













RESEARCH ARTICLE

Spiritual Growth and Stress Management of Physical Education Sport and Health Students

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Abstract

The purpose of this research was to identify the spiritual growth and stress management of Physical Education, Health and Recreation students. The method of this research was qualitative. The respondents to this study were students of the Physical Education, Health and Recreation study program at the Faculty of Sports and Health Sciences, Universitas Negeri Surabaya. The sampling technique used was quota sampling, which was determined by researchers to include as many as 170 students. The data collection technique was a survey with a questionnaire filled out online. The research instrument used was the Health Promoting Lifestyle Profile II instrument, which was adjusted to the characteristics of the activities of Physical Education, Health and Recreation students in the sub-questions about spiritual growth and stress management. The research data were processed descriptively and correlatively using Pearson Correlation analysis. The results of the Pearson Correlation test showed a significance value of $0.00 < 0.05$, so it was stated that the two variables were correlated. Spiritual growth and stress management, with a Pearson Correlation value of 0.728, have a degree of relationship with a strong correlation. The significance value of 0.728 is positive, indicating that the relationship between spiritual growth and stress management increases with the assumption that the higher the spiritual growth, the higher the stress management. The conclusion of this study is that the spiritual growth of Physical Education, Health and Recreation students has a positive correlation with stress management. This study contributes to providing recommendations for conducting stress management activities for students.

Keywords

Students, Spiritual Growth, Stress Management

INTRODUCTION

Spirituality is the development of one's inner well-being to achieve happiness, peace, and satisfaction in one's life (Subramaniam et al., 2011). This development will continue continuously, and there is no limit to someone experiencing the peak of spirituality, along with increasing life experience and providing valuable lessons from each experience that is passed. Spirituality is an abstract reality that is difficult to define as a moral compass

that gives direction and meaning to humans (Fuertes et al., 2021).

A person's spiritual maturity and prosocial motives will show significant changes with age (Ginting, 2018). A person's spiritual maturity should increasingly develop in a positive direction. Spiritual maturity results from interaction with the environment, where one will be able to filter information and make it a record for oneself. Spirituality in the world of education is a need to be able to improve the quality of teaching and learning,

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which is influenced by personal, social, religious, and cultural factors (Narayanan et al., 2023). A person's personality is different from another's to be able to accept social dynamics as a life lesson. Likewise with religion and culture, which, directly or indirectly, can be a means of improving one's spiritual quality.

Students, as academic beings, are in a learning environment that is conditioned by spiritual values in every lecture activity. Student spiritual development can be drawn from experience and reflection while getting assignments and activities related to spiritual development that are relevant to the study program (Moulin-Stožek, 2020). Spirituality is an excellent psychological resource for managing academic-related stress and plays an important role in shaping student identity, life values, and life goals (Ekwoyee et al., 2020). The lecture experience can be a very important and appropriate moment to enrich students' personal growth and development in addition to academic matters. For many students, college is their first step towards living a more independent life without direct supervision from parents, family, or teachers. They are seen as more mature and can be released to be freer and more responsible for themselves (Plante, 2020).

College is a long journey that requires high enthusiasm and struggle to study, complete college assignments, and participate in other off-campus activities. Students must be able to manage various stressors related to academic commitments and social activities, including finances. Students must realize that college requires a lot of assignments that are due in a short time, such as quizzes, exams, term papers, projects, and other practical assignments. If students cannot manage it well, it is certain that many students will experience stress (Kumar et al., 2013). Several factors cause student stress, namely academic matters, workload, relationships with peers, teachers, and parents, work and career aspirations, and financial problems (Goyal et al., 2021).

Stress is experienced by everyone, which can affect decisions by politicians, managers, religious leaders, employees, housewives, students, drivers, or even the unemployed (Mazo, 2015). Stress is a phenomenon that cannot be avoided in human life. Stress is a state of imbalance between a person's physiology and psychology that arises because of demands and the inability to meet these demands. Academic stress is the stress experienced by

students when facing every challenge during a long series of lectures. Stress is a personal experience caused by pressure or demand on someone that has an impact on how the individual attempts to cope with the pressure or demand. Stress occurs when there is a mismatch between pressure or demands and the individual's ability to fulfill or resolve them (Dumnar, 2018). Based on research (Mason, 2017), several categories of stress on students include stress due to financial, spiritual, physical, emotional, mental, and institutional problems.

Stress is a condition that causes negative thoughts and feelings in a person. Not everyone considers this situation stressful because the level of stress varies from one person to another (Kassymova, 2018). Stress can have a positive or negative impact depending on the intensity of the stress, the individual's self-management, and the support of the surrounding environment. One can see stress as a response, as a stimulus, and as a transaction (Rana et al., 2019). Students who have good spirituality will be optimistic, reduce stress and anxiety, and support feelings of comfort and calm. With proper stress management, students will be able to manage stress positively and mature as individuals. Physical Education students are prospective Physical Education teachers who are trained to become competent teachers. These competencies include pedagogical competencies, social competencies, personality competencies, and professional competencies, which should be well mastered to become quality educators. These prospective teachers must begin to instill spiritual values and also learn to manage their own stress when dealing with the challenges and demands faced while studying in college. The results of this study provide information about the spiritual growth and stress management of Physical Education, Health and Recreation students in the class of 2022 at the Faculty of Sports and Health Sciences, Universitas Negeri Surabaya, and their correlation.

MATERIALS AND METHODS

Research Design

This research was carried out in the month of June 2024 and with research ethics approval obtained from the Ministry of Education, Culture, Research and Technology, State University of Surabaya with project number B/65592/UN38.6/TU.00.09/2024. The ethical

approval obtained states that this study strictly adheres to the principles of research ethics and guarantees the confidentiality of research subject data. This study used a qualitative descriptive survey research design.

Participants

Respondents in this study were Physical Education, Health and Recreation students in the class of 2022 at the Faculty of Sports and Health Sciences, Universitas Negeri Surabaya. The sampling technique used in this study was a quota sampling of 170 students. This sampling quota was chosen by the researcher for the effectiveness of the research implementation. With a sample size of 170 students, the minimum number of research samples has been met, with a minimum sample size of 164 students calculated using the Slovin formula from a total population of 279 students.

Instruments

The instrument in this study was a questionnaire that used the Google Forms platform to collect data. The spiritual growth and stress management instrument in this study used the Health Promoting Lifestyle Profile II (HPLP-II) questionnaire, which corresponds to the characteristics of student activity in the Health & Recreation Physical Education Study Program with groupings of questionnaire questions that reflect spiritual growth and stress management. Validity spiritual growth and stress management was 0.71. Reability of spiritual growth was 0.811 and stress management was 0.744 (Kuan, et al., 2019).

Data analysis

The data normality test with the Kolmogorov-Smirnov Test was carried out using IBM SPSS version 25. The basic decision-making process for the Kolmogorov-Smirnov Test is:

- If the significance value is > 0.05, then the residual value is normally distributed.
- If the significance value is <0.05, then the residual value is not normally distributed.

The categorization of research results is carried out by establishing criteria based on the guidelines:

Table 1. Categorization of Research Results

No	Category	Criteria
1	Low	X<M-1SD
2	Medium	M-1SD ≤X< M +1SD
3	Hight	X>M+1SD

The correlation between variables in this study was tested with the Pearson Correlation test, which is a simple correlation involving one dependent variable and one independent variable. The Pearson Correlation test can also test the degree of closeness of the relationship between the two variables being tested. The magnitude of the Pearson Correlation value uses the following formula:

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2] + [n \sum y^2 - (\sum y)^2]}}$$

Information:

- x: first variable
- y: second variable
- n: the number of observations

The correlation test between the two variables in this study is expressed by the correlation coefficient (r). Furthermore, it is also important to find out whether the relationship between variables is positive or negative. The basis for making decisions for the Pearson Correlation test is:

If the significance value is < 0.05, then it is stated to be correlated.

If the significance value is > 0.05, it is stated that it is not correlated.

The correlation coefficient is a measure used to determine the degree of relationship between variables. The coefficient values are in the negative range of 1 (-1) to 1. The degree of relationship between the Pearson Correlation values is as follows:

Table 2. Classification of Pearson Correlation Values

No	Pearson Correlation Value	Value Degree
1	0.00 - 0.200	No Correlation
2	0.21 - 0.400	Weak Correlation
3	0.41 - 0.600	Moderate Correlation
4	0.61 - 0.800	Strtong Correlation
5	0.81 - 1.000	Perfect Correlation

Source: (Miftahuddin et al., 2021)

RESULTS

The results of the study with a sample size of 170 Physical Health and Recreation Education students' class 2022 Faculty of Sports and Health Sciences, Universitas Negeri Surabaya were distributed to as many as 117 men and 53 women.

Data visualization in this study was carried out using descriptive statistics by presenting some data as in the following table:

Tabel 3. Descriptive Statistics

	N	Range	Min	Max	Mean	SD	Variance
Spiritual growth	170	19	17	36	26.95	.330	4.301
Stress management	170	18	14	32	20.96	.290	3.778
Valid N (listwise)	170						

Min:(Minimum), Max: (Maximum), M: (Mean), SD: (Std. Deviation)

The results of the descriptive statistics show that spiritual growth has a minimum value of 17 and a maximum value of 36. The average value of spiritual growth is 26.95, with a standard deviation of 4,301. While stress management has a minimum value of 14 and a maximum value of 32. The

average value of stress management is 20.96, with a standard deviation of 3,778.

The data normality test with the One-Sample Kolmogorov-Smirnov Test was carried out using IBM SPSS version 25. The results of the normality test on the data from this study are:

Tabel 4. Data Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	170
Normal Parameters ^{a,b}	Mean
	Std. Deviation
Most Extreme Differences	Absolute
	Positive
	Negative
Test Statistic	
Asymp. Sig. (2-tailed)	
a. Test distribution is Normal.	
b. Calculated from data.	
c. Lilliefors Significance Correction.	
d. This is a lower bound of the true significance.	

The results of the normality test show a significance number of 0.200>0.05, so it is stated that the data is normally distributed. The

visualization of data distribution to describe spiritual growth and stress management data in this study in the scatterplot is as follows:

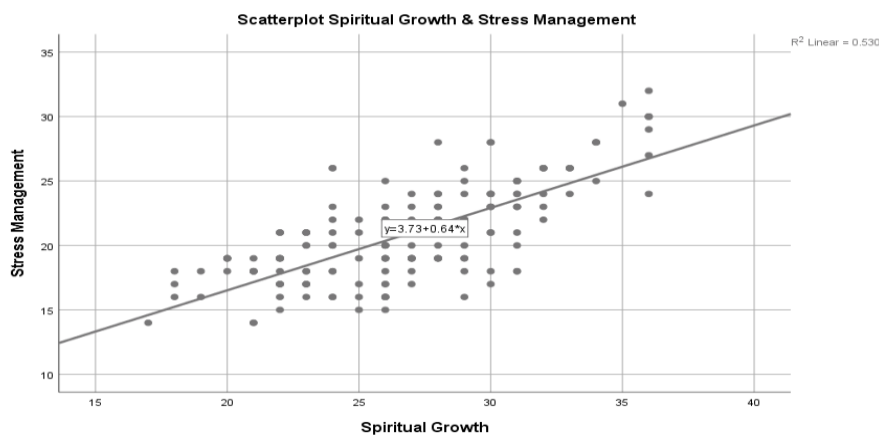


Figure 1. The scatterplot spiritual growth and stress managem

A scatterplot with a diagonal line typically shows a relationship where the values on the x-axis are equal to the values on the y-axis. This diagonal line, often referred to as the line of equality, helps visualize how close the data points are. Spiritual

growth and stress management the scatterplot shows the diagonal line: the higher the spiritual growth, the higher the respondent's stress management.

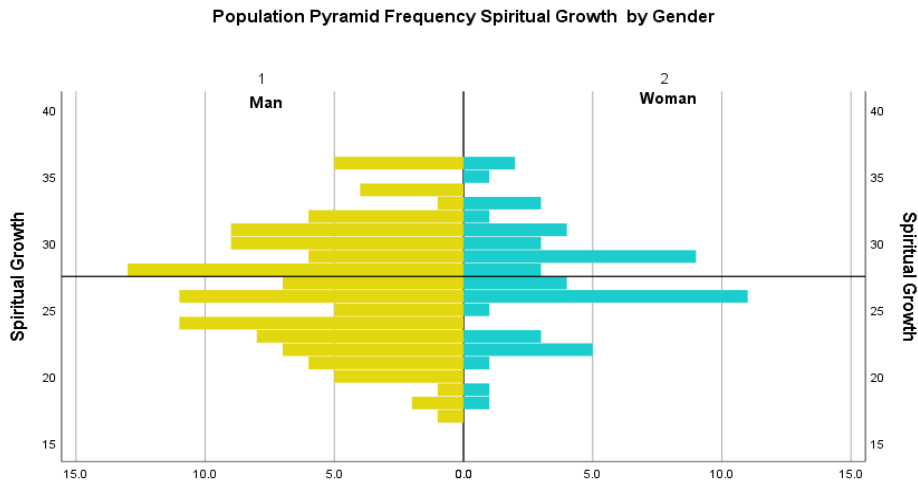


Figure 2. The histogram spiritual growth

The histogram of stress management between male and female students is as follow

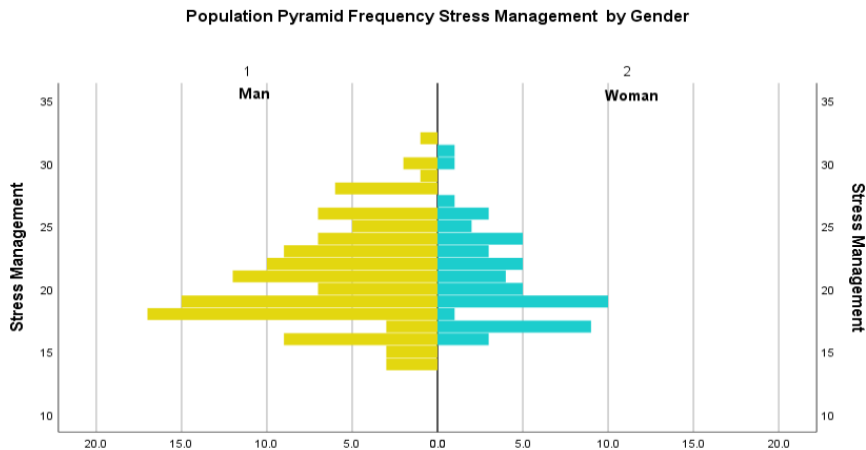


Figure 3. The histogram stress management

The categorization of the spiritual growth results of the respondents is as follows:

Table 5. Spiritual growth categorization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	30	17.6	17.6
	Medium	117	68.8	86.5
	Heigth	23	13.5	100.0
Total	170	100.0	100.0	

In the spiritual growth indicator, the majority of respondents fall into the medium

category. The categorization of the spiritual growth results of the respondents is as follows:

Table 6. Stress mangement categorization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	30	17.6	17.6	17.6
	Medium	110	64.7	64.7	82.4
	Heigth	30	17.6	17.6	100.0
	Total	170	100.0	100.0	

In the stress mangement indicator, the majority of respondents fall into the medium category. The correlation between variables in this

study was tested with the Pearson Correlation test. The results of the Pearson Correlation test on the data from this study are:

Table 7. Pearson correlation test results

		Correlations	
		Spiritual growth	Stress management
Spiritual growth	Pearson Correlation	1	.728**
	Sig. (2-tailed)		.000
	N	170	170
Stress management	Pearson Correlation	.728**	1
	Sig. (2-tailed)	.000	
	N	170	170

** . Correlation is significant at the 0.01 level (2-tailed).

The significance value is .000 < 0.05, so it is stated that the two variables are correlated, with the Pearson Correlation value of .728 being at the degree of relationship with a strong correlation. And the significance value of .728 is positive, indicating that the two variables are positively correlated.

DISCUSSION

Descriptive statistical data from the research results show that the average score on spiritual growth for all respondents is higher than the average stress management score. The minimum value of spiritual growth for all respondents is higher than the minimum value of stress management. Likewise, the maximum value of spiritual growth is higher than the maximum value of stress management. Visualization of data distribution to describe the spiritual growth and stress management data of respondents in the spiritual growth and stress management The scatterplot shows a diagonal line; the higher the spiritual growth, the higher the respondent's stress management.

The results of the research category based on 3 spiritual growth criteria showed that the Low category was 17.6%, the medium category was 68.8%, and the High category was 13.5%. While the

category of research results based on 3 stress management criteria shows that in the Low category it is 17.6%, the medium category is 64.7%, and the High category is 17.6%. Identification of student stress from an early age will make it possible to take steps on how to deal with student stress appropriately (Rizzolo et al., 2011). The level and type of stress for early semester students will be different from those for final semester students. At the time of data collection, the respondents were active students taking the second semester. Stress on early-level students does not necessarily have a negative impact because stress can motivate students to stay focused on lectures and try to study, such as by preparing assignments and exams (Istasy et al., 2021).

The Pearson Correlation test in this study was used to test the correlation and the degree of closeness of the relationship between the two variables being tested. The spiritual growth of Physical Education, Health and Recreation students has a positive correlation with stress management to the degree of a strong correlation. Research conducted by (Fahmi et al., 2022) states that individuals who have a high level of spirituality will be able to overcome problems that occur in their lives because spirituality will be able to provide meaning in dealing with stress that occurs.

The spiritual growth category table shows that the low category is 17.6%, the medium category is 68.8%, and the high category is 13.5%. Of the total respondents, the spiritual growth category was dominated by students who were in the medium category. The stress management category table shows that the stress management category is 17.6%, the medium category is 64.7%, and the high category is 17.6%. Of the total respondents in the stress management category, it was dominated by students who entered the moderate category.

Spirituality in education is needed to improve the quality of teaching and learning (Narayanan et al., 2023). The campus provides students with an opportunity to grow intellectually and actualize their potential for the future. But on the other hand, the campus also causes anxiety and stress for students (Tan et al., 2021). Sustained stress will have a negative impact on students' academic performance, learning achievement and performance, quality and quantity of sleep, physical health, mental health, and other impacts. Improving stress management abilities and skills for students is important (Tan et al., 2021). If students can deal with stress effectively, it will be able to provide motivation for progress in achieving goals (Lin, et al., 2020). Stress can be managed, and one of the best ways is counseling (Kaiwart, et al., 2015). Counseling can be done individually or in counseling groups, which are mostly formed among students. In addition, stress can be managed through physical activity (Kassymova et al., 2018).

Stress needs to be managed well, and the process takes practice. Stress management techniques that can be used are relaxation, meditation, and taking deep breaths (Kassymova et al., 2018). Research conducted by (Rizzolo et al., 2011) states that yoga, humor, and reading are simple methods to help reduce stress. Physical Education, Health and Recreation students have many activities in the field, which will provide many opportunities for communication and joking while attending lectures. Especially in courses in the form of game activities where you will feel happy or happy when doing them, such as in football practice courses, volleyball practice, basketball practice, small games, tennis practice, and other game activities, Regular physical activity has a positive impact on student health and reduces stress (Wilson-Salandy et al., 2012). Other techniques such as yoga, skills training,

mindfulness meditation, and psychotherapy have proven effective in reducing student stress (Reddy et al., 2018). Physical Education, Health and Recreation students with special characteristics, namely a fondness for physical activity, will support stress

Conclusion

This study contributes to providing recommendations for conducting stress management activities for students. The novelty of this study is that Spiritual Growth and Stress Management in Physical Education, Sports and Health Students have never been studied before. The conclusion of this study is that the spiritual growth of Physical Education, Health and Recreation students has a positive correlation with stress management.

Conflict of Interest

There is no conflict of interest in this research.

Ethical considerations

This research was conducted in June 2024 and with research ethics approval obtained from the Ministry of Education, Culture, Research and Technology, Surabaya State University with project number B/65592/UN38.6/TU.00.09/2024.

Author Contributions

Research Design: SW; Data Collection: SW, HNM, TH; Statistical Analysis: SW, SH; Data Interpretation: AP and LAK; Manuscript Preparation, AP; Literature Search: PBDJR. All authors have read and approved the published version of the manuscript.

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REFERENCES

- Dumnar, P.T. (2018). A Study of Spirituality and Stress among College Students. *International Journal of Indian Psychology*, 6(2). [CrossRef]
- Ekwonye, A.U. Sheikhomar, N., & Phung, Vy. (2020). Spirituality: a psychological resource for managing academic-related stressors. *Mental Health, Religion & Culture*, 23(9), 826–839. [CrossRef]
- Fahmi, A.Y., Soekardjo, S., & Hasanah, A.L. (2022). Tingkat Spiritual Berhubungan dengan Tingkat Stres pada Mahasiswa Tingkat IV S1 Keperawatan. *Jurnal Keperawatan Jiwa*, 10(1), 127. [CrossRef]
- Fuertes, A., & Dugan, K. (2021). Spirituality through the Lens of Students in Higher Education. *Religions*, 12(11), 924. [CrossRef]
- Ginting, H. (2018). Spiritualitas Dan Motivasi Menolong Pada Mahasiswa. *Psymphatic: Jurnal Ilmiah Psikologi*, 4(1), 305–310. [CrossRef]

- Goyal, P., Chakrawal, A.K., & Banerjee, R. (2021). Causes of Stress among Students in Higher Educational Institutions in India. *Journal of International Cooperation and Development*, 4(1), 48. [CrossRef]
- Istasy, M., Elias, R., Raheb, M., & Cernovsky, Z. (2021). Measuring Stress Experienced by University Students. *European Journal of Medical and Health Sciences*, 3(2), 133–137. [CrossRef]
- Kaiwart, A., Gupta, M., Sao, H., & Vishvakarma, S. (2015). Effect of Spiritual Counseling on Stress Level of College Going Students. *International Journal of Indian Psychology*, 3(1). [CrossRef]
- Kassymova, G. (2018). Stress Management Techniques Recommended for Students. November. [CrossRef]
- Kassymova, K., Kosherbayeva, N., Sangilbayev, S., & Schachl, H. (2018). Stress management techniques for students. *Proceedings of the International Conference on the Theory and Practice of Personality Formation in Modern Society (ICTPPFMS 2018)*. [CrossRef]
- Kuan, G., Kueh, Y.C., Abdullah, N., & Li Min Tai, E. (2019). Psychometric properties of the health-promoting lifestyle profile II: Cross-cultural validation of the Malay language version. *BMC Public Health*, 19(1), 1–10. [PubMed]
- Kumar, S., & Bhukar, J.P. (2013). Stress level and coping strategies of college students. *Journal of Physical Education and Sport Management*, 4(1), 5–11. [CrossRef]
- Lin, I.K.C., Marcus, V.B., Isa, S.F.A., Jamaluddin, M.H.B., Harun, M.N.B., & SaliM, M.A.B.M. et al., (2020). Stress Management Among Students in Universiti Teknologi Malaysia. *Proceedings of the International Conference on Student and Disable Student Development 2019 (ICoSD 2019)*, 1–9. [CrossRef]
- Subramaniam M., & Natarajan, P. (2011). Spirituality in Management. *Indian Journal of Applied Research*, 3(10), 1–3. [CrossRef]
- Mason, H. D. (2017). Stress-Management Strategies among First-Year Students at a South African University: A Qualitative Study. *Journal of Student Affairs in Africa*, 5(2). [CrossRef]
- Miftahuddin, M., Sitanggang, A.P., & Setiawan, I. (2021). Hubungan Antara Kelembaban Relatif Dengan Beberapa Variabel Iklim Dengan Pendekatan Korelasi Pearson di Samudera Hindia. *Jurnal Siger Matematika*, 2(1). [CrossRef]
- Moulin-Stožek, D. (2020). Spiritual Development as an Educational Goal. *ECNU Review of Education*, 3(3), 504–518. [CrossRef]
- N. Mazo, G. (2015). Causes, Effects of Stress and the Coping Mechanism of the Bachelor of Science in Information Technology Students in a Philippine University. *Journal of Education and Learning (EduLearn)*, 9(1), 71–78. [CrossRef]
- Narayanan, S.P., Rath, H., Mahapatra, S., & Mahakur, M. (2023). Preparedness toward participation in disaster management: An online survey among dental practitioners in a disaster-prone region of Eastern India. *Journal of Education and Health Promotion*, 12(1), 68. [CrossRef]
- Öztuna, Ş. & Işık, C. (2023). Evaluation of Fall from High Cases and Trauma Due to Fall from High in Terms of Mental Health. *Int. J. Act. Health Aging*, 1(1):21-26. [CrossRef]
- Plante, T. G. (2020). A Review of Spiritual Development and Transformation among College Students from Jesuit Higher Education. *Religions*, 11(7), 333. [CrossRef]
- Rana, R., & Gulati, R. (2019). Stress Among Students: An Emerging Issue. *Integr. J. Soc Sci*, 6(2), 44–48.
- Reddy, K.J., Menon, K.R. & Thattil, A. (2018). Academic Stress and its Sources Among University Students. *Biomedical and Pharmacology Journal*, 11(1), 531–537. [CrossRef]
- Rizzolo, D., Zipp, G.P., Stiskal, D., & Simpkins, S. (2011). Stress Management Strategies For Students: The Immediate Effects Of Yoga, Humor, And Reading On Stress. *Journal of College Teaching & Learning (TLC)*, 6(8). [CrossRef]
- Yun, C.T.P., & Greenwood, K.M. (2021). Stress, Sleep and Performance in International and Domestic University Students. *Journal of International Students*, 12(1). [CrossRef]
- Wilson-Salandy, S., & Nies, M.A. (2012). The Effect of Physical Activity on the Stress Management, Interpersonal Relationships, and Alcohol Consumption of College Freshmen. *SAGE Open*, 2(4), 215824401246497. [CrossRef]



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