

## **Why Engineering Students Turn to ChatGPT for Emotional Help: Triggers, Motivations, and Desired Features in High-Stress Academic Settings**

**Dr. Rizwan U Farooqui, Mississippi State University**

With over 27 years of global experience, Dr. Farooqui has been recently conducting teaching and research in the domain of construction 4.0 technologies, particularly related to construction worker safety and mental health. Simultaneously, Dr. Farooqui has been actively working to improve construction engineering and management education with focus on inculcating leadership skills, critical thinking, emotional intelligence and mental strength. This paper looks at how AI in engineering education is being used by students for emotional support and coping with stress related to engineering education.

**Abid Hassan, Mississippi State University**

Abid Hassan is a graduate student in Industrial and Systems Engineering at Mississippi State University and a Graduate Research Assistant in the Building Construction Science Department. His research interests include artificial intelligence, digital technologies, and data-driven approaches for improving construction safety, education and workforce.

**Dr. Muhammad Umer, University of West Florida**

Dr. Muhammad Umer | Educator | Researcher | Innovator in Construction Engineering and Management  
Muhammad Umer is an educator, researcher, and innovator whose work integrates advanced technology with practical challenges in construction engineering and management. He completed his Ph.D. at Auburn University's McWhorter School of Building Science. His dissertation focused on autonomous item localization on active construction sites using Boston Dynamics' Spot® robot, Bayesian filtering, and AI-based object detection to transform material inventory management. With 17+ years of academic, research, and professional experience, Umer has taught and mentored at undergraduate and postgraduate levels, blending innovation with inclusivity to foster leadership, collaboration, and critical thinking. He has led workshops on technical writing, proposal development, and AI in research across disciplines. He holds a B.E. and M.Eng. in Construction from NED University, where he also served for over a decade as lecturer and assistant professor, teaching courses in BIM, quality and safety, entrepreneurship, and project planning. His research spans automation, robotics, AI applications, safety, procurement efficiency, and education innovation. A Presidential Fellow at Auburn, Umer has earned multiple awards, including consecutive Auburn Research Student Symposium College Awards (2023, 2024) and induction into Sigma Lambda Chi. His work appears in top journals and conferences such as the ASCE Journal of Construction Engineering and Management and ASC Proceedings. An active contributor to global collaborations, World Bank procurement reviews, and Enel Foundation projects, Umer also coaches and competes in national construction competitions. A member of ASCE and IAARC, he is committed to advancing knowledge, technology, and inclusivity in construction; driven by the belief that excellence lies in uplifting others while building a smarter, more resilient industry.

**Dr. George D Ford, Mississippi State University**

Dr. George Ford P.E. is a professor of Mississippi State's Building Construction Science (BCS) program. Dr. Ford has 15 years of industrial experience including corporate work, and 16 years of teaching experience at the post-secondary level.

# **Why Engineering Students Turn to ChatGPT for Emotional Help: Triggers, Motivations, and Desired Features in High-Stress Academic Settings**

## **abstract**

Artificial intelligence (AI) tools such as ChatGPT have become part of students' everyday academic routines. In engineering education, where heavy workload and performance pressure are common, some students also turn to ChatGPT during periods of academic stress. While existing research largely treats ChatGPT as an academic support tool, less is known about how students use it during stressful academic situations and how they perceive it relative to other sources of support. This study examines survey data from undergraduate engineering students to understand when and why they use ChatGPT during high-stress academic periods. Using descriptive analysis, the study explores common triggers for use, such as exams and assignment deadlines, as well as motivations including immediate availability, convenience, and perceived lack of judgment. The findings also examine which aspects of ChatGPT students find helpful during stressful periods and how they compare its usefulness to other support options, such as peers, family, or institutional services. Results indicate that many students turn to ChatGPT during peak academic pressure because it is easily accessible and responsive, though it is generally viewed as a supplementary resource rather than a replacement for human support. Overall, the study provides descriptive insight into how engineering students integrate ChatGPT into their stress-related academic experiences and highlights considerations for educators and researchers examining the role of AI tools in demanding educational settings.

**Keywords:** Artificial Intelligence in Education, Student Emotional Support, ChatGPT Usage Behavior, Motivation and Triggers, AI Design for Well-being

## **introduction**

Artificial intelligence (AI) tools are now part of everyday student life in higher education. Over the past decade, research on AI in higher education has focused on tasks like prediction, assessment, adaptive learning, and tutoring support [1]. With the release of ChatGPT, this trend has accelerated. Recent reviews show that many instructors and students are experimenting with ChatGPT for drafting, feedback, coding help, and explaining difficult concepts, while also worrying about plagiarism, reliability, and access [2].

Most of this work, however, treats ChatGPT as an academic tool, focusing on learning outcomes, assessment, and classroom policy rather than on how students may use the same system to cope with stress or talk through emotional struggles [2], [3]. At the same time, growing evidence shows that conversational agents can support mental health. Trials of Woebot have shown that brief, text-based conversations can reduce symptoms of anxiety and depression in young adults [4], and real-world evaluations of Wysa report promising reductions in self-reported anxiety and depression through structured conversational reflection, though evidence remains preliminary [5]. These systems were designed specifically for mental health, yet their popularity hints that students are open to 'talking to technology' about how they feel [6], [7]. Among college students, personal stigma toward mental health treatment is associated with reduced help-seeking, while perceived public stigma plays a more limited and inconsistent role [8]. Other studies identify

barriers such as concerns about how others will judge them, doubts about treatment, and practical factors like scheduling and cost [9]. Many students instead turn to informal sources such as peers, family, or online information [10]. In this context, a tool like ChatGPT is attractive: it is always available, free at the point of use, and feels non-judgmental [11].

Engineering students add another layer to this picture. Recent work describes a high-stress culture where heavy workload, long hours, and performance pressure are often normalized [12], and mental health concerns are prevalent among undergraduates and linked to both academic performance and well-being [13]. Qualitative studies indicate that perceived norms emphasizing competence, self-reliance, and "pushing through" stress contribute to reluctance toward seeking professional mental health support [14], with help-seeking beliefs reliably captured through engineering-specific constructs [15]. Together, these findings suggest that engineering students may be especially likely to pursue low-friction and low-judgment ways to cope with stress.

Against this backdrop, the use of general-purpose AI chatbots like ChatGPT for emotional support is emerging on campuses, but we still know very little about how it unfolds in day-to-day student life. Existing literature on AI in education rarely examines emotional use [1,2], and work on mental health chatbots mostly focuses on purpose-built tools rather than large, general models [3],[4], [16]. This creates a gap: we do not yet know when engineering students turn to ChatGPT during stressful periods, why they choose it over other options, or what features they want if such tools are to play a responsible role in supporting well-being.

This gap is particularly relevant in developing-country contexts, where formal mental health and counseling services for university students are often limited and where students may rely more heavily on accessible, low-cost alternatives during periods of academic stress. Examining ChatGPT use in such a setting is therefore valuable for understanding how AI tools fit into student support ecosystems where institutional resources are constrained. We focus on the following research questions: (1) what academic situations trigger engineering students to seek support from ChatGPT during periods of high stress; (2) what motivations drive students to choose ChatGPT over other available support options; and (3) how students perceive the usefulness of ChatGPT in comparison to other sources of support, such as peers, family, and institutional services.

## **background and related work**

Research on AI in higher education has grown rapidly over the past decade. Before ChatGPT, most work focused on adaptive learning, intelligent tutoring, predictive modeling, and assessment support [1]. ChatGPT shifted interest toward generative tasks such as drafting, summarization, explanation, and code generation, with reviews showing that instructors and students are experimenting with these uses while weighing benefits and risks [2]. Other studies highlight concerns about fairness, reliability, and academic integrity in adoption decisions [17]. Across this work, ChatGPT is mostly treated as an academic productivity tool rather than a system students might use for emotional purposes.

Alongside this educational shift, a different body of research examines mental health and help-seeking among university students. Colleges consistently report a gap between students' mental

health needs and their use of counseling or professional services [8]. Stigma is a common barrier, especially when students worry about how others will judge them [9]. Prior research indicates that a range of practical and attitudinal barriers—including uncertainty about where to seek help, perceived inconvenience, and stigma-related concerns—can reduce help-seeking among young people [10]. As a result, many students rely on informal coping strategies, including peers, family, online information, or simply managing on their own. This broader help-seeking landscape helps explain why students might value support options that feel more private, immediate, and low-effort.

Engineering education adds a specific layer to this picture. Engineering programs are often high-pressure environments with long project cycles, heavy workloads, and competitive expectations [12]. A recent systematic review shows that stress and well-being challenges are common among engineering undergraduates and are tied to both academic and personal outcomes [13]. Yet despite these pressures, engineering students may hesitate to seek professional help in contexts where disciplinary norms emphasize competence, independence, and solving problems on one's own [14]. Further work highlights the importance of disciplinary context, showing that engineering students' help-seeking beliefs are captured through engineering-specific constructs and validated instruments [15]. Together, these patterns suggest that engineering students may be more likely to look for support options that are low-judgment and low-friction than traditional counseling services.

While the mental health literature focuses on barriers to counseling, a third strand of research examines digital tools used for emotional support. Research shows that young people increasingly use digital platforms for emotional expression, regulation, and coping with stress, often engaging in online spaces to seek support and manage psychological distress [6]. At the same time, conversational agents designed specifically for mental health, such as Woebot and Wysa, have demonstrated reductions in anxiety or depressive symptoms and show potential for scalable emotional support [3]. These findings suggest that chat-based interaction can feel safe, accessible, and low-stakes for young users who might not pursue formal counseling.

Taken together, these research areas highlight an important gap. AI-in-education research focuses on academic uses of ChatGPT, mental health research focuses on help-seeking barriers, and therapeutic chatbot research focuses on purpose-built clinical tools. None of these areas examine how students, especially engineering students, use a general-purpose model like ChatGPT for emotional support during stressful academic periods. This emerging behavior is not yet documented in the current literature. To begin addressing this gap, the present study uses survey data from engineering undergraduates to examine how and when ChatGPT is used during high-stress academic periods.

### **novelty and contribution**

This study empirically examines how engineering students use a general-purpose large language model such as ChatGPT during periods of high academic stress. It provides descriptive evidence on common triggers for use, students' motivations for choosing ChatGPT, and how its perceived usefulness compares with other support sources. By situating these findings within the context of

engineering education and help-seeking behavior, the study offers insight into how AI tools are being integrated into students' academic experiences under pressure.

## **methodology**

This section presents the methodological approach adopted for the study. It describes the survey-based design, participant recruitment, instrument development, data analysis procedures, and ethical considerations to provide transparency and context for the reported results.

## **study design**

The present study used a cross-sectional survey approach to investigate how engineering students engage with ChatGPT during periods of academic stress. The survey was developed after reviewing literature on AI adoption, digital behaviors, emotional support, and help-seeking in higher education. Items were designed to capture when students seek support from ChatGPT, what motivates them to do so, and how they compare ChatGPT to other available support options. This paper focuses on survey items directly related to these objectives and reports descriptive findings based on student responses.

## **participants**

Participants were undergraduate engineering students enrolled in a public-sector university in a developing country, a setting where access to formal mental health and counseling services is often more limited than in higher-income contexts and where students may rely more heavily on informal or digital sources of support. Recruitment targeted students in mid-to-late stages of their programs who were familiar with AI tools. A total of 95 students completed the survey. Respondents were mainly 18–23 years old, with representation from both male and female students, and most reported using the internet several times a day.

## **instrument and measures**

The survey included both structured and open-ended items. Structured questions assessed students' interactions with ChatGPT during periods of academic stress, including common triggers, motivations for use, and comparisons with other support sources such as peers, family, and counseling services. Open-ended prompts allowed students to describe their use and what they found helpful. Survey items were organized into four conceptual categories: (1) triggers (e.g., exams, deadlines, workload), (2) motivations (e.g., privacy, immediacy, non-judgment), (3) comparisons with other support sources, and (4) perceived features related to support during stressful academic situations.

## **data analysis**

The survey data were cleaned before analysis, and incomplete or inconsistent responses were removed. Although the survey included open-ended items, this paper reports only findings from structured, closed-ended responses. Descriptive statistics were used to summarize the data, with frequencies and percentages calculated for all variables. Participant demographics were first

summarized to describe the sample, followed by analysis of responses related to triggers for using ChatGPT during academic stress, motivations for choosing ChatGPT, helpful aspects of its use, comparison with other support sources, and perceived academic versus emotional effectiveness. The analysis was descriptive in nature and focused on reporting response patterns rather than testing hypotheses or making causal claims.

### **ethical considerations**

Participation was voluntary and anonymous, and no personal identifying information was collected. The study focused on everyday academic stress and did not include any clinical questions or assessments. All data was stored securely and used only for research purposes, and the survey was reviewed to ensure it was appropriate for undergraduate students.

### **results**

This section presents descriptive results from the student survey, including participant characteristics and reported patterns of ChatGPT use during periods of academic stress.

#### **participant overview**

Table 1 presents the demographic characteristics of the survey participants, including gender, age range, semester level, field of study, and frequency of internet use.

**Table 1:** Participant Demographics (n = 95)

| Variable                 | Category            | n  | %     |
|--------------------------|---------------------|----|-------|
| Gender                   | Male                | 63 | 66.3  |
|                          | Female              | 32 | 33.7  |
| Age Range                | 18–20 years         | 6  | 6.3   |
|                          | 21–23 years         | 71 | 74.7  |
|                          | 24–26 years         | 16 | 16.8  |
|                          | 27+ years           | 2  | 2.1   |
| Semester Level           | 5th Semester        | 15 | 15.8  |
|                          | 6th Semester        | 24 | 25.3  |
|                          | 7th Semester        | 32 | 33.7  |
|                          | 8th Semester        | 24 | 25.3  |
| Field of Study           | Engineering         | 95 | 100.0 |
| Internet Usage Frequency | Several times a day | 86 | 90.5  |
|                          | Once a day          | 7  | 7.4   |
|                          | A few times a week  | 2  | 2.1   |

The sample consisted of 95 upper-level undergraduate engineering students, mostly aged 21–23 and enrolled in their 6th to 8th semesters. Internet use was very high, with over 90% reporting use several times per day, indicating strong familiarity with digital platforms.

### **triggers for using chatgpt during academic stress**

Table 2 summarizes the academic situations that students reported as triggers for using ChatGPT during periods of academic stress.

**Table 2:** Triggers for Using ChatGPT During Academic Stress

| Trigger                   | n  | %    |
|---------------------------|----|------|
| Before final exams        | 47 | 49.5 |
| Before mid-term exams     | 29 | 30.5 |
| Mid-semester              | 22 | 23.2 |
| During holidays or breaks | 20 | 21.1 |
| After mid-term exams      | 13 | 13.7 |
| Start of the semester     | 13 | 13.7 |
| After final exams         | 6  | 6.3  |

Students were allowed to select multiple triggers for using ChatGPT during periods of academic stress. The most commonly reported triggers were the period before final exams (49.5%) and before mid-term exams (30.5%). Use was also reported during mid-semester periods (23.2%) and academic breaks (21.1%), indicating that engagement with ChatGPT was concentrated around times of increased academic workload and performance pressure rather than routine coursework.

### **motivations for choosing chatgpt**

Table 3 presents students' reported motivations for choosing ChatGPT over other available support options during stressful academic situations.

**Table 3:** Motivations for Choosing ChatGPT Over Traditional Support

| Motivation                      | n  | %    |
|---------------------------------|----|------|
| Immediate availability          | 78 | 82.1 |
| No judgment or pressure         | 65 | 68.4 |
| Convenience                     | 61 | 64.2 |
| Privacy                         | 54 | 56.8 |
| Easier than talking to people   | 47 | 49.5 |
| Lack of access to other support | 33 | 34.7 |

Immediate availability was the most frequently cited reason for choosing ChatGPT. Many

students also valued the absence of judgment and the convenience of access. These motivations suggest that ChatGPT was seen as an accessible and low-effort option during stressful academic situations.

### helpful aspects of chatgpt

Table 4 outlines the specific aspects of ChatGPT that students found helpful when using it during periods of academic stress.

**Table 4:** Helpful Aspects of ChatGPT for Emotional Support

| Helpful Aspect      | n  | %    |
|---------------------|----|------|
| Quick responses     | 80 | 84.2 |
| Clear explanations  | 67 | 70.5 |
| Calming tone        | 59 | 62.1 |
| Structured guidance | 55 | 57.9 |
| Feeling heard       | 46 | 48.4 |

Students most often found ChatGPT helpful due to its quick responses and clear explanations. A calm communication style and structured guidance were also commonly mentioned. These aspects indicate that students valued both the speed and clarity of interaction during stressful moments.

### comparison with other support sources

Table 5 shows how students evaluated the effectiveness of ChatGPT in comparison to other support sources they had used.

**Table 5:** Comparison of ChatGPT to Other Support Methods

| Comparison Outcome        | n  | %    |
|---------------------------|----|------|
| Better than other methods | 28 | 29.5 |
| About the same            | 41 | 43.2 |
| Worse than other methods  | 26 | 27.4 |

Most students rated ChatGPT as comparable to other support methods they had tried. Nearly one-third viewed it as better, while a similar proportion felt it was less effective. This suggests that ChatGPT was not universally preferred but was considered a viable alternative by many students.

### academic vs emotional effectiveness

Table 6 presents students' perceptions of whether ChatGPT is more effective for academic assistance or for emotional support. Most participants reported that ChatGPT was more effective

for academic assistance than for emotional support. However, over one-third of students perceived it as equally or more effective for emotional support. This indicates that while academic use remains dominant, emotional support is a meaningful secondary function for a subset of students.

**Table 6:** Academic vs Emotional Effectiveness of ChatGPT

| Perceived Effectiveness              | n  | %    |
|--------------------------------------|----|------|
| More effective for academic help     | 62 | 65.3 |
| Equally effective for both           | 21 | 22.1 |
| More effective for emotional support | 12 | 12.6 |

## discussion

This study examined why upper-level engineering students use ChatGPT during high-stress academic periods. Students primarily turned to ChatGPT before final and mid-term exams rather than during routine coursework, consistent with descriptions of engineering education as a culture in which stress is normalized around performance milestones [12] and with [14]'s observation that engineering students tend to push through stress rather than address it proactively. ChatGPT appears to be absorbed into this coping pattern as a just-in-time resource, used when workload pressure peaks rather than as part of sustained stress management.

Students' motivations map onto help-seeking barriers documented in the broader literature. Immediate availability, absence of judgment, and privacy, which were the most cited reasons for choosing ChatGPT, closely match the barriers Eisenberg et al. [8] linked to reduced formal help-seeking among college students, particularly personal stigma and concerns about being judged. ChatGPT bypasses these barriers at once: it requires no appointment, no disclosure to another person, and carries little perceived social cost. Students' preference therefore functions as a workaround to the attitudinal and structural barriers that have long limited help-seeking among engineering students.

The features students valued most (quick responses, clear explanations, a calming tone, and structured guidance) are precisely the qualities institutional services struggle to provide during acute stress, such as late at night before an exam. Although ChatGPT was not designed for emotional support, these interaction qualities overlap with those of purpose-built mental health chatbots such as Woebot and Wysa [3], [4], which have shown value for young users who avoid formal support.

The comparative ratings are revealing. Most students rated ChatGPT as comparable to other support methods including peers, family, and institutional services, a near-equivalence notable in a disciplinary culture that emphasizes self-reliance [14]. Students appear to treat it as a legitimate option within their existing support repertoire rather than a replacement; for some, the absence of social evaluation may make it functionally preferable to peers or family, even when it offers less

depth. Although most students viewed ChatGPT as more effective for academic help than emotional support, nearly one-third found it equally or more effective for emotional support, a meaningful proportion in a discipline where formal help-seeking is culturally discouraged [14]. Taken together, engineering students' use of ChatGPT during stress is shaped less by enthusiasm for AI and more by the limited availability of accessible, low-stigma alternatives. Rather than displacing human support, ChatGPT occupies a space created by the intersection of engineering stress culture, persistent help-seeking stigma, and the practical limits of institutional services.

## **implications**

The findings suggest that engineering students are most likely to turn to ChatGPT during periods of peak academic pressure, when traditional academic and peer support may be less accessible. This highlights the importance of considering how course design, assessment scheduling, and workload distribution contribute to concentrated stress periods within engineering programs.

Students value support options that are immediate, low-effort, and perceived as non-judgmental. Rather than treating tools like ChatGPT as replacements for existing services, institutions may benefit from recognizing their role as supplementary resources and providing guidance on appropriate use during high-stress situations. Finally, the presence of emotional use alongside academic use suggests a need for further dialogue within engineering education about how digital tools intersect with student well-being. Educators and program leaders may consider how emerging AI technologies fit within broader academic support ecosystems, particularly in high-pressure learning environments.

## **limitations**

This study has several limitations. The sample consisted of 95 upper-level engineering students, which limits the generalizability of the findings across disciplines and academic levels. The data were based on self-reported survey responses, which may reflect individual perceptions at the time of participation. In addition, the study was conducted in a developing country, where access to formal student support services may differ from that of universities in higher-income contexts. As a result, the findings should be generalized with caution, particularly in settings where institutions typically offer more structured academic advising and student support resources. Finally, the use of only structured, closed-ended items limited deeper exploration of students' reasoning and experiences.

## **conclusion and recommendations**

This study explored why engineering students use ChatGPT during periods of high academic stress and how they perceive its role as a support tool. The results indicate that students most often turn to ChatGPT during exam periods and deadline-driven workloads, valuing its immediate availability and ease of use. While ChatGPT is primarily viewed as an academic support tool, a notable proportion of students also perceive it as helpful during stressful academic situations. Overall, the findings suggest that ChatGPT functions as a supplementary resource rather than a replacement for traditional academic or mental health support systems.

Future research should examine similar patterns across different institutional contexts, disciplines, and student populations to clarify generalizability. Qualitative approaches, such as interviews or longitudinal studies, could offer deeper insight into how students experience emotional interactions with AI tools and how these uses evolve over time, contributing to a fuller understanding of how general-purpose AI fits into academic support ecosystems under high pressure.

## references

- [1] O. Zawacki-Richter, V. I. Marín, M. Bond, and F. Gouverneur, "Systematic Review of Research On Artificial Intelligence Applications in Higher Education – Where Are the Educators?" *International Journal of Educational Technology in Higher Education*, vol. 16, no. 1, pp. 1–27, Oct. 2019.
- [2] T. Thuy, Can Van Da, and Nguyen Van Hanh, "The Use of ChatGPT in Teaching and Learning: a Systematic Review through SWOT Analysis Approach," *Frontiers in Education*, vol. 9, no. 1, Feb. 2024.
- [3] M. Baidoo-Anu and L. Owusu Ansah, "Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning," *Journal of AI*, vol. 7, no. 1, pp. 52–62, 2023.
- [4] K. K. Fitzpatrick, A. Darcy, and M. Vierhile, "Delivering Cognitive Behavior Therapy to Young Adults With Symptoms of Depression and Anxiety Using a Fully Automated Conversational Agent (Woebot): A Randomized Controlled Trial," *JMIR Mental Health*, vol. 4, no. 2, Jun. 2017.
- [5] B. Inkster, S. Sarda, and V. Subramanian, "An Empathy-Driven, Conversational Artificial Intelligence Agent (Wysa) for Digital Mental Well-Being: Real-World Data Evaluation Mixed-Methods Study," *JMIR mHealth and uHealth*, vol. 6, no. 11, p. e12106, Nov. 2018.
- [6] M. D. Choudhury and S. De, "Mental Health Discourse on Reddit: Self-Disclosure, Social Support, and Anonymity," *Proceedings of the International AAAI Conference on Web and Social Media*, vol. 8, no. 1, May 2014.
- [7] E. G. Lattie, E. C. Adkins, N. Winquist, C. Stiles-Shields, Q. E. Wafford, and A. K. Graham, "Digital Mental Health Interventions For Depression, Anxiety, And Enhancement of Psychological Well-Being Among College Students: Systematic Review," *Journal of Medical Internet Research*, vol. 21, no. 7, p. e12869, Jul. 2019.
- [8] D. Eisenberg, M. F. Downs, E. Golberstein, and K. Zivin, "Stigma and Help Seeking For Mental Health Among College Students," *Medical Care Research and Review*, vol. 66, no. 5, pp. 522–541, May 2009.
- [9] R. A. Vidourek, K. A. King, L. A. Nabors, and A. L. Merianos, "Students' Benefits and Barriers To Mental Health Help-Seeking," *Health Psychology and Behavioral Medicine*, vol. 2, no. 1, pp. 1009–1022, Oct. 2014.
- [10] A. Gulliver, K. M. Griffiths, and H. Christensen, "Perceived Barriers and Facilitators to Mental Health help-seeking in Young people: a Systematic Review," *BMC Psychiatry*, vol. 10, no. 1, Dec. 2010.
- [11] K. Jung, G. Lee, Y. Huang, and Y. Chen, "'I've Talked To Chatgpt About My Issues Last Night': Examining Mental Health Conversations With Large Language Models Through Reddit Analysis," *Proc. ACM Hum. -Comput. Interact., CSCW*, 2025.
- [12] J. F. Mirabelli, E. M. Johnson, S. R. Vohra, J. L. Sanders, and K. J. Jensen, "Stressors and Normalized Stress In Undergraduate Engineering Education Culture: Development Of The Engineering Stress Culture Scale and Undergraduate Engineering Stressors Questionnaire," *International Journal of STEM Education*, vol. 12, no. 1, Mar. 2025.
- [13] M. Asghar, A. Minichiello, and S. Ahmed, "Mental health and wellbeing of undergraduate students in engineering: A Systematic Literature Review," *Journal of Engineering Education*, vol. 113, pp. 1046–1075, 2023.
- [14] K. J. Jensen, J. F. Mirabelli, A. J. Kunze, T. E. Romanchek, and K. J. Cross, "Undergraduate Student Perceptions Of Stress and Mental Health In Engineering Culture," *International Journal of STEM Education*, vol. 10, no. 1, Apr. 2023.
- [15] J. H. Hammer, C. J. Wright, M. E. Miller, and S. A. Wilson, "The Undergraduate Engineering Mental Health Help-Seeking Instrument (UE-MH-HSI): Development and validity evidence," *Journal of Engineering Education*, Oct. 2024.
- [16] A. A. Abd-alrazaq, M. Alajlani, A. A. Alalwan, B. M. Bewick, P. Gardner, and M. Househ, "An Overview of The Features Of Chatbots In Mental Health: A Scoping Review," *International Journal of Medical Informatics*, vol. 132, no. 103978, p. 103978, Dec. 2019.
- [17] E. Kasneci et al., "ChatGPT for good? On Opportunities and Challenges of Large Language Models for Education," *Learning and Individual Differences*, vol. 103, no. 102274, Apr. 2023.