

The Role of Family Support on Academic Stress for The Grade-Eight Students Mediated By Stress Coping And Self-Efficacy

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Abstrak

Dalam lingkungan akademik, terutama selama proses pembelajaran, prestasi akademik yang lebih baik atau buruk bergantung pada bukti dari berbagai faktor. Stres akademik merupakan salah satu faktor yang dapat mempengaruhi hal tersebut. Meskipun berbagai upaya telah dilakukan untuk mengatasi hal tersebut, penelitian ini akan mencoba menyelidiki sejauh mana dukungan keluarga pada stres akademik yang dimediasi oleh mengatasi stres dan self-efficacy. Penelitian ini menggunakan pendekatan kuantitatif dengan memanfaatkan kuesioner untuk melakukan pengumpulan data. Kuesioner tersebut dirancang dan dikembangkan oleh peneliti dan telah divalidasi oleh ahli. Sejumlah 50 siswa dilibatkan dalam penelitian ini. Data diolah menggunakan SPSS edisi 26, dan dianalisis secara deskriptif untuk melihat apakah ada korelasi yang signifikan antara keempat konstruk yang digunakan. Temuan menunjukkan bahwa korelasi kuat ditemukan di antara variabel-variabel yang diuji berdasarkan nilai standar statistik; nilai-p < 0,01. Oleh karena itu, kami menyimpulkan bahwa ada kebutuhan untuk memperhatikan strategi intervensi yang menekankan pada self-efficacy, dukungan keluarga dan kontrol stres di kalangan pelajar sekolah menengah karena korelasi yang kuat terungkap pada stres akademik mereka.

Kata Kunci: *Dukungan Keluarga, Stres Akademik, Mengatasi Stres, Kemandirian Diri.*

Abstract

In academic settings, especially during the process of learning, better or bad academic achievement is hinged on the evidence of diverse factors. Academic stress is one of them undergone by students both in high school or in tertiary education. Despite strivation being applied to such open hostility, the emphasis in this study is to probe the extent of family support on academic stress which is mediated by stress coping and self-efficacy. By having the nature of the research survey with quantitate approach, a questionnaire was employed during data collection. It is a set of questionnaires designed and developed by the researcher and appraised by an academic supervisor. A number of 50 students was purposely appointed and became the sample size. Data were treated using SPSS 26th edition, and descriptively analyzed to view whether there is a significant correlation among the four constructs used. Findings showcased that strong correlation was found among variables which was tested based on the statistic standard values; p-value < 0.01. Therefore, we concluded that there is a need for close attention to intervention strategies that emphasizes on self-efficacy, family support and stress control among high school learners since strong correlation was revealed on their academic stress.

Keywords: *Family Support, Academic Stress, Stress Coping, Self-Efficacy*

INTRODUCTION

High school students are for some not only believed to be one of the strongest pillars in the growth of any nation, but they are also a crucial and forecasting asset of the shape of tomorrow's country. By being among the hub stakeholders in the development of the nation, the appraisal of their performance mainly relies upon their academic success and achievements. Thus, pursuant to (Deng et al., 2022), to successfully compete in the prevailing dynamic industrial setting, students are not only supposed to nurture their knowledge but also are expected to bear imperative skills and abilities. In the current highly competitive academic performance mostly governed by the power of technology, students' performance is largely driven by diverse factors whereby some

of which include social media, academic quality, family support, social bonding, and so forth (Likisa, 2018). Alkali Kalli & Baba Shehu, (2018), asserted that during their academic journey, high school students continuously undergo both exogenous and intrinsic pressure from different sources during academic life, which ultimately engenders stress and poor performance.

Adolescence is a period when individuals experience psychological development and identification patterns from childhood to adulthood. According to data from the Ministry of Health (Riskasdas, 2018), the number of emotional mental disorders in the form of stress, depression, and anxiety in adolescents in Indonesia stands at 9.8% of the total number of adolescents in Indonesia. That said, teenagers are often faced with emotional problems mostly related to anxiety, depression, self-harm, and eating disorders. To our best intuition, four sources of emotional problems in adolescents are acknowledged namely intrapersonal, interpersonal, academic, and living environments. As highlighted in the preceding section, academic stressors are the most significant triggers in adolescents compared to other sources of stress (Reddy et al., 2017); (Ekpenyong et al., 2013). Junior high school students who fall into the middle age group between the ages of 14 and 16 are part of the youth who also experience academic stress. It is then undeniable that perceived stress is likely emanating from lower grades than expected, fear or anxiety about facing exams, a high workload in class, and a big number of daily and mandatory lessons (Ramadhani & Mahmudiono, 2021).

Despite the evidence that academic stress may cause negative effects and diminish the quality of sleep, it can also reduce the academic performance of the subjects by delaying the study process (Yan et al., 2018); (Zhang et al., 2020). Besides, academic stress may assign severe effects by decreasing the loss of memory ability, like cognitive impairment and life satisfaction (Lin et al., 2020); (Karaman et al., 2018). For (Kim et al., 2021), it can increase both the feeling of anxiety level, and the feeling of smartphone addiction. Additionally, it can cause and exacerbate the depression behaviors and depression itself. As we can see from available literature so far, there are several sources of academic stress that students face so often. However, for high students student and college students, the causes of academic stress can become more worse and complex. Take for example, due to academic stress, it may happen that some students deliberately decide to separate from their families and live alone or with their friends, and thereby they experience the hardship-life transition from high school life to campus life (Arnett, 2000); (Aspelmeier et al., 2012). Based on the foregoing explanations audited above, the definition of academic stress comes as a dangerous impact for students which needs much attention and efforts to uproot it. Then for the sake of all, the support of these students is needed in the wake of sustaining their well-being and improve the quality of education as a whole. To achieve that, the role of the parent is then indispensable to compensate and bridge such gaps as academic stress residing in children. Then, in other words, it is asserted that the support secured by the family makes the child feel well so it creates feelings of pleasure, comfort, and security (Imanian, 2014); (Thomas et al., 2017). In accordance with the foregoing statement, family support that parents can do in the learning process is by providing assistance as a learning motivator and providing facilities for children (Novianti, 2021). In tandem, parents play an important role in a child's development as they grow up and learn how to live life. That said the main role that parents play for their children is to influence how academics should be pursued and achieved throughout life. Last but not the least, parents shape the way children view their academics because parents can be both supporters and motivators to succeed in academics (Mata et al., 2018).

Several researchers, such as (Sandamini et al., 2021) and (Abbas et al., 2014) have investigated stress and depression elements from a performance perspective. As result, it was reported that stress and depression have a negative effect on the academic performance of students although (Woodyard, 2011) reported contradictory results that stress sharpens the individual's mind and reflexes and enables workers to perform better in taxing situations. Research conducted by (Nur et al., 2021) showcased that there is a positive relationship between family support and stress levels in SMK Kesehatan X students with a $p\text{-value} = 0.000 \leq 0.05$. This means that family support has a role in reducing stress in SMK Kesehatan X students in order to complete the academic stage. Students whose high family support tend to have low-stress levels and vice versa. This is due to the support expected by children so that the pressure or demands they feel are reduced and will have a good impact on their academics. Psychologically, efforts made by individuals in dealing with constructive or destructive stress are usually called stress coping (Gunther, 1994). Stress coping is broadly understood as a strategy carried out by

individuals to manage or regulate their behavior towards solving the simplest and most realistic problems and also functions to free themselves from real and unreal problems (Rosa et al., 2021). Another factor that influences academic stress is self-efficacy.

In a broad sense, self-efficacy is the most important thing in the world of learning. A person must believe in his or her abilities to deal with problems in learning because from that ability one can firmly convey what he knows and can easily solve problems being faced (Miyono, 2019). Personal self-efficacy is one of the factors that can influence individuals in overcoming the stressors they face. Then, individuals who have higher self-efficacy tend to be more able to regulate negative perceptions and are more likely to control negative emotions so that they are better able to cope with the stress they feel. As a benefit, self-efficacy can affect an individual's ability to deal with academic demands or stress and also how to deal with stress through effective action (Zajacova et al., 2005). However, to our best knowledge, the current literature provides mixed results mostly on the relationship between stress and performance. Therefore, the present study tends to focus on investigating academic stress among high school students and the role of family support to help overcome it through stress coping and self-efficacy. Most of the available studies on stress, anxiety, depression and other attribute mental problems are from industrial perspectives, and limited attention is paid to stress from school settings or institutional perspectives and examines its impact on students' academic performance and achievement. Then, based on the description above, we are interested in studying more deeply the role of family support on academic stress for junior High School students which is mediated by stress coping and self-efficacy. To help address the research objectives, some main hypotheses have been formulated; that is 1) there is an influence of family support on academic stress; 2) there is an effect of self-efficacy on academic stress; 3) there is a relationship between overcoming academic stress through stress coping.

METHOD

Research Design

In this research, we set out the various steps that were necessary for executing the study thereby satisfying its objectives. The gist of the study is to investigate the extent to which the contribution or the role of family support on academic stress for grade-eight students mediated by stress coping and self-efficacy. As the research population is concerned, the target population of this study contains all high school male and female students studying in *the SMP X* located in Semarang, Central Java, in Indonesia. The sampling technique which has been employed is the purposive sampling technique and a number of 50 students were purposely selected to become the source of information needed in the study. The technique of taking the number of samples from the population in this study uses the Slovin formula described as follows:

$$n = \frac{N}{N \cdot (e)^2 + 1}$$

n = number of sample/sample size

N= target population

e²= desired accuracy limit

Data Collection Instrument

As previously mentioned, the researcher collected data from high school students in grade eight and used a psychological scale with a Likert scaling model. In the frame of the present study, four constructs otherwise research variables have been appointed namely family support, academic stress, stress coping, and self-efficacy. As data collection method is concerned, a questionnaire was administered to the students and they were asked to complete it and provide their opinions independently. The questionnaire used was based on a 5-points Likert scale ranging from strongly agree (5) and strongly disagree equal to 1. The items have been retrieved from different online sources like the one (Goldberg, 1993) and adopted and used in the given questionnaire. Throughout this study, we have realized that there are several factors that affect or that can be used to appraise these aforementioned constructs. However, in order to converge our ideas and concentrate on the scope, we present our measurable factors according to (Taylor et al., 2009); (Taylor et al., 2007); and (Taylor 2003). For Taylor and his colleagues, academic stress can be appraised by employing an academic stress scale that encompasses cognitive, emotional, physiological, and behavioral aspects (Basith et al., 2021). In tandem, the same authors posited and asserted that family support mostly called parental social support was measured based on subconstruct such as emotional support, appreciation support, informational support, and instrumental support.

As randomly chosen, here is an example of an item used for the extent of family support in reducing academic stress. Did your parents or any of your relatives ever ask you about the progress of your study? Following this, self-efficacy was also relied on in this study. It was measured by the self-efficacy scale consisting of three main aspects namely; level, generality, and strength (Taylor, 2018). In a broad sense, coping with stress according to Azahra, 2017, is the way individuals do, in solving problems, adjusting to the desires to be achieved, and responding to situations that pose a threat to him or her. Stress coping with academic stress was measured based on gender, social-economic status, family support, and belief.

Data Analysis

The research employed the quantitative descriptive approach to determine the extent to which is the role of family support on academic stress mediated by stress coping and self-efficacy aspects. Data were dealt with SPSS 26th edition normality test, linearity test, and multiple regression tests were the gist of the quantitative analysis we utilized. In other words, the assumption test of the present work adopted the normality test, linearity test as well as multicollinearity test. Suffice to impart also that in normal conditions, the multicollinearity factor is analyzed through the variance inflation factor shortened VIF (Akinwande et al., 2015).

RESULTS AND DISCUSSION

Results

Demographic Profile of Respondents/Grade-Eighth Students

Table 1: Demographic Data of Students

Particulars	Description	Values	Percentages
Total received responses	<i>SMK 8 Semarang</i>	50 of 63	79.36%
Gender	Male	21	42%
	Female	29	59%
Age	≤ 15	36	72%
	≥ 16	14	28%

Instrument Validity and Reliability

In a scientific piece of work, validity is broadly defined as the extent to which any measuring research tool success to measure what is planned to be measured (Goodwin & Leech, 2003). Then the validity scale in this study adopted the validity content through experts' judgments as lecturers indeed. Meanwhile, the reliability was calculated and obtained from the internal consistency of the scale treated using SPSS software. Reliability is related to any measurement that can provide a consistent result with equal values in the research (Mohajan, 2017). By using the Cronbach's Alpha as the standard scale for reliability, (Ursachi et al., 2015) stated that item instrument results are reliable when it has a Cronbach's alpha value equal to or superior to 0.7. As showcased in the table 2 below, both family support and self-efficacy constructs applied five-item statements respectively, while academic stress and stress coping constructs were revealed by six and four items. After addressing all data in terms of reliability testing, all composite reliabilities felt in the acceptable interval, which is over 0.7. Overall, the results of validity and reliability for the four afore stated variables particularly enable us to be used as valid and reliable data.

Table 2. Instrument reliability and validity

Variable	No. of items	Factor loading	Composite ^a reliability	AVE ^b
Family support	5	0.818–0.941	0.863	0.698
Academic stress	6	0.852–0.897	0.778	0.721
Stress coping	4	0.776–0.921	0.897	0.685
Self-efficacy	5	0.779–0.918	0.914	0.693

^a Composite reliability should be > 0.7 (96).

^b The average variance extracted (AVE) value should also be > 0.5 (96).

Assessment of the Measurement and Assumption Test Results

Normality Test Calculation and Outputs

Table 3: Normality Test Calculation and Outputs

Constructs applied	Kolmogorov-Smirnov Z	Sig (p)	Description
Family support	.066	.117	Normal
Academic stress	.070	.200	Normal
Stress coping	.079	.2001	Normal
Self-efficacy	.059	.0121	Normal

The table depicted above contains and represents the results of the normality test results. In fact, a normality test was performed to disclose the status of data yields whether they are normally distributed or not. Then, it was shown from the distribution of the subject's score on the variables used that the normality assumption was verified and acceptable. The *One Sample-Kolmogorov-Smirnov Test* enables us to reveal such normality aspects. To our best understanding and also referring to the existing literature, data are assigned normal distributed if the *p-value* is superior or $>.05$ and vice versa (Louangrath Paul, 2015). Therefore, our results fulfilled normal distribution criteria.

Linearity Testing and Outputs

Table 4: Linearity test Outputs

Variables tested	F-Linearity	Sig.	Threshold	Annotation
Family support on the academic stress	69.715	.416	P $>.05$	Linear
Academic stress on self-efficacy	49.431	.170	P $>.05$	Linear
Academic stress on stress coping	51.178	.392	P $>.05$	Linear

Linearity is simply overviewed as the predictor variables in the regression calculations that have a straight-line relationship with the outcome variable (Mindrila et al., 2013); (Companies, 2005), Thus, the results of the linearity test were obtained from Dev. when variables were correlated with each other (see table 4). The value of linearity once correlating family support and academic stress was found to equal to 0.416, whereas a *p-value* of 0.170 and 0.392 were found between academic stress and self-efficacy; and academic stress on stress coping respectively, and so forth.

Multicollinearity Testing and Outputs

Table 5: Multicollinearity Results

Variables	Tolerance	VIF	Profile
Family support	.72	1.388	No multicollinearity was found
Self-efficacy	.69	1.238	Idem
Stress coping	.72	1.388	Idem

Basically, multicollinearity in SPSS for quantitative data refers to when your predictor variables are highly correlated with each other (Shrestha, 2020). So, in this research, it was employed to verify and ensure that there was no multicollinearity relationship mostly among the independent variables. The data showcased in table 5 exhibit that family support, self-efficacy, and stress coping had a value of VIF less than 10 and a tolerance score greater than 0.1. When taken together, it implies that family support, self-efficacy, and stress coping did not verify significant multicollinearity.

Research Hypothesis Testing through Multiple Regression Analysis

Constructs	R- square	F	Sig.	p-value	Description
Family support and stress coping on academic stress	0.46	43.98	.000	P $<.01$	Strong influence detected
Family support and self-efficacy on academic stress	0.18	4.98	.026	P $>.01$	Weak influence found
Stress coping and self-efficacy on academic stress	0.39	41.01	.003	P $<.01$	Strong influence detected

Based on the information presented in the table above, shows that there are tough relationships among all constructs used though the level of toughness is slightly different. As it can be viewed, a relationship was found significant when correlating family support and stress coping toward academic stress with a *p-value* of 0.000. In the same vein, strong liaison was also found when correlating stress coping and self-efficacy with academic stress with a *p-value* of 0.003. Conversely and a bit surprisingly, a weak relationship was tested while

correlating family support and self-efficacy on academic stress which was virtually equal to 0.026.

Correlational Analysis between two Variables

Table 6. Relationship Results

Variables	T	Sig.	Rule	Conclusion
Family support on the academic stress	-5.561	.000	P <.01	Sig. effect detected
Self-efficacy on the academic stress	-3.347	.001	P < .01	Sig. effect found
Stress coping on the academic stress	-4.403	.009	P <.01	Sig effect verified

The table above presents the summarized results of the correlational analysis when two variables were correlated with one another. Then findings indicate that significant influence was found among all constructs namely family support versus academic stress, self-efficacy with academic stress, and stress coping versus academic stress, with *p-value* .000; .001; and .009 respectively. In tandem, the analysis also showed T-values of -5.561, -3.347, and -4.403 (see table above). Overall, in this study on hands, a significant effect was found among the high school students through research variables employed.

DISCUSSION

The present study primarily aimed at extending merely the arena of academic stress on high school students towards other untapped and influencing constructs namely self-efficacy and stress coping. Substantial online search and some reference libraries revealed a paucity of information on this aspect of the mental problem of high school students in Indonesia. Understanding the space that the family occupies, the importance of self-efficacy, and stress coping as the ultimate cornerstone in successful and overcoming academic stress, we strove to establish the predictive ability of family support, self-efficacy, and stress coping in this research through research-based hypothesis and regression/correlational model. As a reminder, in this study, we analyze the role of family support on academic stress for grade-eight students in the Semarang quarter, along with self-efficacy and stress coping factors named mediators. Other than this, most students partaking in this research were adolescents; less than 20 years old.

These findings add to our knowledge of how young students commonly called teenagers' stress is predicted by academic workloads and duties that leading to poor academic performance. However, though our results have practical implications for prevention and intervention programs to safeguard these young generations' mental health, especially in the school context, family support, self-efficacy, and stress coping are credible and reliable assets to lessen its magnificence (Kausar, 2010); (Basith et al., 2021); (Shehadeh et al., 2020). From the perspective of the hypothesis used, the results of the multiple regression toward our four main variables (academic stress, family support, self-efficacy, and stress coping) indicated that family intervention is at a large scale. That said the three independent constructs significantly affected the academic stress of high school students. Then, the first hypothesis; that is, there is an influence of family support on academic stress; was accepted. In this context, academic stress could be predicted by family support along with other related attributes. The second hypothesis otherwise there is an effect of self-efficacy on academic stress; was also tested and felt in acceptance distant likewise for the third hypothesis that there is a relationship between overcoming academic stress through stress coping.

The findings in general agree with previous studies that revealed a high level of academic stress caused by several factors (Çivitci, 2015). According to Wang (Deng et al., 2022), a large level of school burnout is deemed to be the main source of the higher level of academic stress, which subsequently leads to a higher degree of depression. Other than the high school context, (Satinsky et al., 2021) stated that at the university level, both university officials and mental health specialists have conveyed worry about academic stress, depression, and anxiety among doctorate students. And their research indicated that depression and anxiety are quite common among Ph.D. students. In the same vein, (Strodl et al., 2015) obtained akin results and concluded that depression, anxiety, behavioral difficulties, irritability, and other issues are common among students who are under a lot of academic stress. Typically, (Kokou-Kpolou et al., 2021) demonstrated that depressive symptoms are common among tertiary students in France schools in which socioeconomic and demographic characteristics have a role. Some propositions and suggestions for overcoming or mitigating the impact of academic stress on

students' life have also been considered by different authors.

The previous relevant works include the research of (Tinto, 2010); (Nicpon et al., 2006) asserted that lack of support would be able to ease the students to undergo diverse problems related to their learning process. So, the lack of support especially family support is judged to be a strong predictor of high academic stress. Such fact was also claimed by (Voorhis et al., 2013) & (Cardona, 2021) who affirmed that the support from the parents can make the students feel important and cared for. Due to that, it is believed that once support is properly secured their emotional condition is more stable, and the feelings of integration with family also led them to stay strong and more persistent in tackling various experienced academic challenges.

Afterward, the relationship between academic stress and both self-efficacy and stress coping was found linear in this study and a significant positive correlation was revealed. Other studies have focused on the importance of self-efficacy and psychological issues like depression and social avoidance (Tahmassian & Moghadam, 2011); (Mukhtar & Hashim, 2010). These studies also reported that self-efficacy significantly predicts quality of life and a negative relationship between self-efficacy and depression and a positive relationship between self-efficacy and quality of life. Accordingly, the findings of this study were corroborated with the previous ones. Take for example, (Mehdi M. A., et al., 2018) opined that, self-efficacy could improve academic performance and reduce academic stress. Yet, it could also make students have a higher persistence rate, cope with rational strategies and lead them to better performance and achievement.

CONCLUSION

With insights from the grade-eight students at SMK 8 Semarang, Indonesia, this study contributes to the research by revealing how crucial family support, self-efficacy, and stress coping are in diminishing academic stress of students, which in turn leads to employing of inept discipline. After addressing all data, findings showcased that family support, self-efficacy, and stress coping to be consistently correlated to academic stress. As a suggestion, self-efficacy, family support and stress coping emerge as constructive ideas and also significant concepts that merit inclusion in education to reduce stress problems manifesting in academic settings. There is a need for close attention to intervention strategies that emphasize self-efficacy, family support, and stress control among high school learners.

DAFTAR PUSTAKA

- Abbas, J., Muzaffar, A., Mahmood, H. K., Ramzan, M. A., & Ul Hassan Rizvi, S. S. (2014). Impact of technology on the performance of employees (a case study on Allied Bank Ltd, Pakistan). *World Applied Sciences Journal*, 29(2), 271–276. <https://doi.org/10.5829/idosi.wasj.2014.29.02.1897>
- Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance Inflation Factor: As a Condition for the Inclusion of Suppressor Variable(s) in Regression Analysis. *Open Journal of Statistics*, 05(07), 754–767. <https://doi.org/10.4236/ojs.2015.57075>
- Alkali Kalli, K., & Baba Shehu, A. (2018). Effects of Stress on the Academic Performance of Students of Tertiary Institution (a Case Study of Ramat Polytechnic Maiduguri, Borno State, Nigeria). *International Journal of Humanities, Art and Social Studies (IJHAS)*, 3(3), 79–88.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Aspelmeier, J. E., Love, M. M., McGill, L. A., Elliott, A. N., & Pierce, T. W. (2012). Self-Esteem, Locus of Control, College Adjustment, and GPA Among First- and Continuing-Generation Students: A Moderator Model of Generational Status. *Research in Higher Education*, 53(7), 755–781. <https://doi.org/10.1007/s11162-011-9252-1>
- Basith, A., Syahputra, A., Fitriyadi, S., Rosmayadi, Fitri, & Triani, S. N. (2021). Academic stress and coping strategy in relation to academic achievement. *Cakrawala Pendidikan*, 40(2), 292–304. <https://doi.org/10.21831/cp.v40i2.37155>
- Cardona, M. A. (2021). Supporting Child and Student Social, Emotional, Behavioral, and Mental Health Needs. *U.S. Department of Education*, 1–99. <https://www2.ed.gov/documents/students/supporting-child-student-social-emotional-behavioral-mental-health.pdf>

- Çivitci, A. (2015). The moderating role of positive and negative affect on the relationship between perceived social support and stress in college students. *Kuram ve Uygulamada Eğitim Bilimleri*, 15(3), 565–573. <https://doi.org/10.12738/estp.2015.3.2553>
- Copyright, I., & Companies, T. M. (2005). *Multiple Regression and Correlation*. 431–509. <https://doi.org/10.1002/0471477435.ch14>
- Deng, Y., Cherian, J., Khan, N. U. N., Kumari, K., Sial, M. S., Comite, U., Gavurova, B., & Popp, J. (2022). Family and Academic Stress and Their Impact on Students' Depression Level and Academic Performance. *Frontiers in Psychiatry*, 13(June). <https://doi.org/10.3389/fpsy.2022.869337>
- Ekpenyong, C. E., Daniel, N. E., & Aribo, E. O. (2013). Associations between academic stressors, reaction to stress, coping strategies, and musculoskeletal disorders among college students. *Ethiopian Journal of Health Sciences*, 23(2), 98–112.
- Goldberg. (1993). *Goldberg's s Depression Scale*. 35209.
- Goodwin, L. D., & Leech, N. L. (2003). The Meaning of Validity in the New Standards for Educational and Psychological Testing: Implications for Measurement Courses. In *Measurement and Evaluation in Counseling and Development* (Vol. 36, Issue 3, pp. 181–191). <https://doi.org/10.1080/07481756.2003.11909741>
- Gunther, S. V. (1994). A Review of Coping, With Reference to Mental Health and Stress. *Mental Health Masters, January 1994*.
- Imanian, S. (2014). Children's sense of security in social spaces: A case study of middle-class children in Iran. *SAGE Open*, 4(4). <https://doi.org/10.1177/2158244014561212>
- Izzati, I. D. C., Tentama, F., & Suyono, H. (2020). Academic stress scale: A psychometric study for academic stress in senior high school. *European Journal of Education Studies*, 7(7), 153–168. <https://doi.org/10.46827/ejes.v7i7.3161>
- Karaman, M. A., Nelson, K. M., & Cavazos Vela, J. (2018). The mediation effects of achievement motivation and locus of control between academic stress and life satisfaction in undergraduate students. *British Journal of Guidance and Counselling*, 46(4), 375–384. <https://doi.org/10.1080/03069885.2017.1346233>
- Kausar, R. (2010). Perceived stress, academic workloads, and use of coping strategies by university students. *Journal of Behavioural Sciences*, 20, 31–45. <http://pu.edu.pk/images/journal/doap/PDF-FILES/3rd-article-Vol-20-No-1-2010.pdf>
- Kim, C., Kwak, K., & Kim, Y. (2021). *The Relationship between Stress and Smartphone Addiction among Adolescents: The Mediating Effect of Grit*. 1–17. <https://www.researchsquare.com/article/rs-159399/latest.pdf>
- Kokou-Kpolou, C. K., Jumageldinov, A., Park, S., Nieuviarts, N., Noorishad, P. G., & Cénat, J. M. (2021). Prevalence of Depressive Symptoms and Associated Psychosocial Risk Factors among French University Students: the Moderating and Mediating Effects of Resilience. *Psychiatric Quarterly*, 92(2), 443–457. <https://doi.org/10.1007/s11126-020-09812-8>
- Likisa, K. D. (2018). Challenges and prospects of competency-based education: The case of Adama science and technology university alumni students and hawas TVET college, Adama, Ethiopia. *The Journal of Competency-Based Education*, 3(2), e01163. <https://doi.org/10.1002/cbe2.1163>
- Lin, L., Zhang, J., Wang, P., Bai, X., Sun, X., & Zhang, L. (2020). Perceived control moderates the impact of academic stress on the attention process of working memory in male college students. *Stress*, 23(3), 256–264. <https://doi.org/10.1080/10253890.2019.1669557>
- LOUANGRATH Paul. (2015). Normal Distribution and Common Tests Used to Verify Normality. In *Research Methodology Series* (Issue July). <https://doi.org/10.13140/RG.2.1.1935.0883>
- Mata, L., Pedro, I., & Peixoto, F. J. (2018). Parental support, student motivational orientation, and achievement: The impact of emotions. *International Journal of Emotional Education*, 10(2), 77–92.
- Mindrila, D., Ph, D., Balentyne, P., & Ed, M. (n.d.). *Regression*. 2013.
- Mirzaei-Alavijeh, M., Hosseini, S. N., Motlagh, M. I., & Jalilian, F. (2018). Academic self-efficacy and its relationship with academic variables among Kermanshah University of Medical Sciences students: a cross-sectional study. *Pajouhan Scientific Journal*, 16(2), 28–34. <https://doi.org/10.21859/psj.16.2.28>

- Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University. Economic Series*, 17(4), 59–82. <https://doi.org/10.26458/1746>
- Mukhtar, F., & Hashim, H. A. (2010). Relationship among depression, self-efficacy, and quality of life among students in medical and allied health sciences. *Malaysian Journal of Medicine and Health Sciences*, 6(2), 51–58.
- Nicpon, M. F., Huser, L., Blanks, E. H., Sollenberger, S., Befort, C., & Kurpius, S. E. R. (2006). The relationship between loneliness and social support with college freshmen's academic performance and persistence. *Journal of College Student Retention: Research, Theory and Practice*, 8(3), 345–358. <https://doi.org/10.2190/A465-356M-7652-783R>
- Nur, S., Ahmad, A., Purnamasari, E., & Suryani, D. D. (2021). Dukungan Keluarga Dengan Tingkat Stres Pada Siswa Smk Kesehatan X. *Jurnal JKFT*, 6(1), 29–37. <http://jurnal.umt.ac.id/index.php/jkft/article/view/5215>
- Quincho, F. S., Galan, D. B., Pimentel, J. F., Josefina, H. F., Arenas, R. D., Crispin, R. L., & Navarro, E. R. (2021). Academic Stress in University Students: Systematic Review. *Elementary Education Online*, 28(79), 3224–3230. <https://doi.org/10.17051/ilkonline.2021.05.351>
- Ramadhani, N., & Mahmudiono, T. (2021). Attribution-NonCommercial-ShareAlike license (CC BY-NC-SA 4.0). ACADEMIC STRESS IS ASSOCIATED WITH EMOTIONAL EATING BEHAVIOR AMONG ADOLESCENTS. *Media Gizi Indonesia (National Nutrition Journal)*. 2021, 16(1), 38–47. <https://doi.org/10.204736/mgi.v16i1>.
- Reddy, J. K., Menon, K., & Thattil, A. (2017). Understanding Academic Stress among Adolescents. *Artha - Journal of Social Sciences*, 16(1), 39. <https://doi.org/10.12724/ajss.40.4>
- Riskesdas. (2018). Laporan Riskesdas 2018 Kementerian Kesehatan Republik Indonesia. In *Laporan Nasional Riskesdas 2018* (Vol. 53, Issue 9, pp. 154–165). [http://www.yankes.kemkes.go.id/assets/downloads/PMK No. 57 Tahun 2013 tentang PTRM.pdf](http://www.yankes.kemkes.go.id/assets/downloads/PMK%20No.%2057%20Tahun%202013%20tentang%20PTRM.pdf)
- Rosa, N. N., Retnaningsih, L. E., & Jannah, M. (2021). Pengaruh Strategi Koping Stres Mahasiswa Terhadap Stres Akademik Di Era Pandemi COVID-19. *Tanjak: Journal of Education and Teaching*, 2(2), 103–111.
- Sandamini, N., Silva, A., Perera, N., & Udayananda, V. (2021). *A comprehensive study of Emotion Based Depression detectors*. July.
- Satinsky, E. N., Kimura, T., Kiang, M. V., Abebe, R., Cunningham, S., Lee, H., Lin, X., Liu, C. H., Rudan, I., Sen, S., Tomlinson, M., Yaver, M., & Tsai, A. C. (2021). Systematic review and meta-analysis of depression, anxiety, and suicidal ideation among Ph.D. students. *Scientific Reports*, 11(1), 1–12. <https://doi.org/10.1038/s41598-021-93687-7>
- Shehadeh, J., Hamdan-Mansour, A. M., Halasa, S. N., Hani, M. H. B., Nabolsi, M. M., Thultheen, I., & Nassar, O. S. (2020). Academic Stress and Self-Efficacy as Predictors of Academic Satisfaction among Nursing Students. *The Open Nursing Journal*, 14(1), 92–99. <https://doi.org/10.2174/1874434602014010092>
- Shrestha, N. (2020). Detecting Multicollinearity in Regression Analysis. *American Journal of Applied Mathematics and Statistics*, 8(2), 39–42. <https://doi.org/10.12691/ajams-8-2-1>
- Strodl, E., Deb, S., & Sun, J. (2015). Academic Stress, Parental Pressure, Anxiety, and Mental Health among Indian High School Students Cite this paper Academic Stress, Parental Pressure, Anxiety, and Mental Health among Indian High School Students. *International Journal of Psychology and Behavioral Sciences*, 2015(1), 26–34. <https://doi.org/10.5923/j.ijpbs.20150501.04>
- Tahmassian, K., & Moghadam, N. J. (2011). Relationship between self-efficacy and symptoms of anxiety, depression, worry, and social avoidance in a normal sample of students. *Iranian Journal of Psychiatry and Behavioral Sciences*, 5(2), 91–98.
- Taylor, S. E. (2018). *Health Psychology (Edisi ke-10)*.
- Taylor, S. E., Klein, L. C., Gruenewald, T. L., Gurung, R. A. R., & Fernandes-Taylor, S. (2009). Affiliation, Social Support, and Biobehavioral Responses to Stress. *Social Psychological Foundations of Health and Illness*, 314–331. <https://doi.org/10.1002/9780470753552.ch12>
- Taylor, S. E., Welch, W. T., Kim, H. S., & Sherman, D. K. (2007). Cultural differences in the impact of social support on psychological and biological stress responses. *Psychological Science*, 18(9), 831–837. <https://doi.org/10.1111/j.1467-9280.2007.01987.x>

- Thomas, P. A., Liu, H., & Umberson, D. (2017). Family Relationships and Well-Being. *Innovation in Aging*, 1(3), 1–11. <https://doi.org/10.1093/geroni/igx025>
- Tinto, V. (2010). From theory to action: Exploring the institutional conditions for student retention BT - Higher education: Handbook of theory and research. In *Higher Education: Handbook of Theory and Research*. <https://doi.org/10.1007/978-90-481-8598-6>
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How Reliable are Measurement Scales? External Factors with Indirect Influence on Reliability Estimators. *Procedia Economics and Finance*, 20(15), 679–686. [https://doi.org/10.1016/s2212-5671\(15\)00123-9](https://doi.org/10.1016/s2212-5671(15)00123-9)
- Voorhis, F. L. Van, Maier, M. F., Epstein, J. L., & Lloyd, C. M. (2013). The impact of family involvement on the education of children aged 3 to 8. *Mdrc*, 10, 229. <https://files.eric.ed.gov/fulltext/ED545474.pdf>
- Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase the quality of life. *International Journal of Yoga*, 4(2), 49. <https://doi.org/10.4103/0973-6131.85485>
- Yan, Y. W., Lin, R. M., Su, Y. K., & Liu, M. Y. (2018). The relationship between adolescent academic stress and sleep quality: A multiple mediation model. *Social Behavior and Personality*, 46(1), 63–77. <https://doi.org/10.2224/sbp.6530>
- Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education*, 46(6), 677–706. <https://doi.org/10.1007/s11162-004-4139-z>
- Zhang, W. J., Yan, C., Shum, D., & Deng, C. P. (2020). Responses to academic stress mediate the association between sleep difficulties and depressive/anxiety symptoms in Chinese adolescents. *Journal of Affective Disorders*, 263(October 2019), 89–98. <https://doi.org/10.1016/j.jad.2019.11.157>