

Original article:**Correlation of Academic Stress with Internet Addiction in Students Junior High School Class VIII (Observational Study at SMP Islam Al Azhar 14 Semarang)***Annafi Nandhira Putri¹, Putri Rokhima Ayuningtyas², Ratnawati³***Abstract:**

Academic stress is a situation where students are unable to meet academic demands and perceive these demands as a nuisance or threat. A person's academic stress is influenced by one factor, namely internet addiction. This research aims to determine the relationship between academic stress and internet addiction in Class VIII Middle School Students. This research uses an analytical observational research design with a cross sectional approach. The research sample was taken using a proportional sampling technique, totaling 68 students in class VIII of Al Azhar Islamic Middle School 14 Semarang who met the inclusion criteria. The inclusion criteria were class VIII students who were willing to fill out the questionnaire completely. The questionnaires used were Gadzella's Students Life Stress Inventory and Young's Internet Addiction Test. Data analysis used Spearman correlation. In calculating internet addiction scores, the majority were found to be in the moderate category at 50 students (73.5%). In the academic stress score, it was found that the majority of academic stress was in the moderate category for 44 students (64.7%). The results obtained from the Spearman rho statistical test, $r = 0.674$ and $p = 0.000$ ($p < 0.05$). There is a significant relationship between academic stress and internet addiction with a strong relationship. The direction of the positive relationship shows that the more academic stress, the more it will cause internet addiction.

Keywords: Academic Stress, Internet Addiction, Class VIII Middle School Students

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Introduction

Internet addiction is a condition where individuals experience psychological dependence due to the inability to regulate time spent using the internet, and the feeling that the virtual world is more fun than the real world¹. Internet addiction is difficult to get rid of because it results in a feeling of joy and happiness. This has a negative impact on a person's life, for example reduced interest in daily life, lack of interest in interacting with other people. Internet usage in Indonesia continues to increase. Based on APJII (Asosiasi Penyelenggara Jasa

Internet Indonesia) in 2021-2022 the penetration rate in Indonesia will reach 77.02% of the entire population in all age groups, namely children to the elderly².

Based on the APJII report, in 2022 the majority of internet users will be aged 13-18 years with a penetration of 99.16. Stress is one of the individual factors that causes internet addiction³. The stress most experienced by students is academic stress⁴. Academic stress is a situation where students are unable to meet academic pressure and perceive this pressure as disturbing and threatening.

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Stress is caused by many academic pressures, for example school assignments, exams, low grades/achievements, etc⁵. Therefore, this research aims to determine the relationship between academic stress and internet addiction in Class VIII Middle School Students.

Material and Methods

The type of research carried out by researchers was observational analytical research with a cross sectional approach which was carried out at Al Azhar 14 Islamic Middle School Semarang in January 2024. The independent variable in this research was academic stress. The dependent variable in this research is internet addiction.

Academic stress is a situation where students are unable to meet academic pressure and perceive this pressure as disturbing and threatening. Academic stress was measured using Gadzella's Students Life Stress Inventory. Categories consist of frustration, conflict, pressure, change, self-imposed, physiological reactions, emotional reactions, behavioral reactions, and cognitive appraisals. The questionnaire consists of 51 items which are answered using the Likert method, answers consist of Never = 1, Rarely = 2, Sometimes = 3, Often = 4, and Always = 5. Stress scores are interpreted into 4 categories, namely normal (0-51), light (52-119), medium (120-187), and heavy (188-255). Data scale: ordinal.

Internet addiction is a condition where a person experiences psychological dependence, where a person loses control over their time when using the internet, feeling that the virtual world is more fun than the real world. The measuring tool for internet addiction uses an adaptation of Young's Internet Addiction Test. The questionnaire consists of 20 items. Questions using the Likert method, answers consist of very often (SS) = 5, often (S) = 4, neutral = 3, rarely (J) = 2, very rarely (SJ) = 1. Interpretation of scores is grouped into 3 categories, namely mild = 0-49, moderate = 50-79, severe = 80-100. Data scale: ordinal.

The target population in the research was Class VIII junior high school students. The accessible population in this study was class VIII students at SMP Al Azhar 14 Semarang. The sample in this study was class VIII students of Al Azhar Islamic Middle School 14 Semarang who met the inclusion criteria and were not included in the exclusion criteria, namely:

- a) Inclusion criteria
 - 1) Class VIII students of Al Azhar Islamic Middle School 14 Semarang.
 - 2) Willing to take part in research.
 - 3) Fill in all statements and questions on the questionnaire sheet completely.

- b) Exclusion criteria

- 1) Did not attend school during the research.

The population selected and taken into the study met the inclusion and exclusion criteria. The sample size was calculated using a cross sectional research design. The correlation formula (r) to determine the minimum sample size taken is:

$$n = \left[\frac{(z\alpha + z\beta)}{0.5 \ln \left[\frac{1+r}{1-r} \right]} \right]^2 + 3$$

The sample was taken based on the proportional technique, namely the selection of subjects in a representative manner, where each subject is determined in a balanced manner by the number of subjects from each stratum who meet the criteria of having equal rights to be sampled.

Statistical Analysis

Data analysis uses univariate and bivariate analysis. Univariate analysis in this research is academic stress and internet addiction variables. Meanwhile, bivariate analysis was used to see and measure the relationship between academic stress and internet addiction. All these calculations were carried out using statistical data processing software, namely the SPSS version 25 computer program. Data analysis used Spearman correlation, to determine the relationship between academic stress and internet addiction, if (p<0.05) then H0 was rejected and Ha was accepted, whereas if the results (p>0.05) then H0 is accepted and Ha is rejected. From the correlation test, the correlation value (r) will be obtained.

Results

The research was conducted on January 11 2024 – January 12 2024 at Al Azhar 14 Islamic Middle School Semarang. The sample was class VIII students who met the inclusion criteria. Data was obtained through direct recording of questionnaires filled out by students. Questionnaires include the Gadzella's Students Life Stress Inventory which aims to measure academic stress levels and the Young's Internet Addiction Test questionnaire to measure internet addiction scores. This research involved 68 respondents.

Table 1. Characteristics of Research Subjects

Variable		Frequency	Percentage (%)
Gender	Male	33 people	48,5
	Female	35 people	51,5
Age	13 years old	47 people	69,1
	14 years old	21 people	30,9

Based on table 1, it is known that the majority of respondents were 13 years old, 47 people (69.1%). It is also known that there are 51.5% more female respondents than male respondents.

Table 2. Academic Stress Category based on Domain Instrument

Domain		Kategori Stres Akademik			
		High-est Score	Low-est Score	Average Score	Std. Deviation
Academic Stressor	Frustrating	25	8	15,69	3,605
	Conflict	18	3	7,59	3,106
	Pressure	17	4	10,15	3,426
	Change	18	3	8,43	3,257
	Self-imposed	28	12	20,29	3,906
Reaction to Stressor	Physiological	56	13	30,65	9,366
	Emotional	22	7	12,93	3,529
	Behavior	24	9	15,03	3,705
	Cognitive	24	2	7,18	4,139
Score		195	72	127,93	26,318

Based on table 2, the academic stressors felt by self-imposed junior high school students have the highest score, namely with an average score of 20.29 where the highest score is 28 and the lowest score is 12. Reactions to stressors resulting from the stress experienced by junior high school students namely physiological reactions, the average score is 30.65 where the highest score is 56 and the lowest score is 13.

The results of the answers to the description of academic stress above are then categorized into mild, moderate and severe academic stress. The academic stress felt by respondents is presented in table 3 as follows:

Table 3. Academic Stress Category based on *Gadzella's Students Life Stres Inventory*

Score	Academic Stress Category	Amount	Percentage (%)
1 – 119	Mild	21	30,9
120 – 187	Moderate	44	64,7
188 – 255	Severe	3	4,4
Amount		68	100

Table 3. is the result of a description of academic stress in this research. Based on this table, it was found that the moderate academic stress category was felt most frequently by 44 students (64.7%).

Table 4. Categories of Internet Addiction based on Instrument Domain

Domain	Addiction Internet Category			
	Highest Score	Lowest Score	Average Score	Std. Deviation
Excessive Use	20	7	13,63	3,185
Withdrawal				
Tolerance	17	0	9,31	3,642
Negatif Repercussion	19	9	13,07	2,517
	30	10	18,29	4,292
Score	77	38	54,31	8,915

Based on Table 4, it is known that internet addiction experienced by junior high school students with negative repercussion has the highest score, namely a score with an average of 18.29 where the highest score is 30 and the lowest score is 10. The negative symptoms/effects of repercussion are the symptoms/effects that most felt by respondents.

The results of the answers describing the types of internet addiction above were then categorized into normal, mild, moderate and severe based on each respondent's score for the degree of internet addiction. The level of internet addiction felt by respondents is presented in table 5 as follows:

Table 5. Internet Addiction Category based on Young's Internet Addiction Test

Score	Category	Amount	Percentage (%)
0 – 30	Normal	0	0
31 – 49	Mild	16	23,5
50 – 79	Moderate	50	73,5
80 – 100	Severe	2	2,9
Amount		68	100

Table 5 provides the results of an overview of internet addiction in this study. Based on this table, it was found that the majority of students were in the moderate category, 50 (73.5%), this shows that 50 students experienced moderate levels of internet addiction.

The relationship between academic stress and internet addiction in Class VIII junior high school students was analyzed using Spearman's correlation method. The method aims to measure the closeness of the relationship between two variables on a nominal scale. Calculations use statistical data processing software, namely the SPSS version 25 computer program.

Table 6. Relationship between Academic Stress and Internet Addiction

Variable	Internet Addiction	
	p*	r
Akademic Stress		
Mild	0.000	0.674
Moderate		
Severe		

*Spearman's rho

Thus, the hypothesis of this research that there is a strong relationship between academic stress and internet addiction can be accepted with a correlation value of $r = 0.674$ $p = 0.000$ ($p < 0.05$). The direction of the positive relationship shows that the more academic stress the junior high school students have, the more internet addiction will occur.

Conclusion

Based on research conducted on 68 Class VIII students of Al Azhar Islamic Middle School 14 Semarang regarding academic stress and internet

addiction, several things can be concluded as follows:

1. There is a significant relationship between academic stress and internet addiction in Class VIII Middle School Students.
2. Academic stress in Class VIII middle school students is in the medium category at 64.7%.
3. Internet addiction among Class VIII junior high school students is in the moderate category at 73.5%.
4. The close relationship between academic stress and internet addiction is 0.674 in the strong category.

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Ethical clearance: All experiment for this study were approved by the Ethical Committee No.2/I/2024 Komisi Bioetik of Faculty of Medicine, Universitas Islam Sultan Agung.

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References:

1. Griffiths, M. D. (2000). "Internet addiction: time to be taken seriously?" *Addiction Research*, 8(5), 693–710.
2. APJII. (2022). Profil Internet Indonesia 2022. *Apji.or.Od*, June, 10. apji.or.id
3. Anggreani, N. (2018). Hubungan Stres Akademik dan Self-Regulated Learning Dengan Kecanduan Jejaring Sosial. *Psikoborneo: Jurnal Ilmiah Psikologi*, 6(2), 158–164. <https://doi.org/10.30872/psikoborneo.v6i2.4553>
4. Taufik, Ifdil, & Ardi, Z. (2013). Kondisi Stres Akademik Siswa SMA Negeri di Kota Padang. *Jurnal Konseling Dan Pendidikan*, 143–150. <http://jurnal.konselingindonesia.com>
5. Gaol, N. T. L. (2016). Teori Stres: Stimulus, Respons, dan Transaksional. *Buletin Psikologi*, 24(1), 1. <https://doi.org/10.22146/bpsi.11224> Tambahkan referensi dari IJHHS