



## Stress Management Interventions for University Students: Improving Mental Health and Academic Performance

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### Abstrak

Sosialisasi ini berfokus pada intervensi manajemen stres untuk mahasiswa di perguruan tinggi. Program ini dilaksanakan di NutriHub Samarinda dan menggunakan pendekatan konseling interaktif untuk menyampaikan informasi komprehensif tentang stres, penyebabnya, jenis-jenisnya, dan teknik manajemen stres. Peserta secara aktif berpartisipasi dalam diskusi, berbagi pengalaman pribadi, dan mempraktikkan strategi manajemen stres selama sesi. Setelah intervensi, peserta melaporkan penerapan teknik-teknik kunci seperti perencanaan akademik yang cermat, latihan relaksasi, istirahat yang cukup, aktivitas fisik, dan dukungan sosial. Hasil ini menunjukkan kesuksesan program dalam mengembangkan keterampilan koping proaktif dan ketahanan. Namun, kendala seperti keterbatasan waktu, perbedaan pemahaman peserta, dan pengalaman terbatas dalam teknik manajemen stres diidentifikasi. Solusi yang diusulkan meliputi sesi tindak lanjut, materi pengajaran modular, dan sumber daya tambahan. Penyebaran ini menyimpulkan bahwa upaya berkelanjutan dan kolaboratif di antara pemangku kepentingan sangat penting untuk menciptakan ekosistem pendidikan yang mendukung kesejahteraan mental siswa dan memfasilitasi kemajuan akademik dan psikologis. Materi penyuluhan di masa depan harus mengeksplorasi efek jangka panjang dari intervensi dan strategi ini untuk mengintegrasikannya ke dalam program pendidikan reguler.

**Kata Kunci:** Pengelolaan Stres, Kesehatan Mental, Prestasi Akademik, Ekosistem Pendidikan.

### Abstract

*This socialization focused on stress management interventions for university students. The program was implemented at NutriHub Samarinda and used an interactive counseling approach to deliver comprehensive information about stress, its causes, types, and stress management techniques. Participants actively participated in discussions, shared personal experiences, and practiced stress management strategies during the sessions. After the intervention, participants reported implementing key techniques such as careful academic planning, relaxation exercises, adequate rest, physical activity, and social support. These results demonstrate the program's success in developing proactive coping skills and resilience. However, constraints such as time constraints, differences in participants' understanding, and limited experience in stress management techniques were identified. Proposed solutions include follow-up sessions, modular teaching materials, and additional resources. This dissemination concluded that continuous and collaborative efforts among stakeholders are essential to create an educational ecosystem that supports students' mental well-being and facilitates academic and psychological progress. Future extension materials should explore the long-term effects of these interventions and strategies to integrate them into regular education programs.*

**Keywords:** Stress Management, Mental Health, Academic Performance, Educational Ecosystem.

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## INTRODUCTION

Academic stress significantly impacts university students' well-being and academic performance across diverse educational contexts. Evidence from various regions illustrates the scale of this issue; for instance, a study at Khulna University revealed that 76.8% of students experience academic stress, with 15.68% suffering from high levels, while 61.1% report anxiety symptoms (Rabbi & Islam, 2024). These stressors, which include test anxiety, assignment overload, and deadline conflicts, contribute to a range of physical and mental health complications, such as headaches, exhaustion, and concentration difficulties, ultimately compromising academic performance and increasing absenteeism (Rabbi & Islam, 2024).

The impact of this stress extends beyond immediate symptoms to impair core academic functions. Building on this, research demonstrates that academic stress can significantly impair concentration, memory, and overall cognitive performance. The neurobiological mechanisms underlying these effects involve stress hormones like glucocorticoids negatively affecting brain regions crucial for working memory, such as the prefrontal cortex and hippocampus (Almarzouki, 2024). Consequently, a detrimental cycle is established where stress reduces academic performance, which in turn exacerbates stress levels, leading to decreased psychological well-being and diminished motivation (Kernan, 2019). This complex interplay highlights a critical need for effective interventions, yet current understanding of stress factors and mechanisms remains insufficient, necessitating further research into effective support strategies (Fomina et al., 2024).

Fortunately, a growing body of evidence points to the efficacy of structured interventions. Research demonstrates that stress management

techniques are effective for improving student well-being. Key methods include mindfulness practices, relaxation, meditation, and cognitive-behavioral techniques, which have shown moderate effectiveness in reducing stress, depression, and anxiety among college students (Amanvermez et al., 2020; Fatih et al., 2025; Malik et al., 2024). The effectiveness of these interventions is often enhanced by factors such as good sleep quality and strong social support, underscoring the importance of a holistic approach (Malik et al., 2024).

The imperative for such interventions becomes even more evident when considering the parallel between academic and professional environments. The ability to manage stress is a critical meta-skill that promotes resilience and sustains engagement in high-demand settings (Goleman, 1995; Luthans, 2002). Conversely, poor stress management increases the risk of anxiety and depression. This dynamic is effectively explained by models like the Job Demands-Resources (JD-R) theory, which posits that negative outcomes arise when demands outweigh an individual's resources (Bakker & Demerouti, 2007). Therefore, much like forward-thinking corporations, educational institutions have an ethical and strategic responsibility to foster a supportive environment. A positive psychosocial safety climate, where the institution is committed to protecting mental health, is directly linked to improved well-being and productivity (Dollard & Bakker, 2010). Implementing comprehensive stress management strategies is thus a strategic investment in human capital (World Health Organization, 2022).

Based on this compelling rationale, we designed and implemented a community service program (PKM) focused on stress management for university students. This program aims to provide students with the knowledge, practical skills, and

hands-on guidance needed to manage stress more effectively. It is anticipated that through this initiative, students' mental health can be maintained, their academic performance can be improved, and the broader goal of higher education to develop resilient and excellent human resources can be advanced.

## **METHOD**

This community service activity was designed to provide stress management education to university students. The following sections detail the implementation framework.

**Study Setting and Participants:** Participants were students from universities around the area, totaling 20 students. The session was scheduled in the afternoon to suit the free time of the majority of students after college, so that they could participate with more focus and without rushing.

### **Materials and Equipment**

To support the smooth execution of the activity, several materials and pieces of equipment were utilized:

1. LED TV: Served as a display medium for presentations, allowing participants to view the material clearly.
2. Laptop: Used to run the presentation and control the flow of the material.
3. Presentation Materials: A Microsoft PowerPoint (PPT) presentation was prepared, containing explanations regarding stress, its causes, types of stress, and stress management techniques.
4. Smartphone: Employed to document the activity in the form of photographs and/or videos for reporting and evaluation purposes.

### **Intervention Procedure**

The educational intervention employed a counseling method. This method involves the direct delivery of information to participants through comprehensive, interactive, and applicable

explanations. It was selected for its efficacy in enhancing participants' overall understanding within a short period. The counseling format facilitates two-way interaction, allowing participants to move beyond passive reception of information to actively ask questions and discuss personal stress experiences. Furthermore, this method enables the structured delivery of material tailored to the audience's specific needs, in this case, students facing academic pressures. The activity was carried out through the following sequential stages:

1. Opening and Welcome by the MC: The session commenced with an introduction and welcome address.
2. Material Presentation: The core content on stress management was delivered to participants.
3. Question and Answer Session: A dedicated interval was allocated for interactive discussion and clarification.
4. Closing and Documentation: The event concluded with a summary, followed by official documentation.

## **RESULTS AND DISCUSSION**

### **Overview of Implementation and Participant Engagement**

The community service activity, entitled "Stress and Pressure in Daily Life, Particularly in Facing Exams and Course Assignments," was successfully implemented, with university students as the primary participants. The activity achieved its main objective of raising participant awareness about the importance of stress management and introducing practical strategies for coping with academic pressure.

The success of the intervention was evidenced by the high level of active participation during the material presentation, small group discussions, and Q&A sessions. Participants

demonstrated enthusiasm in sharing personal experiences, responding to the presented material, and directly practicing stress management techniques such as breathing exercises and study planning. This high level of engagement indicates that the Interactive and educational counseling method employed was effective in conveying Key Outcomes and Adoption of Stress Management Strategies. Following the activity, participants reported adopting several key stress management strategies, which are discussed below:

1. Advanced Academic Planning and Preparation

Participants began to implement better time management, create study schedules, and determine task priorities. This outcome demonstrates the activity's success in building executive functioning skills, equipping students with proactive tools to manage academic demands rather than reacting to deadlines passively (Häfner et al., 2015).

2. Application of Relaxation Techniques and Sufficient Rest.

Participants reported starting to maintain healthier sleep patterns and practice relaxation techniques like deep breathing to control anxiety. This indicates an improvement in self-regulation abilities, a critical component for mitigating the physiological and psychological effects of stress (Gross, 2015). The adoption of these techniques aligns with evidence that behavioral interventions can effectively reduce anxiety symptoms (Amanvermez et al., 2020).

3. Engagement in Physical Activity and Social Support

Participants recognized the importance of moderate exercise and building supportive social relationships. These findings support the theoretical understanding that mental well-being is strengthened by internal and

external resources (Bakker & Demerouti, 2007). Conscious efforts to seek social support reflect a shift towards adaptive mechanisms, which are essential for long-term resilience and fostering new attitudes towards stress.



**Figure 1.** Material Submission Session

## Evaluation of Constraints and Proposed Solutions

Despite the overall success, several constraints were identified during the implementation, along with proposed solutions for future activities:

1. Time Limitations

The duration of the activity was constrained by the venue's operational hours and participant availability, which limited the depth of some discussion sessions. *Proposed Solution:* Future initiatives should consider follow-up sessions or online mentoring to provide more comprehensive and sustained support.

2. Variation in Participant Comprehension

Differences in the participants' educational backgrounds led to variations in their absorption and interpretation of the material. *Proposed Solution:* Developing modular teaching materials tailored to different educational levels could enhance understanding and engagement.

3. Limited Prior Experience with Stress Management Techniques

Although enthusiastic, many participants were encountering structured relaxation and time-management techniques for the first time. Proposed Solution: Providing supplementary resources, such as worksheets, video tutorials, or short guidebooks, would facilitate independent practice and reinforce learning after the session.



**Figure 2. Documentation Session**

## CONCLUSION

In conclusion, this community service activity successfully enhanced participants' understanding, awareness, and practical skills in managing academic stress. The interactive, applicative, and experience-based counseling approach was instrumental in facilitating this outcome. Crucially, participants not only acquired theoretical knowledge but also demonstrated a positive shift in their attitudes and behaviors. The application of the taught stress management strategies indicates a meaningful transition from a passive and reactive coping style to a more proactive and empowered approach.

To ensure the long-term impact of these initiatives, it is recommended that similar activities be developed into sustained and regular programs rather than standalone events. Achieving this goal necessitates a collaborative effort among key stakeholders, including university lecturers, school teachers, parents, and educational counselors. Ultimately, such a multi-stakeholder approach is essential for fostering an educational ecosystem that genuinely supports student mental

well-being, thereby enabling students to thrive both academically and psychologically.

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