral contract is an official accord between the therapist and the client that describes the goals, expectations, and obligations in terms of treatment. In a case where a person is experiencing sleep onset anxiety, a behavioral contract may be used to define the role the client is expected to play in the therapeutic process. It may include not only the implementation of specific intervention methods (such as worry journals or guided audio tapes), but also the development of sleep hygiene objectives.

The contract needs to be a collaborative one and it should make the client feel part of their treatment and committed. It also brings a form of responsibility and reminds the client that he or she is willing to change his or her sleeping pattern. Clients can also be reinforced positively by therapists as they meet their goals and this boosts commitment and motivation (De Clercq et al., 2021).

5.4 Developing a Long-term Sustainable Succession Plan

The long-term goal of the combination of these interventions in the therapy is to create a sustainable plan of long-term success in managing the anxiety of sleeping onset. This does not only capture the immediate issues but also gives the clients the tools that they can make use of even when they are no longer under the therapy. To enable clients to develop an independent approach to their anxiety associated with the onset of sleep, therapists are to provide psychoeducation and practical steps and tools (motivational interviewing, behavioral contracts, etc.) (Chapoutot et al., 2021).

Also, progress can be evaluated by the follow-up sessions to make any changes to the treatment plan and celebrate the achievements. To support learned behavior and to prevent relapse, ongoing support to clients can be provided after successful behavior change through booster sessions or group therapy.

Summary of Integration into Therapy

The use of sleep onset anxiety interventions in the therapeutic process is voluminous and covers psychoeducational, practical, and interactional approaches of interacting with the client. Therapists can assist clients in keeping track of their symptoms and managing their anxiety more effectively with the aid of worry journals, guided audio sessions, sleep apps. Motivational interviewing and behavioral contracts are also significant components that should be used in enhancing participation, compliance, and ultimate success of clients. Together, they can be implemented to design a potent framework to combat sleep onset anxiety and assist the clients in documenting better sleep results(Staines et al., 2022).

6. Conclusion

Sleep onset anxiety is a severe barrier to the path to healthy sleep, and it can be of concern to people of different age and culture. This situation, as it is usually premised on a combination of cognitive, physiological, and neurobiological activity, disrupts the natural sleep initiation process and leads to insomnia and poor quality sleep. The knowledge about sleep onset anxiety processes is the essential component of developing successful interventions, and it is even suggested that a complex intervention strategy combining both physiological and cognitive components is the most useful in coping with the given issue(Harvey, 2022).

Cognitive-behavioral therapy, mindfulness-based therapy and relaxation programs have been shown to be effective in reducing anxiety, as well as improving sleep quality. The resources provided to clients include practical aids such as worry journals, guided audio sessions, and sleep apps to help them monitor and manage their symptoms outside the therapy sessions, to have an idea of their sleep-anxiety relationship and to keep them engaged in their treatment. Besides, certain therapeutic approaches (motivational interviewing and behavioral contracts) can help the success of the long-term view since they have the potential to increase the commitment and adherence of clients to the therapy.

The clinical importance of sleep onset anxiety cannot be overestimated since it is not limited to sleep disorders, but the outcomes on emotional, physical, and cognitive health are also possible. By incorporating evidence-based interventions into the treatment, a clinician will be able to assist the clients to overcome the fear of falling asleep, better the quality of their sleep, and well-being. With additional innovation such as the development of digital applications and biofeedback techniques, the future of anxiety during sleep onset treatment will depend on them, providing a client with the right and individual information on how he or she can improve his or her sleep and be available(Li et al., 2021)

Finally, the sleep onset anxiety is a complex issue, yet it is something to be dealt with on an individual level. It is advisable that in an effort to deal with adolescents, older clients, or clients with a differing cultural background, a therapist takes into account a broad scope of issues that might affect the process and experience of sleep onset anxiety. As research and clinical practice evolve further, there is still more to explore, and clinical practice can also contribute further to the creation of more personalized, integrative and more accessible interventions that can help people with the issue of sleep onset anxiety to resolve it and enjoy restful and restorative sleep(Roostaei et al., 2025).

References

- Ajibade, I., & Boateng, G. O. (2021). Predicting why people engage in pro-sustainable behaviors in Portland Oregon: The role of environmental self-identity, personal norm, and socio-demographics. *Journal of environmental management*, 289, 112538.
- Amicucci, G., Salfi, F., D'Atri, A., Viselli, L., & Ferrara, M. (2021). The differential impact of COVID-19 lockdown on sleep quality, insomnia, depression, stress, and anxiety among late adolescents and elderly in Italy. *Brain sciences*, 11(10), 1336.
- Bigalke, J. A., & Carter, J. R. (2022). Sympathetic neural control in humans with anxiety-related disorders. *Comprehensive Physiology*, 12(1), 3085-3117.
- Buckner, J. D. (2024). Motivational interviewing-based interventions with patients with comorbid anxiety and substance use disorders. *Current Opinion in Psychology*, 60, 101934.
- Chan, S. H.-W., Lui, D., Chan, H., Sum, K., Cheung, A., Yip, H., & Yu, C. H. (2022). Effects of mindfulness-based intervention programs on sleep among people with common mental disorders: A systematic review and meta-analysis. *World Journal of Psychiatry*, 12(4), 636.
- Chapoutot, M., Peter-Derex, L., Bastuji, H., Leslie, W., Schoendorff, B., Heinzer, R., Siclari, F., Nicolas, A., Lemoine, P., & Higgins, S. (2021). Cognitive behavioral therapy and acceptance and commitment therapy for the discontinuation of long-term benzodiazepine use in insomnia and anxiety disorders. *International Journal of Environmental Research and Public Health*, 18(19), 10222.
- De Clercq, D., Azeem, M. U., & Haq, I. U. (2021). But they promised! How psychological contracts influence the impact of felt violations on job-related anxiety and performance. *Personnel Review*, 50(2), 648-666.
- Derlic, D. (2022). From cognitive behavioral therapy to mindfulness-based interventions. *Journal of Correctional Health Care*, 28(6), 439-446.
- Dindar, M., Järvelä, S., Nguyen, A., Haataja, E., & Çini, A. (2022). Detecting shared physiological arousal events in collaborative problem solving. *Contemporary Educational Psychology*, 69, 102050.
- Dong, R., Wang, Y., Wei, C., Hou, X., Ju, K., Liang, Y., & Xi, J. (2023). Pursuing harmony and fulfilling responsibility: A qualitative study of the orientation to happiness (OTH) in Chinese culture. *Behavioral Sciences*, 13(11), 930.
- Dressle, R. J., & Riemann, D. (2023). Hyperarousal in insomnia disorder: Current evidence and potential mechanisms. *Journal of Sleep Research*, 32(6), e13928.
- Erten Uyumaz, B., Feijs, L., & Hu, J. (2021). A review of digital cognitive behavioral therapy for insomnia (CBT-I apps): are they designed for engagement? *International Journal of Environmental Research and Public Health*, 18(6), 2929.
- Ferreira, M. G., Mariano, L. I., de Rezende, J. V., Caramelli, P., & Kishita, N. (2022). Effects of group Acceptance and Commitment Therapy (ACT) on anxiety and depressive symptoms in adults: A meta-analysis. *Journal of affective disorders*, 309, 297-308.
- Gao, M., Roy, A., Deluty, A., Sharkey, K. M., Hoge, E. A., Liu, T., & Brewer, J. A. (2022). Targeting anxiety to improve sleep disturbance: a randomized clinical trial of app-based mindfulness training. *Biopsychosocial Science and Medicine*, 84(5), 632-642.
- Gkintoni, E., Vassilopoulos, S. P., Nikolaou, G., & Boutsinas, B. (2025). Digital and AI-enhanced cognitive behavioral therapy for insomnia: neurocognitive mechanisms and clinical outcomes. *Journal of Clinical Medicine*, 14(7), 2265.

- Grant, J. B., Batterham, P. J., McCallum, S. M., Werner-Seidler, A., & Caele, A. L. (2023). Specific anxiety and depression symptoms are risk factors for the onset of suicidal ideation and suicide attempts in youth. *Journal of affective disorders*, 327, 299-305.
- Hara, K. M., Westra, H. A., Coyne, A. E., Di Bartolomeo, A. A., Constantino, M. J., & Antony, M. M. (2022). Therapist affiliation and hostility in cognitive-behavioral therapy with and without motivational interviewing for severe generalized anxiety disorder. *Psychotherapy Research*, 32(5), 598-610.
- Harvey, A. G. (2022). Treating sleep and circadian problems to promote mental health: perspectives on comorbidity, implementation science and behavior change. *Sleep*, 45(4), zsac026.
- Hertenstein, E., Trinca, E., Wunderlin, M., Schneider, C. L., Zuest, M. A., Feher, K. D., Su, T., Straten, A. v., Berger, T., & Baglioni, C. (2022). Cognitive behavioral therapy for insomnia in patients with mental disorders and comorbid insomnia: A systematic review and meta-analysis. *Sleep medicine reviews*, 62, 101597.
- Howarth, N. E., & Miller, M. A. (2024). Sleep, sleep disorders, and mental health: a narrative review. *Heart and Mind*, 8(3), 146-158.
- Howell, M., Avidan, A. Y., Foldvary-Schaefer, N., Malkani, R. G., During, E. H., Roland, J. P., McCarter, S. J., Zak, R. S., Carandang, G., & Kazmi, U. (2023). Management of REM sleep behavior disorder: an American Academy of Sleep Medicine clinical practice guideline. *Journal of Clinical Sleep Medicine*, 19(4), 759-768.
- Jamieson, D., Shan, Z., Lagopoulos, J., & Hermens, D. F. (2021). The role of adolescent sleep quality in the development of anxiety disorders: A neurobiologically-informed model. *Sleep medicine reviews*, 59, 101450.
- Jansson-Fröjmark, M., Alfnsson, S., Bohman, B., Rozental, A., & Norell-Clarke, A. (2022). Paradoxical intention for insomnia: A systematic review and meta-analysis. *Journal of Sleep Research*, 31(2), e13464.
- Juruena, M. F., Bourne, M., Young, A. H., & Cleare, A. J. (2021). Hypothalamic-pituitary-adrenal axis dysfunction by early life stress. *Neuroscience letters*, 759, 136037.
- Karaca, Z., Grossman, A., & Kelestimur, F. (2021). Investigation of the Hypothalamo-pituitary-adrenal (HPA) axis: a contemporary synthesis. *Reviews in Endocrine and Metabolic disorders*, 22(2), 179-204.
- Lancel, M., van Marle, H. J., Van Veen, M. M., & van Schagen, A. M. (2021). Disturbed sleep in PTSD: thinking beyond nightmares. *Frontiers in psychiatry*, 12, 767760.
- Leonardi, L. (2025). *The effect of therapeutic music playlists as a sleep aid on perceived sleep quality for college students: a pilot research protocol*
- Leung, P., Li, S. H., & Graham, B. M. (2022). The relationship between repetitive negative thinking, sleep disturbance, and subjective fatigue in women with Generalized Anxiety Disorder. *British Journal of Clinical Psychology*, 61(3), 666-679.
- Li, J., Cai, Z., Li, X., Du, R., Shi, Z., Hua, Q., Zhang, M., Zhu, C., Zhang, L., & Zhan, X. (2021). Mindfulness-based therapy versus cognitive behavioral therapy for people with anxiety symptoms: a systematic review and meta-analysis of random controlled trials. *Annals of palliative medicine*, 10(7), 7596612-7597612.
- Locsin, B., & Salvador, M. (2021). Excess Anxiety's Effect on the Occurrence of Insomnia in Adolescents in Late Adolescence. *Journal of Asian Multicultural Research for Medical and Health Science Study*, 2(3), 52-59.

- López-Gil, J. F., Cavero-Redondo, I., Tárraga López, P. J., Jiménez-López, E., González, A. D., Sequí-Domínguez, I., & Mesas, A. E. (2022). Anxiety-induced sleep disturbance and associated lifestyle behaviors according to sex in Argentine adolescents. *Frontiers in behavioral neuroscience*, 16, 860241.
- Maraqa, B. N., Nazzal, Z., Hamshari, S., Alutt, B., Rishmawi, E., & Qawasmeh, A. (2024). Prevalence of depression and anxiety among elderly primary care patients in Palestine. *Frontiers in psychiatry*, 14, 1291829.
- Ogundele, M. O., & Yemula, C. (2022). Management of sleep disorders among children and adolescents with neurodevelopmental disorders: A practical guide for clinicians. *World journal of clinical pediatrics*, 11(3), 239.
- Petersen, J. M. (2025). Understanding acceptance and commitment therapy for youth. *Psychiatric Clinics*.
- Roberts, S., & Ulmer, C. S. (2024). Barriers in access to and delivery of behavioral sleep treatments. *Current Sleep Medicine Reports*, 10(1), 70-80.
- Robinson, T., Condell, J., Ramsey, E., & Leavey, G. (2023). Self-management of subclinical common mental health disorders (anxiety, depression and sleep disorders) using wearable devices. *International Journal of Environmental Research and Public Health*, 20(3), 2636.
- Roostaei, G., Khoshnam Rad, N., Rahimi, B., Asgari, A., Mosalanejad, S., Kazemizadeh, H., Edalatifard, M., & Abtahi, H. (2025). Optimizing Sleep Disorder Management in Hospitalized Patients: Practical Approach for Healthcare Providers. *Brain and Behavior*, 15(2), e70282.
- Saiu, S., & Grosso, E. (2022). Controlled audio-visual stimulation for anxiety reduction. *Computer Methods and Programs in Biomedicine*, 223, 106898.
- Serra-Blasco, M., Radua, J., Soriano-Mas, C., Gómez-Benlloch, A., Porta-Casteràs, D., Carulla-Roig, M., Albajes-Eizaguirre, A., Arnone, D., Klausner, P., & Canales-Rodríguez, E. J. (2021). Structural brain correlates in major depression, anxiety disorders and post-traumatic stress disorder: A voxel-based morphometry meta-analysis. *Neuroscience & Biobehavioral Reviews*, 129, 269-281.
- Staines, A. C., Broomfield, N., Pass, L., Orchard, F., & Bridges, J. (2022). Do non-pharmacological sleep interventions affect anxiety symptoms? A meta-analysis. *Journal of Sleep Research*, 31(1), e13451.
- Toussaint, L., Nguyen, Q. A., Roettger, C., Dixon, K., Offenbächer, M., Kohls, N., Hirsch, J., & Sirois, F. (2021). Effectiveness of progressive muscle relaxation, deep breathing, and guided imagery in promoting psychological and physiological states of relaxation. *Evidence-Based Complementary and Alternative Medicine*, 2021(1), 5924040.
- Wang, W. K., Chen, B., Yang, J., Jeong, H., Hershkovich, L., Islam, S. M. M., Liu, M., Roghanizad, A. R., Shandhi, M. M. H., & Spector, A. R. (2025). WatchSleepNet: A Novel Model and Pretraining Approach for Advancing Sleep Staging with Smartwatches. *Proceedings of Machine Learning Research*, 287, 1-20.
- Wong, S. M., Chen, E. Y., Lee, M. C., Suen, Y., & Hui, C. L. (2023). Rumination as a Transdiagnostic phenomenon in the 21st century: the flow model of rumination. *Brain sciences*, 13(7), 1041.
- Yuan, M., Liu, B., Yang, B., Dang, W., Xie, H., Lui, S., Qiu, C., Zhu, H., & Zhang, W. (2023). Dysfunction of default mode network characterizes generalized anxiety disorder relative to social anxiety disorder and post-traumatic stress disorder. *Journal of affective disorders*, 334, 35-42.

Zhou, F., Li, S., & Xu, H. (2022). Insomnia, sleep duration, and risk of anxiety: A two-sample Mendelian randomization study. *Journal of psychiatric research*, 155, 219-225.