

## Research paper format

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Article

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### Managing Anger: Effects on Mental Health and Academic Involvement in Medical and Psychology Undergraduate Students

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#### Keywords

Anger, anger management, curricular activities, undergraduate students

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#### Abstract

This study looks at the dynamics of anger management among psychology and medical undergraduates, as well as the consequences for mental health and other elements of academic and personal life. Data collected from 80 participants show a range of anger inclinations, with the majority (59%) reporting very low levels of anger, indicating a greater understanding of successful anger management tactics. Anger and depression show a positive association of 0.468, indicating the interconnectedness of students' emotional well-being and anger tendency. rage's impact on academic concentration, interpersonal connections, and family life is explored, with a significant proportion of students experiencing difficulty in these domains during episodes of rage. Despite these challenges, 72% of students exhibit minimal or no signs of depression, showcasing a considerable capacity for effective anger management.

The study emphasizes the need of implementing focused interventions for anger control into educational settings. By addressing the complex relationship between anger and mental health, institutions can improve the overall well-being of psychology and medicine students. This study lays the groundwork for future investigations and the development of comprehensive well-being programs aimed at improving emotional resilience and coping abilities among undergraduate students, resulting in a healthier and more productive academic environment.

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#### Introduction

In recent times, there has been a greater emphasis on recognizing and resolving mental health issues among college students, particularly those pursuing medical and psychology degrees (Hammoudi, Soltani Dalli, Alsarraj & Malki, 2023). As these students traverse the demanding demands of their studies, the importance of exploring and managing emotions, including rage, has become increasingly clear. Anger, as a complex and powerful emotion, has the ability to have a substantial impact on both an individual's mental health and their engagement in extracurricular activities. This study will look into the intricate dynamics of dealing with anger among undergraduate students in medical and psychology areas, shedding light on its diverse impacts on mental health and academic engagement (Deci & Ryan, 2000).

The demanding nature of medical and psychology undergraduate programs exposes students to significant stress, which frequently triggers emotional responses that range in severity and manifestation (Deci & Ryan, 2000; Maclean, Booza & Balon, 2016). Anger, in particular, is a remarkable emotion because of its ability to disrupt interpersonal relationships, impair academic achievement, and negatively impact general well-being. The academic journey is an important phase for personal and professional development, and understanding how anger is controlled during this time is critical for developing supportive environments that promote achievement and resilience.

## **Background**

Anger is a complex, varied emotion that influences human behavior and interaction. The American Psychological Association (APA) defines rage as an emotion marked by hostility toward someone or something thought to have intentionally hurt an individual.

It encompasses a range of reactions to perceived threats, injustices, or disappointments and is accompanied by physiological arousal, cognitive appraisal, and a readiness to act. While anger can serve as a positive force, motivating individuals to address problems or express dissatisfaction, uncontrolled rage can have detrimental effects on both mental and physical well-being, as well as interpersonal relationships (Watson & Clark, 1984).

Understanding the nature, triggers, and consequences of anger is crucial, particularly in educational settings where stressors and pressures are prevalent. For undergraduate students pursuing degrees in fields such as medicine and psychology, managing anger effectively is essential for academic success, personal well-being, and future professional practice (Bahrami, Mazaheri & Hasanzadeh, 2016). The academic journey presents numerous challenges and stressors, from demanding coursework to clinical placements, making it imperative for students to develop strategies for coping with anger and other intense emotions.

Operationalizing anger involves evaluating both subjective and observable indicators of the emotion (Keltner, Ekman, Gonzaga & Beer, 2003). Self-report scales, physiological indicators (such as heart rate and skin conductance), behavioural observations, and qualitative assessments of verbal and nonverbal clues are among the most used measurement methods. These measures provide insights into the frequency, intensity, and duration of anger episodes, as well as the specific triggers or situations that elicit anger responses.

Various factors can trigger anger, including feelings of injustice, impatience, or past traumatic experiences. Individual differences in upbringing, environmental cues, and learned behaviors also influence how individuals interpret and respond to anger-provoking situations. Furthermore, anger activates the body's "fight or flight" reaction, resulting in physiological changes such as increased heart rate, breathing, and perspiration.

In this study, we aim to explore anger management among undergraduate students in medical and psychology fields and its impact on their mental health and academic involvement. By examining the prevalence of anger, coping strategies employed by students, and the relationship between anger management and mental health outcomes, we seek to contribute to a deeper understanding of emotional experiences in educational contexts.

Theoretical frameworks such as Lazarus and Folkman's Transactional Model of Stress and Coping and Self-Determination Theory (Deci & Ryan, 2000), provide valuable insights into how individuals perceive and manage anger in response to stressors. Additionally, distinguishing between trait anger (stable tendency to become angry) and state anger (temporary and situational anger) helps elucidate individual differences in anger responses and coping mechanisms (Anjanappa, Govindan, Munivenkatappa & Bhaskarapillai, 2023).

Mental health, which includes psychological, emotional, and social well-being, is an essential component of college students' adaptive functioning. Assessing students' mental health, particularly depression, provides vital information about their overall well-being and ability to deal with academic and personal challenges.

This study aims to shed light on the dynamics of anger management among undergraduate students in medical and psychology fields and its implications for mental health and academic involvement.

## **Rationale**

The study of anger management among undergraduate students in medical and psychology fields is not merely an academic pursuit; it is grounded in the recognition that emotions play a critical role in shaping individuals' lives and outcomes. Anger, in particular, has emerged as a significant concern, especially among young people. The need for effective anger management training is particularly crucial during this developmental stage, as students learn to regulate their emotions, which can have long-term implications for their mental health and interpersonal relationships (Kaźmierczak, Zajenkowska, Rajchert, Jakubowska, & Abramiuk-Szyszko, 2023).

Anger management training has been shown to reduce aggressive behavior and improve self-control among adolescents, leading to better outcomes in both academic and social domains. Furthermore, the inability to control anger can have detrimental effects on mental health and interpersonal relationships, underscoring the importance of developing effective coping strategies. By understanding how anger impacts students' mental health and academic involvement, educators and mental health practitioners can develop targeted interventions to

support students' emotional well-being and academic success (Zhao, Chapman, Houghton, & Lawrence, 2022).

### **Purpose**

The purpose is to examine the importance of anger management training for undergraduate students in medical and psychology fields. By exploring how students perceive, express, and control anger, as well as how these dynamics influence their mental health and participation in extracurricular activities, this study aims to shed light on the emotional experiences of undergraduate students. By addressing these objectives, the study seeks to provide valuable insights into the emotional landscape of undergraduate students, laying the groundwork for the development of tailored interventions and support mechanisms.

In summary, this research intends to fill a gap in the literature by examining the complex dynamics of anger management among undergraduate students in medical and psychology fields. By exploring the prevalence of anger, examining coping strategies, and assessing the impact on mental health and academic involvement, this study seeks to provide valuable insights into the emotional well-being of undergraduate students.

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### **Literature review**

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Several studies have shown that anger tendencies have an impact on medical students' mental health. Higher anger tendencies are associated with poorer mental health, with friends being a major source of rage (Prabhu et al., 2016). Anger outbursts, which last around a day on average, interfere with concentration on work, school, and relationships due to medical students' hectic schedules. Despite this, anger management techniques have not been demonstrated to negatively impact mental health.

Another study looked at medical students' attitudes, knowledge, and practices about anger management from an Islamic perspective, highlighting the relevance of Islamic teachings in anger regulation (Iqbal et al., 2023). Furthermore, study in Traditional Chinese Medicine (TCM) investigated coping techniques among students, indicating that the anger-in group used more negative coping mechanisms than the anger-out group (Hui-Yun, 2011).

Anger management skills training, particularly among college students, has been shown to reduce aggressiveness while also enhancing social adjustment and mental health (Salehi, 2013). While gender does not play a significant effect, ethnicity may influence anger control owing to cultural differences. It is proposed that incorporating anger management lessons into the undergraduate medical curriculum can improve emotional coping and avoid psychosocial problems (Lwin et al., 2020).

Furthermore, state anger and anger expression-in (AXI) are important predictors of addiction potential among medical students, arguing for increased emphasis on these features in anger management programs (Yusefi, 2016). Personality types are also substantially associated with trait anger in medical students, highlighting the importance of including personality factors into anger management training programs (Khasi et al., 2016).

Regular monitoring and care for medical students' well-being, especially when away from home, is advised. A combination of observational, self-report, and physiological measurements is recommended for properly assessing anger. These findings highlight the necessity of treating anger and emotional well-being in medical education. Collectively, these studies highlight the need of addressing anger management in medical and psychology students, emphasizing its critical role in improving mental health and developing effective anger regulation mechanisms.

## **Methodology**

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This study employed a quantitative research design to investigate the relationship between anger management and its effect on the mental health and participation in curricular activities among undergraduate students in the fields of medicine and psychology. The research aimed to correlate data on anger tendency scores, anger management scores, and mental health scores, while also assessing the duration and consequences of anger episodes through a survey.

### **Objective**

The objectives of this study are threefold:

- I. To explore the prevalence and nature of anger among medical and psychology undergraduate students.
- II. To investigate the strategies employed by students in managing and coping with anger.
- III. To examine the impact of anger management on the mental health and participation of students in curricular activities.

### **Hypothesis**

- I.  $H_0$  - There is no significant relationship between anger management among medical and psychology undergraduate students and its impact on their mental health and participation in curricular activities.
- II.  $H_1$  - Anger management among medical and psychology undergraduate students significantly improves their mental health and enhances their participation in curricular activities.

### **Sampling method**

Purposive sampling led to a sample comprising of 80 undergraduate students aged 17 to 21 years from medical and psychology programs. Participants were recruited from various educational institutions.

### **Tests and instruments**

Two main instruments were utilized in the study:

- I. Novaco Anger Inventory (Short Form): Adapted from the longer version, this inventory consists of 25 items describing anger-provoking situations. Participants rated their potential reactions on a 5-point Likert scale ranging from 0 (very little or no annoyance) to 4 (very angry).
- II. Patient Health Questionnaire (PHQ-9): This 9-question instrument assesses the severity of depression symptoms. Responses are rated on a 4-point Likert scale, with options ranging from 0 (not at all) to 3 (nearly every day).

### **Data collection**

Participants completed the survey, which included the Novaco Anger Inventory (Short Form) and the PHQ-9, providing data on their anger tendencies, anger management strategies, and mental health status. Additionally, open-ended questions were incorporated to gather qualitative information on the duration and consequences of anger episodes.

### **Data analysis**

The quantitative data collected from the survey were statistically evaluated to establish relationships between anger control, mental health, and engagement in extracurricular activities. The hypothesized relationships were investigated using descriptive statistics, correlation analysis, and regression analyses.

### **Ethical consideration**

Before collecting data, the relevant institutional review board provided ethical approval. Participants were told of the study's goal, confidentiality procedures, and the right to withdraw from participation at any time without penalty. All subjects provided informed consent before participating in the study.

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## **Result**

### **Tendency to Get Angry**

Among the surveyed psychology and medical undergraduate students (n=80), a notable proportion demonstrated awareness of effective anger management strategies. Only 5% of students admitted to frequently reacting angrily, while 20% reported experiencing an average amount of anger. Encouragingly, 16% of students identified themselves as substantially more peaceful than average, and the majority (59%) acknowledged experiencing remarkably low levels of anger in various situations (Figure 1).

### **Correlation between Anger and Depression**

Analysis revealed a significant positive correlation ( $r=0.468$ ,  $p<0.01$ ) between anger and depression among the participants. This indicates that as a student's propensity for anger increases, so does their score on the modified PHQ-9, suggesting a potential link between anger management and mental health (Figure 2).

### Effects of Anger on Various Life Domains

Regarding the impact of anger on work or study, approximately 21.3% of students reported no interference, while the majority (61.3%) found it somewhat difficult to concentrate when angry. In terms of interpersonal relationships, 33.8% of students stated that anger did not affect their interactions, yet 50% indicated that managing relationships became somewhat difficult when angry. Similarly, for home life, 30% of students reported no interference from anger, but 58.8% found managing household tasks challenging when angry (Figures 3-5).

### Effect of Anger Management on Mental Health

The assessment of depression levels among participants revealed that 72% showed minimal or no indicators of depression. A lesser proportion were classified as severe or moderately severe, with the rest falling within the depression median range. These data show that good anger management may help students achieve improved mental health outcomes (Figure 6).

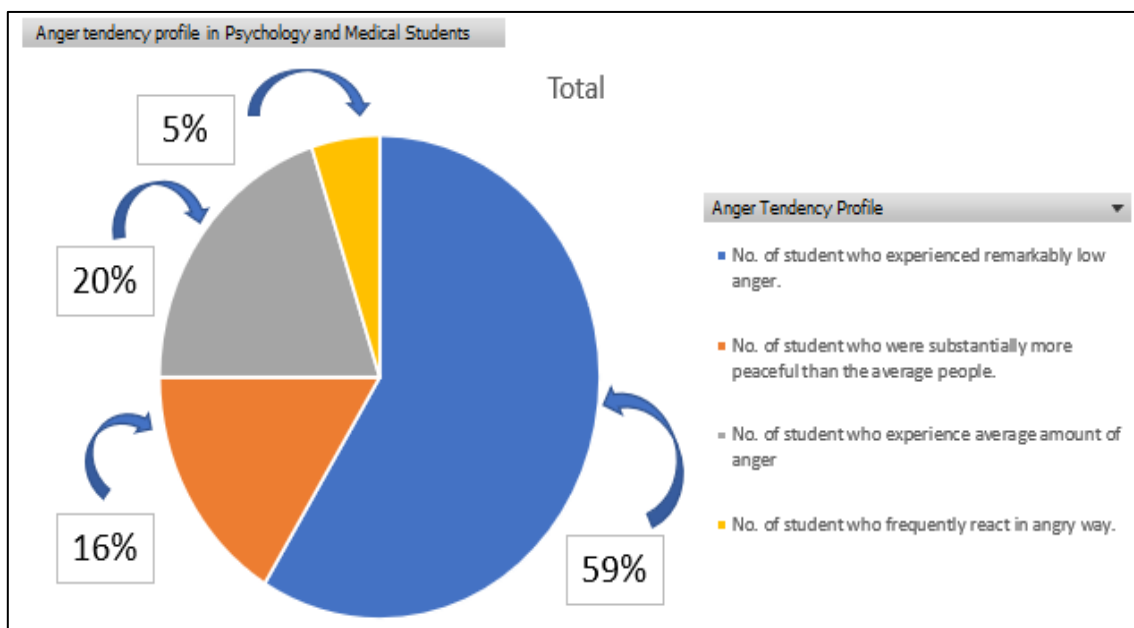


Figure 1:

Correlations			
		NovacoAnger Scale	PHP9
NovacoAngerScale	Pearson Correlation	1	.468**
	Sig. (1-tailed)		.000
	N	80	80
PHP9	Pearson Correlation	.468**	1
	Sig. (1-tailed)	.000	
	N	80	80

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Figure 2

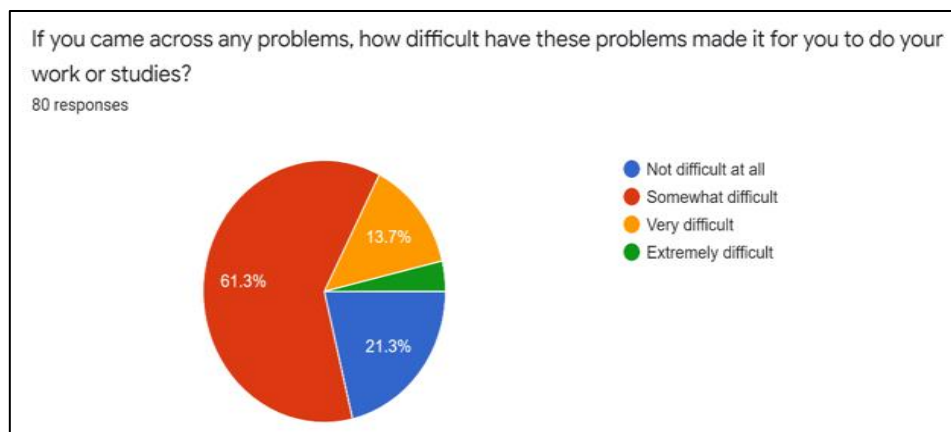


Figure 3

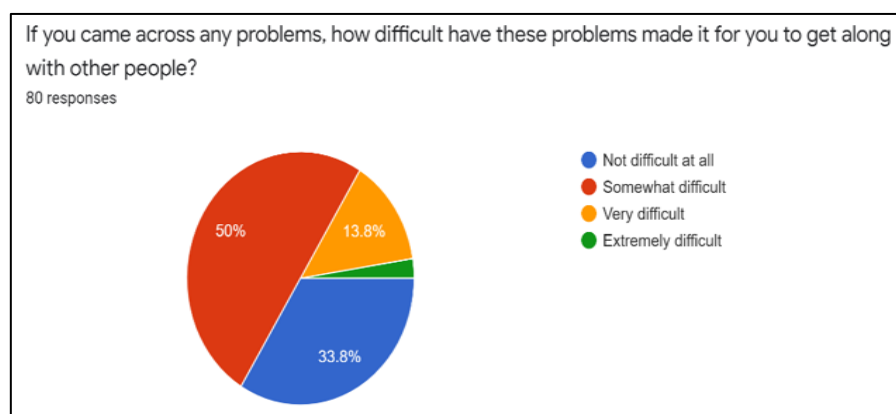
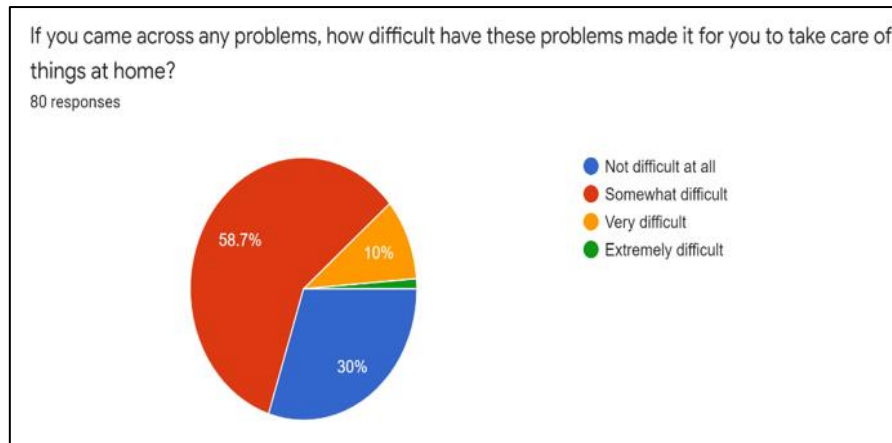
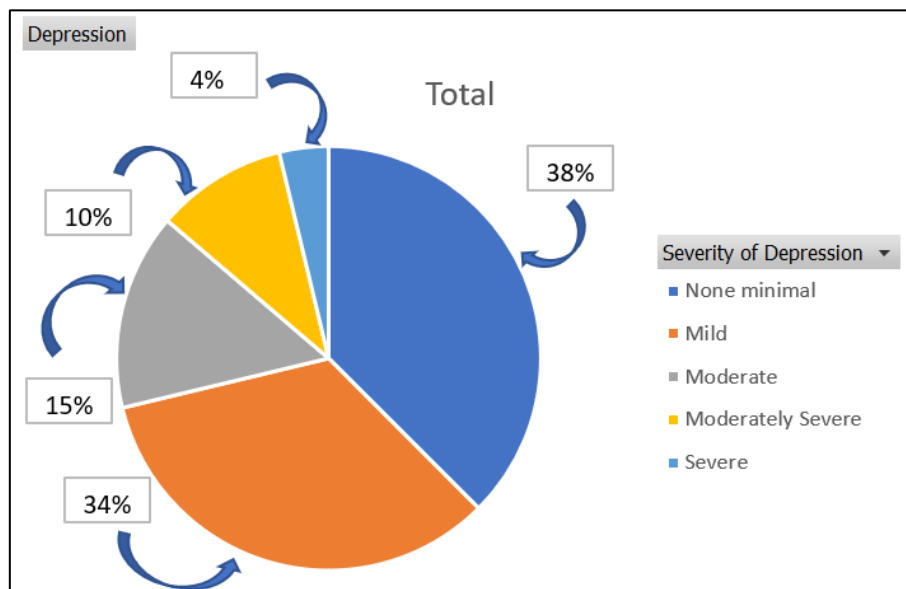


Figure 4





**Figure 5**



**Figure 6**

## Discussion

The findings of this study provide valuable insights into the prevalence of anger among undergraduate students in psychology and medical fields, as well as its multifaceted impact on their mental health, academic performance, relationships, and personal life. The self-reported data on anger tendencies revealed a diverse distribution among participants, with a majority indicating unusually low levels of anger. This suggests a generally positive trend in anger management awareness among surveyed students, indicating an understanding of effective coping strategies.

The positive correlation between anger and depression, with a correlation coefficient of 0.468, underscores the complex relationship between emotional well-being and the propensity for anger among students. This finding aligns with previous research highlighting the

interconnectedness of anger and mental health, emphasizing the need for targeted interventions that address both emotional aspects comprehensively. By acknowledging and addressing the interplay between anger and depression, mental health practitioners and educators can develop more effective strategies to support students' emotional well-being.

Regarding the influence of anger on various life domains, a significant proportion of students reported difficulties concentrating during angry episodes, managing relationships, and dealing with domestic rage. These findings underscore the importance of integrating anger management tactics into holistic well-being programs within educational institutions. By providing students with effective coping strategies and support mechanisms, institutions can enhance academic performance, promote positive interpersonal relationships, and improve overall student well-being.

### **Implications**

The findings of this study offer significant implications for both practice and policy in supporting the emotional well-being and academic success of undergraduate students in psychology and medical fields. Firstly, educational institutions should strongly consider integrating anger management programs into their holistic well-being initiatives. By incorporating such programs, institutions can provide students with valuable skills and resources to effectively manage their emotions, ultimately promoting overall mental health among the student body. Furthermore, mental health practitioners should prioritize the development of targeted interventions that address both anger and depression. Recognizing the interconnected nature of these emotions is crucial in providing comprehensive support to students, enhancing their emotional resilience and well-being.

In addition to intervention strategies, institutions should ensure the availability of readily accessible support services for students experiencing difficulties with anger management. These services may include counseling, therapy, and support groups, providing students with the necessary resources to address their emotional challenges effectively. Moreover, there is a need for curriculum development in psychology and medical programs to incorporate modules on emotional regulation and anger management. Equipping students with these essential skills during their academic training will prepare them for future professional practice, enhancing their ability to navigate challenging situations and provide effective care to others.

### **Limitations**

The use of self-reported data may create bias since participants may underreport or overreport their anger tendencies and experiences. Furthermore, the study's cross-sectional design makes it difficult to establish causal links between variables. Future research should include longitudinal studies to investigate the long-term benefits of anger management programs on students' well-being. Furthermore, the study's sample size may restrict the findings' generalizability, emphasizing the importance of bigger sample sizes and diverse

student groups in future research initiatives. Finally, social desirability bias should be considered, since participants may supply responses that they believe are socially desirable, thereby altering data accuracy.

### **Future research**

Moving forward, further research could investigate other routes to expand on the findings of this study. Longitudinal studies could look into the long-term impact of anger management therapies on students' mental health, academic achievement, and interpersonal relationships. Qualitative study could provide detailed insights into students' experiences with rage and the efficacy of various coping mechanisms. Furthermore, comparative studies could assess the efficiency of various anger management strategies and programs in a variety of educational contexts. An intersectional approach can better understand the impact of gender, ethnicity, and socioeconomic status on anger management and student well-being.

### **Conclusion**

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In conclusion, a significant proportion of psychology and medical undergraduate students had a low predisposition toward anger, indicating a positive trend in anger management skills. However, the positive relationship between anger and sadness emphasizes the significance of addressing emotional well-being holistically. The difficulties described in concentration, relationship management, and family life during angry episodes suggest areas where targeted assistance and interventions can help. The findings also revealed that a sizable proportion of students had excellent anger control, as evidenced by the large percentage (72%) who showed low or no indicators of despair. This implies that, despite problems, a significant number of students have coping strategies in place to deal with the strains of academic and personal life.

This study sheds light on the anger tendencies of psychology and medical undergraduate students, their relationships with mental health, and the consequences for numerous facets of their lives. The findings emphasize the need of incorporating anger management measures into larger well-being initiatives inside academic institutions. Educational institutions can help their students' overall mental health and achievement by raising awareness and offering focused support. More research and the implementation of intervention programs are needed to improve undergraduate students' emotional resilience and coping skills, resulting in a healthier and more productive academic environment.

### References

- Anjanappa, S., Govindan, R., Munivenkatappa, M., & Bhaskarapillai, B. (2023). Effectiveness of anger management program on anger level, problem solving skills, communication skills, and adjustment among school-going adolescents. *Journal of education and health promotion*, 12, 90. [https://doi.org/10.4103/jehp.jehp\\_1216\\_22](https://doi.org/10.4103/jehp.jehp_1216_22)
- Bahrami, E., Mazaheri, M. A., & Hasanzadeh, A. (2016). Effect of anger management education on mental health and aggression of prisoner women. *Journal of education and health promotion*, 5, 5. <https://doi.org/10.4103/2277-9531.184563>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01)

- Entesar Foumany GH. and Salehi J. 2013. The effects of anger management skills training on aggression, social adjustment, and mental health of college students. *Journal of Educational & Management Studies*, 3(4):266-270.
- Hammoudi Halat, D., Soltani, A., Dalli, R., Alsarraj, L., & Malki, A. (2023). Understanding and Fostering Mental Health and Well-Being among University Faculty: A Narrative Review. *Journal of clinical medicine*, 12(13), 4425. <https://doi.org/10.3390/jcm12134425>
- Iqbal, M., Ahmad, R., Iqbal, S., Samad, A., Ullah, N., & Imtiaz, J. (2023). Knowledge, attitude, and practice of medical students regarding anger. *Pakistan Journal of Medical and Health Sciences*, 17(2), 874–877. <https://doi.org/10.53350/pjmhs2023172874>
- Kaźmierczak, I., Zajenkowska, A., Rajchert, J., Jakubowska, A., & Abramiuk-Szysko, A. (2023). The Role of Anger Expression in Unmet Expectations and Depressive Symptoms. *Depression research and treatment*, 2023, 8842805. <https://doi.org/10.1155/2023/8842805>
- Keltner, D., Ekman, P., Gonzaga, G. C., & Beer, J. (2003). Facial expression of emotion. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 415–432). Oxford University
- Khasi, B., Yousefi, F., Azadi, N. A., & Taymoori, P. (2016a). The relationship between personality type with trait anger at Kurdistan University of Medical Sciences. *Journal of the Medical Sciences*, 16(51), 45–51. [http://zanko.muk.ac.ir/browse.php?a\\_id=109&sid=1&slc\\_lang=en](http://zanko.muk.ac.ir/browse.php?a_id=109&sid=1&slc_lang=en)
- Lwin, H., Shen, S. K., Yunn, C. S., Vasudevan, Y., Than, N. N., Soe, H. H. K., Abas, A. L., & Htay, M. N. N. (2020). Interprofessional Undergraduate Analytical study on anger Management. *Journal of Advances in Medicine and Medical Research*, 1–10. <https://doi.org/10.9734/jammr/2020/v32i330377>
- MacLean, L., Booza, J., & Balon, R. (2016). The Impact of Medical School on Student Mental Health. *Academic psychiatry : the journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry*, 40(1), 89–91. <https://doi.org/10.1007/s40596-015-0301-5>
- Novaco, R. W. (2007). *Manual for the Novaco Anger Scale-Provocation Inventory (NAS-PI)* (3rd ed.). Psychological Assessment Resources.
- PHQ-9: Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of the American Medical Association*, 286(16), 1941-1945.
- Prabhu, G., Yen, J. T. M., Amalaraj, J. J. P., Jone, E. T. Y., & Kumar, N. (2016). Anger Management among Medical Undergraduate Students and Its Impact on Their Mental

- Health and Curricular Activities. *Education Research International*, 1–6.  
<https://doi.org/10.1155/2016/7461570>
- Wang, J., Wang, H., Gaskin, J., & Hawk, S. T. (2017, May 11). The Mediating Roles of Upward Social Comparison and Self-esteem and the Moderating Role of Social Comparison Orientation in the Association between Social Networking Site Usage and Subjective Well-Being. *Frontiers in Psychology*.  
<https://doi.org/10.3389/fpsyg.2017.00771>
- Watson, D. and Clark, L.A. (1984) Negative Affectivity: The Disposition to Experience Negative Aversive Emotional States. *Psychological Bulletin*, 96, 465-490.  
<https://dx.doi.org/10.1037/0033-2909.96.3.465>
- Yusefi, A. A., Saffarinia, M., & Abaspour, P. (2016). The Investigation of Drug Addiction Potential among Medical Students: Role of Subjective Components of Anger. *DOAJ (DOAJ: Directory of Open Access Journals)*.  
<https://doaj.org/article/1fed963393384ffdb61fb3a8dd0d451b>
- Zhang, H. (2011). Analyse of the Medical Students, Coping Style Among anger-out Group and Anger-in Group. *Liaoning Journal of Traditional Chinese Medicine*.  
[https://en.cnki.com.cn/Article\\_en/CJFDTOTAL-LNZY201101014.htm](https://en.cnki.com.cn/Article_en/CJFDTOTAL-LNZY201101014.htm)
- Zhao, J., Chapman, E., Houghton, S., & Lawrence, D. (2022, March 23). Development and Validation of a Coping Strategies Scale for Use in Chinese Contexts. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.845769>