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ZENIFY: A HOLISTIC APPROACH TO MITIGATING ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) SYMPTOMS

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ABSTRACT

People with Attention Deficit Hyperactivity Disorder (ADHD) face many obstacles in every aspect of their lives. In addition to examining the fundamental causes of ADHD, this research paper offers a comprehensive mobile application created to deal with these issues. Although there isn't a cure for ADHD, people with the condition can live much better thanks to management techniques.

This application provides a comprehensive approach that assists people in managing their daily lives by addressing the causes and difficulties associated with ADHD, encouraging self-improvement, and building a strong support system. It is a big step in a desirable direction toward enhancing the overall well-being of people with ADHD and reducing the influence of the condition on day-to-day functioning.

Keywords: Attention Deficit Hyperactivity Disorder (ADHD), Digital Solution, Mental Health

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1. INTRODUCTION

ADHD, or attention deficit hyperactivity disorder, is a prevalent neurodevelopmental disease in children. It is typically diagnosed in childhood and might extend into adulthood. Children with ADHD may struggle to focus, manage impulsive behaviors (doing without considering the consequences), or exhibit excessive activity.

Co-occurring disorders such as disruptive mood, anxiety, and substance addiction are frequently linked to ADHD. Clinical diagnosis of ADHD is made through an assessment of symptoms and functional impairment. Data from neuropsychology, neurochemistry, neuroimaging, and genetics all support the disorder's biological basis. When diagnosing and treating ADHD, every aspect of the patient's life must be taken into account. Individual, family, and educational assistance are all part of multidisciplinary treatment. ADHD and associated conditions benefit from both medication and psychotherapy

alone. Throughout the lifespan, pharmacotherapy—which includes stimulants, noradrenergic drugs, alpha agonists, and antidepressants—is essential to the long-term management of ADHD.

Changes in energy levels and inattention are common. This occurs more frequently and to a greater extent for an individual with ADHD than for a person without the disorder. It may significantly impact their home life, relationships, careers, and schooling.

ADHD symptoms can appear as early as between the ages of 3 and 6 and can continue through adolescence and adulthood. Symptoms of ADHD can be mistaken for emotional or disciplinary problems or missed entirely in children who primarily have symptoms of inattention, leading to a delay in diagnosis. Adults with undiagnosed ADHD may have a history of poor academic performance, problems at work, or difficult or failed relationships.

There's a significant chance of coexisting mental health issues like conduct disorder, mood and anxiety disorders, oppositional defiant disorder (ODD), substance abuse disorders, and smoking disorders. The social and societal consequences of untreated ADHD are significant across the lifespan and include challenges with personal relationships, criminality, motor vehicle safety, and underachievement in school and the workplace.

An estimated 4% to 12% of school-age children worldwide suffer from ADHD, and statistics from surveys and epidemiological studies indicate that 4–5% of adults and college-aged students also suffer from the disorder. The identification and diagnosis of ADHD in adults has grown in recent years, but treatment for adults with the disorder still lags far behind that for children. Despite the fact that boys are diagnosed with ADHD at a higher rate than girls when they are younger, equal numbers of men and women with ADHD are seeking diagnosis and treatment as adults [10][11].

1.1 HOW DOES ADHD AFFECT INDIVIDUALS?

There are many different behaviors linked to ADHD. Among the more typical ones are:

- Finding it difficult to concentrate or focus;
- Forgetting to finish chores;
- Being easily distracted;
- Finding it difficult to sit still;
- Interrupting people when they are speaking.

Signs and symptoms can be specific to different aspects of ADHD, such as hyperactivity, impulsivity, or difficulty focusing[10] [11].

1.2 What causes ADHD?

To improve treatment and lower the likelihood that someone would get ADHD, researchers are looking into the cause(s) and risk factors of the disorder. Although the exact cause(s) and risk factors of ADHD are unknown, recent studies have indicated a significant hereditary component. Recent research connects genetic variables to ADHD.

Apart from heredity, researchers are examining additional potential causes and risk factors such as:

- Brain damage
- Early childhood exposure to environmental hazards (like lead)
- Alcohol and tobacco consumption during pregnancy
- Early delivery
- Low birth weight [10][11]

1.3 TYPES OF ADHD

1.3.1 MOSTLY INATTENTIVE

As the name implies, this particular kind of ADHD is characterized by severe difficulties focusing, finishing tasks, and adhering to directions. [10][11]

1.3.2 MOSTLY IMPULSIVE AND HYPERACTIVE TYPE

The main behavioral traits of those with this kind of ADHD are hyperactivity and impulsivity. This may involve:

- Fidgeting
- interrupting others during their speech
- being unable to wait one's turn

1.3.3 COMBINED HYPERACTIVE-IMPULSIVE AND INATTENTIVE TYPE

The most prevalent kind of ADHD is this one. Individuals with this mixed form of ADHD exhibit signs of hyperactivity and inattention. These include being impulsive, having trouble paying attention, and having higher-than-normal amounts of energy and activity.

2. RELATED WORK

2.1 LITERATURE REVIEW

In this comprehensive review Venkata Shiva Reddy B., et al. [18] examined the present condition of mental health in India, addressing the prevailing challenges, and the existing healthcare system's limitations. They shed light on the cultural stigmas surrounding mental illness in the country, the scarcity of resources, and the need for effective interventions and policy reforms to meet the population's mental health needs.

Ashok Malla, et al. [13] critically analyzed the notion of mental illness being comparable to physical illnesses. The authors explored the implications of this comparison on patient care, including diagnosis, treatment, and social perception. They emphasized the importance of eliminating stigma and promoting a holistic approach to mental health care that considers both the medical and psychosocial aspects of mental illnesses.

Focused on university students in Northern Ireland, Margaret McLafferty, et al. [14] investigated mental health and behavioral issues, along with their treatment-seeking patterns. They highlight the unique challenges faced by students transitioning to university life and underscore the importance of providing accessible mental health support services on campuses.

John A. Naslund et al. [15] explored the connection between social media and mental health, examining both the potential benefits and risks. They mentioned the opportunities for leveraging social media in mental health research and interventions while also addressing the potential negative impacts on mental well-being and privacy concerns.

Researchers Nisarat Auttama et al. [2] investigated the variables affecting resilience, psychological self-care, self-esteem, and mental health with a focus on university students in Northern Thailand. The authors highlighted the importance of promoting positive psychological well-being among students and identifying potential strategies for enhancing their mental health.

Janice Connell1, John Brazier, Alicia O'Cathain, et al. [4] Paisley synthesized qualitative studies to comprehend the experiences of those with mental health issues in terms of their quality of life. They provided valuable insights into the psychosocial impact of mental illness, highlighting the importance of considering the quality of life in mental health interventions and support systems.

Prachi Bhavesh Sanghvi and Seema Mehrotra [19] looked at the variables influencing the behavior of seeking mental health treatment with an emphasis on the Indian context. In addition to discussing the importance of traditional healing methods, mental health services' accessibility, and cultural barriers, they also identified new ideas that could encourage more Indians to seek help.

The use of technology in providing children and youth with mental health services was investigated by Katherine M. Boydell, et al [3]. The authors assessed the various technological interventions and their effectiveness in addressing mental health issues in younger populations, highlighting the potential for widening access to care through digital platforms.

Vikram Patel and Christopher G. Fairburn [7] investigated how digital technology affects psychological treatments and their availability. In addition to talking about the difficulties and moral issues surrounding digital mental health services, they underlined the potential of these technologies to improve the scalability and accessibility of mental health treatment.

Creating a conceptual framework for the working alliance in a blended low-intensity cognitive-behavioral therapy intervention for depression was the main goal of Asmae Doukani et al [5]. The authors discussed the implications of their observations on the therapeutic relationship in digital mental health interventions for primary mental health care.

During the COVID-19 pandemic, Sara J. Sagui-Henson et. al. [17] evaluated the efficacy of digital mental health services in real-world scenarios. They looked at how digital tools can help people in need of mental health support during emergencies and outlined the lessons that should be applied in the future.

The evolving field of digital mental health interventions and their implications for practice and research were examined by E. M. Seabrook and M. Nedeljkovic [6]. They talked about the possible advantages, difficulties, and moral issues surrounding the developing field of digital mental health.

Adrian Aguilera [1] discusses the opportunities and challenges in integrating digital technology into mental health interventions. He emphasized the potential benefits of using technology for personalized care and improved access to mental health services, while also acknowledging the need to address issues like data security and equity.

Benedetta Spadaro, et al. [21] focus on creating a digital ecosystem for mental health and the opportunities and difficulties facing innovators in mobile health. They addressed the potential for mobile technology to revolutionize mental health care delivery, while also examining the regulatory, privacy, and interoperability challenges that need to be addressed for successful implementation.

Pooja Patnaik Kuppili, et al. [16] highlighted recent advancements in technology-based interventions for ADHD. They covered various approaches like mobile applications, computer programs, and wearable devices designed to aid individuals with ADHD in managing their symptoms and improving their overall well-being. They gave a thorough review of the state of the field today and highlighted the possible advantages and difficulties of incorporating technology into the treatment of ADHD.

Cynthia Watters, et. al. [22] looked into how successful online therapies are for ADHD. By analyzing a collection of relevant studies, the authors offered insights into the overall impact of web-based interventions on ADHD symptomatology and functional outcomes. The results provided evidence for the potential of online platforms in delivering supportive treatments for individuals with ADHD, highlighting their convenience and accessibility.

Focused on the educational aspect, Scott H. Kollins, et al. [12] addressed the challenges of managing ADHD in the context of digital distractions faced by students. They explained how technology can both aid and hinder academic performance and attention regulation for students with ADHD. The authors suggested strategies and tools to assist educators, parents, and students in navigating the digital landscape and optimizing the learning environment.

Juliet E. and Hart Barnett [9] assessed the effectiveness of a specific digital therapeutic used in conjunction with traditional medication for pediatric ADHD treatment. She evaluated the therapeutic impact on symptom management, medication adherence, and overall functional outcomes. The findings contributed valuable insights into the potential benefits of incorporating digital therapeutics into standard ADHD treatment protocols.

Focusing on ADHD's long-term effects, Choon Guan Lim, et al. [8] explored the experiences and challenges faced by individuals with ADHD in adulthood. They delved into the emotional, social, and occupational aspects of living with ADHD beyond childhood and adolescence. They shed light on the need for continued support and tailored interventions for adults with ADHD to enhance their quality of life.

Songting Shou, Shengyao Xiu, Yuanliang Li, et al. [20] compiled existing research on ADHD in India, encompassing prevalence, diagnostic practices, treatment approaches, and cultural factors influencing ADHD management. By synthesizing various studies, the authors contributed to the understanding of ADHD's manifestation and treatment in the Indian context, highlighting the need for culturally sensitive interventions and research initiatives.

Table 1. Literature review

Sr. No.	Paper Title	Methodology	Merits	Remarks
1.	Mental Health Issues and Challenges in India: A Review [18]	Referred Research Papers Conducted Studies Community surveys	Going through research papers gives deeper insights into the topics. Surveys help us understand and cover the audience on a large scale.	Stigma related to mental health, delayed treatment, lack of awareness, and lack of ease of treatment availability are some of the challenges faced in India.
2.	"Mental illness is like any other medical illness": a critical examination of the statement and its impact on patient care and society [13]	Comparative Study Studies Surveys	Comparison between mental health and other diseases to understand the correlation between them. Studies helped	Mental health is just like any other illness. It should be given just as much importance as other illnesses. A proper place is needed to understand, explain, and treat mental health disorders.

			to know the main causes.	
3.	Mental health, behavioural problems and treatment seeking among students commencing university in Northern Ireland [14]	Surveys WHO conducted research Screening tests for various disorders Data Analytics	Screening tests for each disorder gave more accurate information about that disorder. Data analytics is one of the ways of drawing accurate conclusions.	Many students have mental health and behavioral problems while at university which can impact their wellbeing and may result in elevated attrition rates. Improved screening for disorders and early diagnosis are important.
4.	Social Media and Mental Health: Benefits, Risks, and Opportunities for Research and Practice [15]	Data Analytics Surveys Research	The research helped gain critical information on how social media affects and plays a role in mental health.	Many individuals use social media to share their lived experiences with mental illness, to seek support from others, and to search for information about treatment recommendations, accessing mental health services, and coping with symptoms.
5.	Factors Associated with Self-Esteem, Resilience, Mental Health, and Psychological Self-Care Among University Students in Northern Thailand [2]	Survey	Surveys were helpful in extracting specific data from university students in the particular case.	The relationship with friends and family is a major factor associated with self-esteem, resilience, mental health, and psychological self-care among university students. Access to mental health services for university students and social support by other students and their family members should be promoted.
6.	Quality of life of people with mental health problems: a synthesis of qualitative research [4]	Primary Research Data Analytics Research Papers	Research papers were analyzed and data analytics was used to better understand the quality of life of people with mental health problems.	Focus is given more on physical health than mental health. A poor quality of life, often experienced by those with severe mental health difficulties, was characterized by feelings of distress, lack of control, choice, and autonomy; low self-esteem and confidence; a sense of not being part of society; diminished activity; and a sense of hopelessness and demoralization.
7.	Help-seeking for mental health concerns: review of Indian research and emergent insights [19]	Research Studies	Research studies proved to be helpful in recognizing the points in seeking help in mental health and how the treatment is followed up.	A huge gap between help-seeking in mental health problems and treatment. Digital interference has become one of the needs in this sector.
8.	Using Technology to Deliver Mental Health Services to	Research studies	Research studies played a major role in recognizing the scope of digital	The use of technologies such as videoconferencing and the Internet will play a major role in

	Children and Youth: A Scoping Review		technology in the mental health domain.	the delivery of mental health programs.
9.	The impact of digital technology on psychological treatments and their dissemination [7]	Studies	Studies done on existing technological treatments help us understand where they are lacking and areas of improvement.	Digital interventions will become more common but making them more efficient and accurate still remains a challenge.
10.	Toward a conceptual framework of the working alliance in a blended low-intensity cognitive behavioral therapy intervention for depression in primary mental health care: A qualitative study [5]	Primary research Screening Tests	Screening tests were the most helpful in creating a conceptual framework for various mental health problems.	This is the first study to offer a conceptual framework of working alliance for b-CBT for various mental health problems and how they can be addressed through computerized delivery.
11.	Real world effectiveness of digital mental health services during the COVID-19 pandemic [17]	Data Analytics	Data analytics helped in drawing conclusions that digital technologies can be one of the mediums that can be used to bring improvement in mental disorders.	Digital mental health services showed a significant improvement among the participants. It can show more growth in future developments.
12.	The evolving landscape of digital mental health: implications for research and practice [6]	Research Studies Clinical research	Clinical research gave the result that digital technology is the future of mental health solutions.	Digital technology can significantly help people with mental health problems.
13.	Digital Technology and Mental Health Interventions: Opportunities And Challenges [1]	-	-	The use of digital technology has gained a tremendous boom in the mental health domain. With continuous improvement, it can be of huge help.
14.	Building the Digital Mental Health Ecosystem: Opportunities and Challenges for Mobile Health Innovators [21]	-	-	Digital technologies can help with early identification, management, and treatment while empowering the patients.

15.	ADHD research in India: A narrative review [16]	Research studies	Going through various papers helped to understand the current situation of ADHD in India.	ADHD research in India is rising but still faces limitations like small sample size, variability in assessment tools, lack of control group/randomization, and lack of comparison with non-pharmacological interventions.
16.	The impact of attention deficit hyperactivity disorder (ADHD) in adulthood: a qualitative study [22]	Primary Research	Interviews were extremely useful in understanding the problems of people with ADHD.	This paper highlighted the problems people with ADHD undergo. It also helped in becoming aware of the stigma related to ADHD.
17.	Effectiveness of a digital therapeutic as adjunct to treatment with medication in pediatric ADHD [12]	Screening test	Screening tests evaluate the digital technology's impact on ADHD symptom management and help.	Digital technology can be of great help in managing and helping ADHD patients.
18.	Helping Students with ADHD In The Age Of Digital Distraction [9]	Studies	Studies done on existing digital interventions helped recognize advantages and disadvantages.	Digital mediums can be both helpful and disadvantageous for ADHD patients so supervision becomes important.
19.	Updates in technology-based interventions for attention deficit hyperactivity disorder [8]	Studies	Studies have examined the types of therapy that are helpful for patients.	Development towards ADHD is in the right direction but with more studies it can give more solid solutions.
20.	Efficacy of Online Intervention for ADHD: A Meta-Analysis and Systematic Review [12]	Research studies	Studies helped in identifying the effectiveness of online interventions.	Online interventions are effective, but more research is needed to improve symptoms.

2.2.PRIMARY RESEARCH

Six people, including psychologists and ADHD patients, participated in interviews. The interviews with psychologists focused on understanding clinical perspectives on common challenges faced by ADHD patients, while conversations with patients offered firsthand insights into the day-to-day struggles of managing attention, focus, and organization. Desk research, which involved reviewing scientific literature and existing resources to better understand ADHD symptoms, causes, and available treatments, complemented this qualitative data gathering.

We developed a detailed questionnaire that included questions about the challenges individuals with ADHD face in their personal and professional lives. It also explored the effectiveness of current coping strategies and treatments, such as behavioral therapy and lifestyle adjustments. Moreover, participants were asked about their needs and preferences for tools or features that could be incorporated into a digital app specifically designed to help manage ADHD symptoms. This combination of interviews, desk research, and the questionnaire provided a comprehensive foundation for designing the app to effectively meet the needs of ADHD individuals.

2.2.1 RESEARCH QUESTIONS

1. Are you familiar with ADHD (Attention Deficit Hyperactivity Disorder)?
2. How did you learn about ADHD, and what do you think it means?
3. Have you or anyone you know ever experienced difficulties with attention, focus, or impulse control?
4. What challenges do you think individuals with ADHD might face in their daily lives?
5. What are some challenges you face in managing your time, staying focused, or organizing your tasks?
6. How do these challenges affect your daily productivity and overall well-being?
7. Have you received treatment for ADHD? If so, what has been your experience with the diagnostic process and treatment options?
8. What strategies do you use to manage ADHD symptoms and improve focus and attention?
9. Are there any specific activities or practices that help you improve your mental well-being?
10. How do you think a digital tool could assist you in managing attention, time, or organization?
11. Are there any specific tasks or situations where you think an app could be helpful for individuals with attention and focus challenges?
12. How would you prefer to receive support and motivation while using the app?
13. What type of information do you think would be beneficial for users who may not be familiar with ADHD

2.2.2 RESEARCH INSIGHT

1. Users struggle with organization and management and maintaining attention.
2. Impulse control: making hasty decisions, speaking without thinking.
3. Forgetfulness: forgetting appointments and ignoring important tasks.
4. Medication management
5. Anxiety and depression symptoms

2.2.3 USER EXPECTATIONS

1. Getting reminders, planning tasks, and tracking progress.
2. Setting timers and breaking tasks into steps.
3. Mindfulness exercises
4. Community for sharing tips and reaching out.
5. Information, awareness, and possible solutions for ADHD.

2.3 COMPARATIVE ANALYSIS

We have compared various available digital solutions to deal with ADHD. This comparison helped to realize the work done and also to identify the opportunities available that are not yet solved.

Table 2. Comparative Analysis of different ADHD apps that are available.

Features	Routine Flow: Routine & ADHD	ADHD Lifehacks for Adults	My ADHD	Univi ADHD Tools, Moo Tracker
Routine Planning	Yes	No	No	No
Task Management	Yes	No	No	No
Time Management	Yes	No	No	No
Symptom Tracking	No	No	No	Yes
ADHD Tips & Strategies	No	Yes	Yes	No
Mindfulness	No	No	No	No
Community Engagement	No	No	No	Yes
ADHD Information	No	No	No	No

3. UNDERSTANDING AND DEFINING PROBLEMS

3.1 RESEARCH GAP

- User Engagement and Adherence: Research should explore the design features, interface usability, gamification elements, and personalized content delivery that enhance user motivation and sustained usage.

- User Perspectives and Needs: Less information is available about the needs, preferences, and experiences of adults with ADHD when it comes to using apps to support executive function. There should be more qualitative research methods that can help uncover user perspectives, including perceived benefits, barriers, and suggestions for app improvement. These insights can guide the development of more user-centered and impactful interventions.

3.2 OBJECTIVES

1. To streamline daily responsibilities, enhance organization, and reduce the overwhelm experienced by individuals with ADHD.
2. To create a safe space for users to connect, share experiences, and provide mutual support.
3. To offer tools such as exercises, yoga, guided meditation, affirmations, and an emotion tracker to improve focus, reduce stress, and promote emotional balance.
4. To enable users to track and reflect on their thoughts and emotions, fostering self-awareness and emotional regulation.

3.3 SCOPE

The scope of the paper is to offer a comprehensive solution for ADHD management, catering to a wide range of needs and challenges faced by individuals with ADHD, encompassed in a user-friendly and versatile platform, accessible via mobile devices, that integrates various features.

3.4 PROBLEM STATEMENT

Individuals who suffer from attention deficit hyperactivity disorder (ADHD) find it difficult to control their impulses and focus. They face challenges in organizing and managing tasks. Forgetfulness and neglecting tasks/appointments are also a few of the major challenges they face. There is a need for a unified tool that combines task management, mindfulness tools, community support, and educational resources addressing the multifaceted requirements of people with ADHD to enhance their general health and quality of life.

4. METHODOLOGY

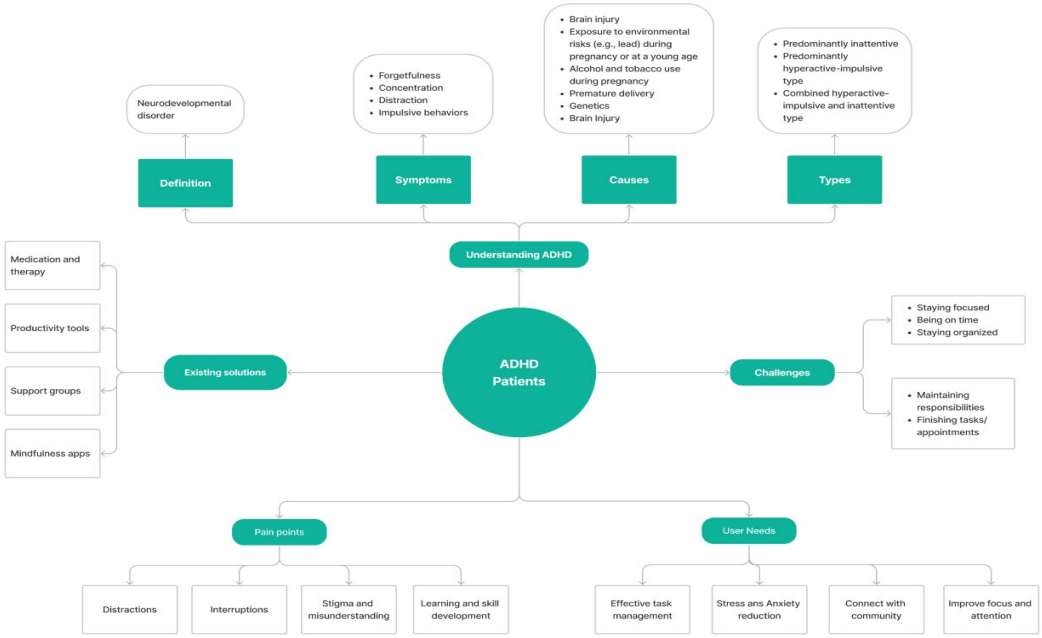


Figure 1. Mind Map of ADHD

We employed methods like mind mapping, flow model, and cultural model to gain a comprehensive understanding of its causes, symptoms, and potential solutions.

4.1 MIND MAP

A mind map visually organizes and connects various aspects of ADHD, providing an overview of its different dimensions.

4.2 FLOW MODEL

A flow model visually represents the user journey and interactions related to ADHD. It captures the key stages, actions, and touchpoints that individuals with ADHD and their caregivers go through.

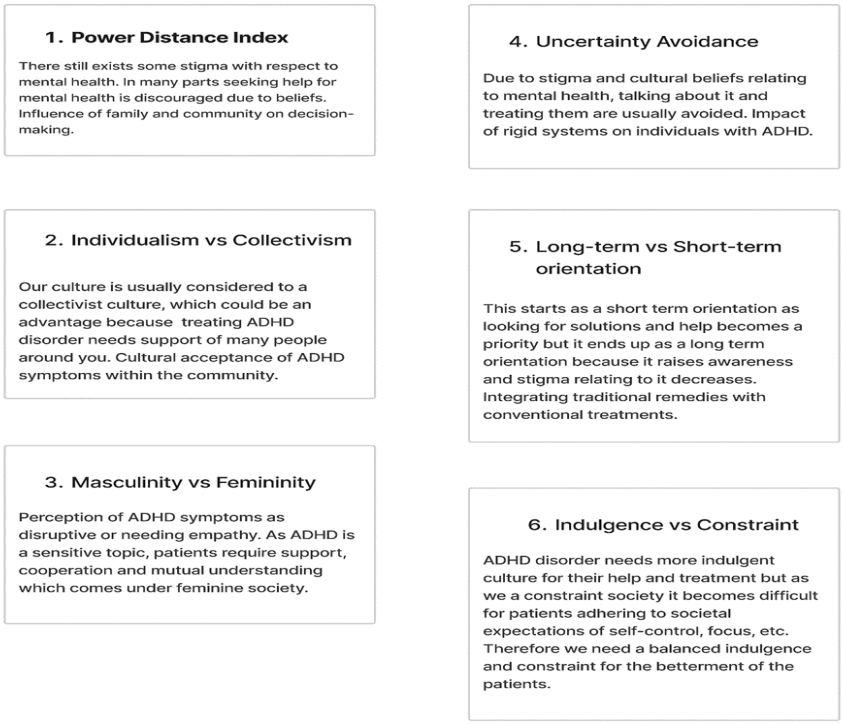


Figure 2. Flow model of ADHD individuals

4.3 CULTURAL MODEL

In the Indian context, a cultural model takes into account the influence of cultural dimensions on ADHD.

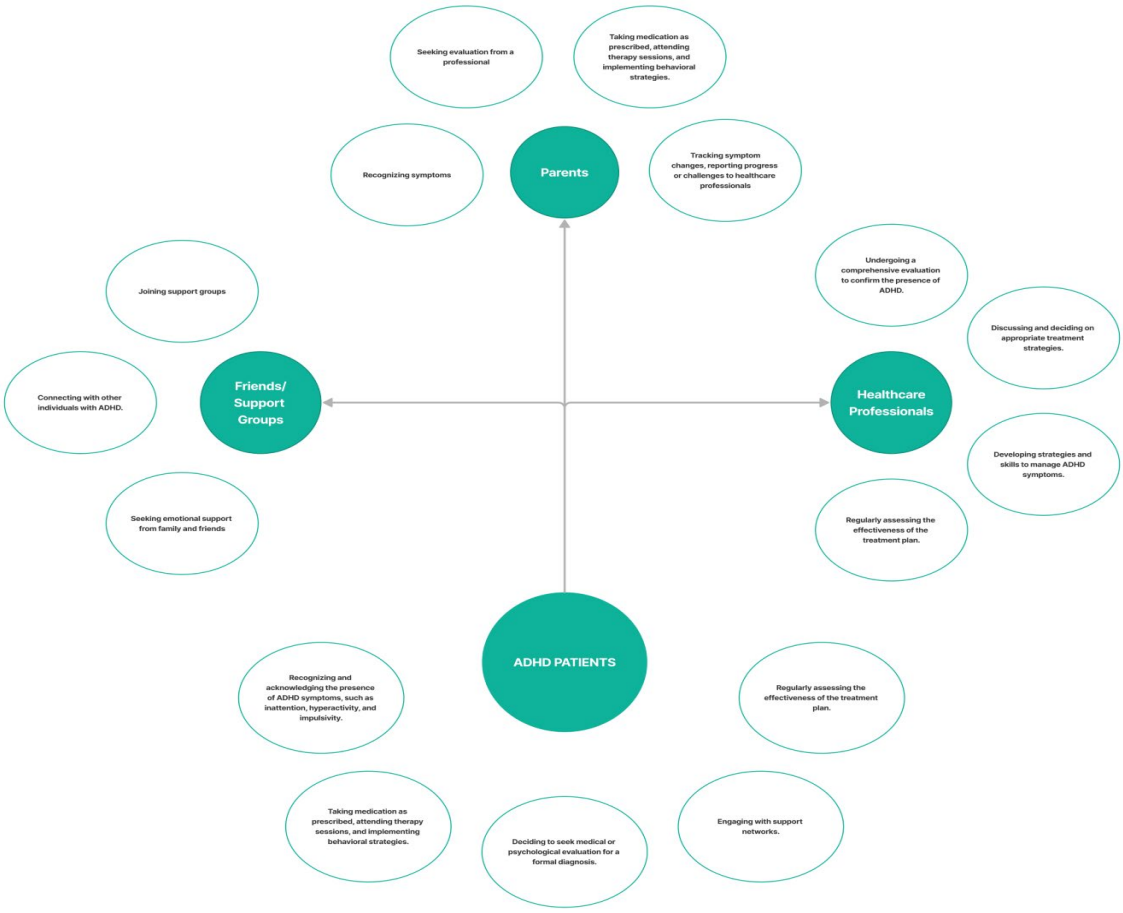


Figure 3. Hofstede's Cultural Model

5. PROPOSED SOLUTION

This research addresses the need for a holistic mobile application designed to support individuals with ADHD in their daily lives. By understanding the challenges and causes of ADHD, we propose an innovative solution. This application aims to empower users to enhance their focus, manage impulsivity, build a supportive network, and ultimately improve their overall quality of life.

5.1 COLOR

Colors, patterns, and even temperature can cause overstimulation in people with ADHD. Utilizing blue, green, and brown colors that are soft, neutral, and calming to make them feel more at ease.

Figure 4. Color Scheme

5.2 TYPOGRAPHY

Sans serif is undoubtedly the kind of associate that has been tested and proven effective over a considerable period of time. not by theory, but by practice and the best browser fonts that are currently the default.

Font style alone does not determine how readable something is. It is in this instance that size is crucial, if it is too small, the letters will muddle and blur together to form an unclear ink stain. If it is too big, you become overwhelmed and you lose the overall thread. It would need to be between 12 and 16 points to be readable while maintaining balance.

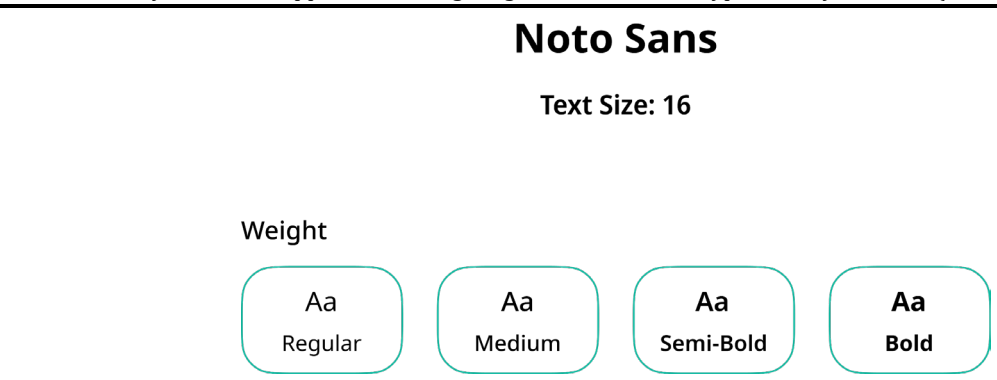
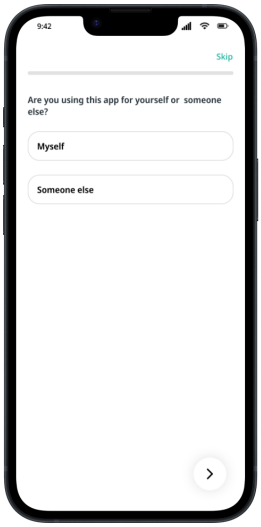


Figure 5. Typography for ADHD App UI

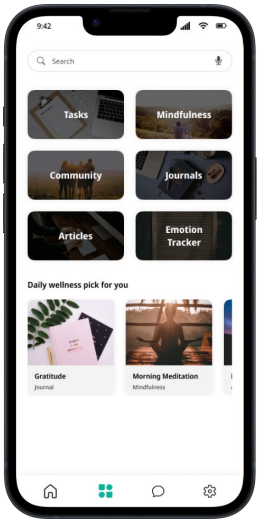
6. RESULT

ZENIFY: ADHD MANAGEMENT APPLICATION



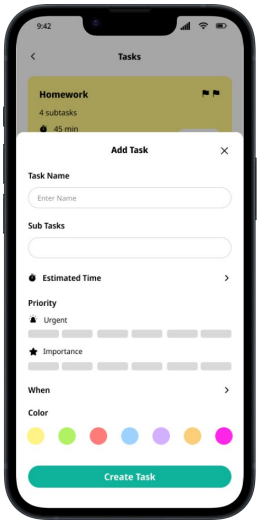
Onboarding

Ask users about general questions about ADHD and their preferences.



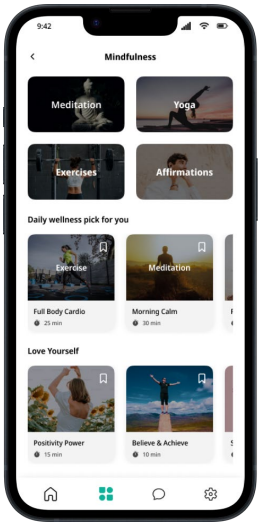
Menu Bar

Users can view current tasks, mindfulness features, recent articles on the homepage. Explore has various categories for the user to choose from.



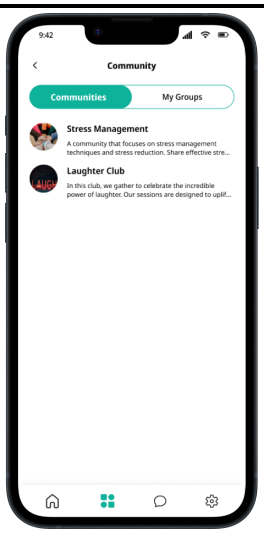
Task

Adding and editing tasks according to the users preferences and start a task.



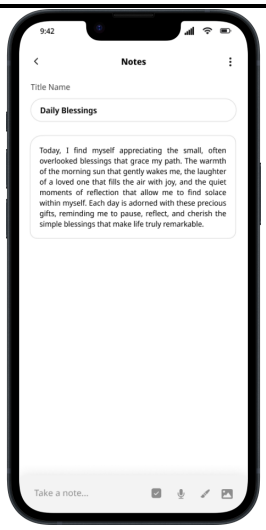
Mindfulness

View and choose from various features like meditations, yoga, exercises and affirmations for physical and emotional well-being.



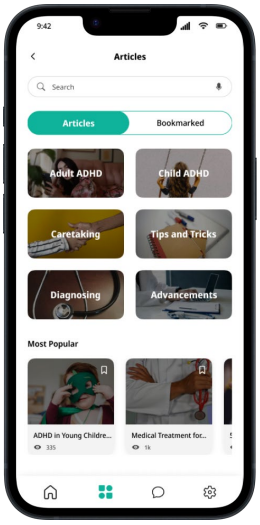
Communities

Join different groups of your interests and connect.



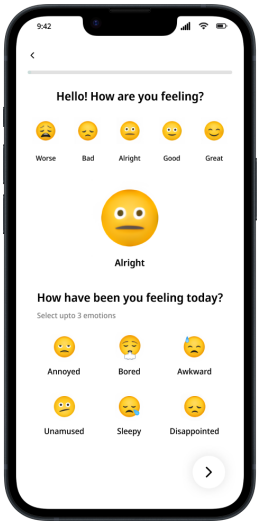
Journals

Write journals that helps in self-reflection, recognizing patterns, and improving emotional regulation.



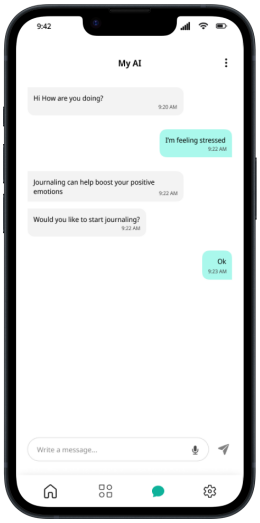
Articles

Read articles and blogs related to ADHD, offering valuable insights, tips, and strategies for managing the condition.



Emotion Tracker

Help users identify emotional triggers, patterns, and trends, allowing for better self-awareness.



AI Chat

Serves as a virtual companion and resource for users seeking immediate assistance.

Figure 6. Screens of the features of the ADHD management application

7. USABILITY TESTING

8 users were recruited for the usability testing for the following tasks. We performed User Task Analysis and System Usability Scale (SUS).

7.1 TASK ANALYSIS

We have performed a task analysis to validate and check the proposed solution. The formula used for checking the average time taken by the users for each task is as follows.

$$Task\ Time\ =\ Time(user1)\ +\ Time(user2) + \ldots + Time(UserN)$$

$$Total\ number\ of\ users$$

Table 3. Task Analysis

Task Description	No. of users that performed the task	No. of users that completed the task	Average Time required to complete the task
Start a Task	8	8	19.8s
Find 'Daily Blessings' journal to write	8	8	22.9s
Read an Article	8	8	21.9s
Track your emotion	8	8	44.9s

7.2 SYSTEM USABILITY SCALE (SUS)

The System Usability Scale (SUS), introduced by John Brooke in 1986, is a widely used tool to evaluate the usability of a system through a quick 10-item questionnaire, providing a reliable measure of user satisfaction. A total of 6 participants were recruited to complete the SUS questionnaire after using the system for a predefined task. After completing the task on the platform, participants were asked to fill out the SUS questionnaire.

The system achieved an average SUS score of 85.11, with scores ranging from 70 to 90, indicating a generally positive usability experience. According to established SUS guidelines, a score of 85.11 is above the industry average, a score of 68, suggests that the system is perceived as usable by participants. The above-average SUS score highlights the system's user-friendly design, making it suitable for a diverse user base with varying levels of technical expertise.

8. CONCLUSION

We have examined the difficulties and underlying causes of Attention Deficit Hyperactivity Disorder (ADHD) in this research paper because it is a complicated condition that needs a multimodal approach to treatment. This app can help people with ADHD live better lives and lessen the negative effects of the disorder on their everyday functioning and general well-being by focusing on the underlying causes of ADHD and offering a comprehensive toolkit. Our proposed mobile application offers an integrated solution to help individuals with ADHD better navigate their daily lives, foster self-improvement, and establish a strong support system.

CONFLICT OF INTERESTS

None

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