

The Influence Of Peer Social Environment On Students Learning Strategies And Academic Achievement At Jakarta State University

Imelda Bekay Zharya¹, Christian Wiradendi Wolor², Darma Rika Swaramarinda³

¹Student of Faculty of Economics, State University of Jakarta

²Office Administration Educaion, State University of Jakarta

³Office Administration Education, State University of Jakarta

Abstract

This study aims to determine the Influence of Peer Social Environment on Learning Strategies and Academic Achievement of Jakarta State University Students. In the world of education, one indicator of the success of a university is the academic achievement of students. One of the many factors that can influence academic performance is the peer social environment. The peer social context can have a significant impact on individual performance, including in terms of learning strategies. Peers can serve as a source of inspiration, support, or even pressure that can influence the learning strategies considered by students. This study uses a quantitative method with a correlational design. The research sample was taken from students of Jakarta State University. Data were collected through questionnaires and analysis using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The results of this study indicate that there is a significant positive influence between the peer social environment and students' learning strategies and academic achievement. So it is hoped that the findings of this study can contribute to a better understanding and also provide insight into the development of programs aimed at improving academic achievement among students.

Keywords: Peer Social Environment; Learning Strategy; Academic Achievement; Students

1. Introduction

Higher education is an important stage in the development of a nation's human resources. In a college environment, students are not only required to master lecture materials, but also to develop social and personal skills. One important factor that influences student development in college is the social environment, especially the peer social environment (classmates or fellow students).

The peer social environment can have a significant influence on various aspects of student life, including learning strategies and academic achievement. Interaction with peers can facilitate the exchange of information, knowledge, and learning experiences. Discussions, group work, and collaboration with peers can enrich students' understanding of lecture materials and motivate them to study harder. Conversely, a less supportive peer social environment, for example one dominated by less productive behavior or lack of motivation, can have a negative impact on students' learning strategies and academic achievement. According to Desmita (2009), peers are children with more or less the same level of maturity, where this interaction plays a role in children's socio-emotional development. Peer groups provide sources of information and comparisons about the world outside the family.

Learning strategies are methods used in learning to achieve learning goals in line with the opinion of Alexander et al. (in De Boer et al., 2012) said that learning strategies are a form of procedural knowledge. This means that learning strategies are knowledge about how to learn to achieve learning goals. Learning strategies are an approach used by students in understanding and mastering lecture materials. Effective learning strategies can help students achieve optimal academic achievement. The peer social environment can influence the selection and implementation of student learning strategies. For example, students who interact with peers who have regular and disciplined study habits tend to be motivated to adopt similar habits. Conversely, students who are in a peer environment that is less supportive of academic activities may have difficulty developing effective learning strategies.

According to Bloom (in Slavin, 2005) defines academic achievement or learning achievement as a learning process experienced by students and results in changes in the fields of knowledge, understanding, application, analytical power, synthesis and evaluation. Academic achievement is an indicator of student success in completing their studies. Good academic achievement is the hope of every student and is also a benchmark for the quality of education in higher education. The peer social environment is believed to have a contribution to student academic achievement. Social support, motivation, and peer exchange can improve students' understanding of the lecture material and encourage them to perform better. Conversely, negative social pressure from peers can reduce learning motivation and have a negative impact on academic achievement.

Research on the influence of peer social environment on students' learning strategies and academic achievement has been widely conducted, but the context and characteristics of each university are different. UNJ with its diverse student characteristics requires special research to understand how peer social environment influences students' learning strategies and academic achievement in the campus environment. This understanding is important for the university, lecturers, and students to create a conducive learning environment and support optimal academic achievement.

This shows that students who have close friends tend to be more resilient and are able to cope with stress better. With this support, victims of bullying feel less alone and are more courageous in reporting bullying to authorities, such as teachers or counselors. Peer support does not only include giving words of encouragement or hugs, but can also take the form of real actions, such as accompanying the victim when reporting or helping to find solutions to overcome the situation. The peer social environment also encourages collaborative learning where students can share knowledge and skills with each other. Group discussions and collaboration in completing assignments or projects can improve understanding of the material and critical thinking skills, creating a more interactive and enjoyable learning atmosphere.

2. Literatur Review

2.1. Peer Social Environment

Peer social environment refers to a social group consisting of individuals of relatively similar age and social status, who interact with each other regularly and influence each other. In the context of students, peer social environment is a group of students who are on campus, either in the same study program, the same faculty, or even outside the faculty, who interact with each other and share experiences. According to Slavin (2011), defines peer environment as an interaction with people who have similarities in age and status. This environment functions as an arena where individuals can interact socially, learn from each other, and form their self-identity. Slavin also emphasizes that peer groups provide significant educational impacts through intense social interactions, which can affect academic achievement in school.

According to Hurlock (1988), states that peer groups are the first social environment for adolescents to learn to live with others outside their families. In this group, adolescents learn to respect, tolerate, and be responsible for each other. Hurlock also highlights the importance of peer groups in the formation of an individual's personality and social identity. This was revealed in a study conducted by Yusuf (2010), which showed that interactions in peer groups contributed significantly to the formation of students' character and behavior. They stated that peers not only function as agents of socialization but also as examples of behavior that can influence adolescents' attitudes and self-identity.

2.2. Learning Strategies

A learning strategies can be defined as a systematic plan containing a series of activities designed to achieve certain educational goals. According to Dick, W., & Carey, L. (1990) learning strategies are common components of a series of learning materials and procedures used simultaneously by teachers and students during the teaching and learning process. In other words, this strategy includes various methods and techniques that allow students to be actively involved in the learning process.

According to Etin Solihatin (2012) stated that learning strategies are a comprehensive approach in the learning system that functions as a general guideline. This strategy includes various aspects such as stimulation, student reactions, and feedback given to students to improve their understanding. This shows the importance of systematic planning in the teaching and learning process to achieve the desired educational goals.

A learning strategies is a method used in learning to achieve learning goals. Alexander et al. (in De Boer et al., 2012), said that learning strategies are a form of procedural knowledge. This means that learning strategies are knowledge about how to learn to achieve learning goals. Alexander et al. (in De Boer et al., 2012,) characterizes learning strategies as purposeful, in the

sense that learning strategies are consciously used by students to achieve the desired learning outcomes. The use of learning strategies has consequences for the learning process, which can facilitate students in learning and improve learning performance.

2.3. Academic Achievement

Academic achievement is a term used to indicate an achievement obtained from a person's learning outcomes over a certain period of time in the form of understanding, application, analytical skills, and evaluation expressed in the form of certain numbers or symbols through assessments carried out directly by teachers or using standardized tests. According to Sudjana (in Kunandar, 2013) academic achievement is the abilities possessed by students after receiving their learning experiences.

According to Setiawan (2000), academic achievement is something that indicates an achievement of the level of success of a goal, because of the learning efforts that have been made by someone optimally. Academic achievement focuses on the values or numbers achieved by students in the learning process at school or college. These values are mainly seen from the cognitive side to see the mastery of knowledge as a measure of learning outcomes. This is in line with Sobur's research (2006), adding that academic achievement is a change in behavioral skills or abilities that can increase over time and are not caused by the growth process, but by the learning situation. This shows the importance of the learning environment in influencing achievement.

3. Material and Method

This research uses descriptive analysis research methods. Descriptive analysis is a method that describes or describes information or data that has been obtained from the source with the aim of analyzing the data and obtaining conclusions from the results of this research.

3.1 Design Study

1. Population and Sample

Population is the entire subject or totality of research subjects which can be; people, objects, something in which can be obtained and or can provide research information (data). The population in this study refers to all active students of Jakarta State University. A sample is a portion of the number and characteristics possessed by the population, or a small part of the population members taken according to certain procedures so that they can represent the population. In this study the sample taken was 50 respondents of active students of Jakarta State University.

2. Research Instrument

The method used in this study uses a survey method. The survey method is a method that uses a questionnaire as an instrument used to collect research data needed for. The data in this study uses primary data sources in collecting data by distributing questionnaires. The research approach used is to use a quantitative approach, namely research that uses numbers and is rational and systematic, starting from data collection, data interpretation, and analysis of results. In addition, the author will use a descriptive approach in explaining the results obtained from respondents.

3.2 Data Analysis

After compiling the research instrument, the next step is to distribute the questionnaire form. After obtaining the number of samples, the data was analyzed using SEM PLS using the help of smart pls 4.0.

4. Result

This study uses 4 variables, namely three independent variables and one dependent variable. The independent variables in this study are the Social Environment of Peers (X1), Learning Strategies (X2), Academic Achievement (X3), while the dependent variable in this study is UNJ Students (Y). The types of research variables vary and refer to the research problems, so that the data description can be grouped into two parts, namely descriptive analysis and hypothesis testing.

1) Structural Model of Questionnaire Data

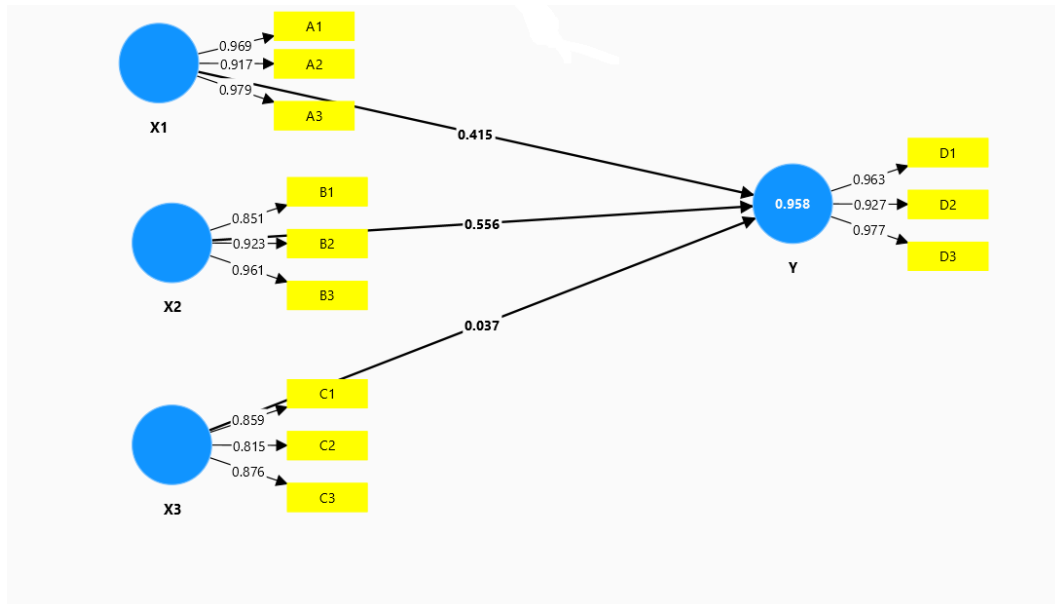


Figure 4.1 Outer Model

Figure 4.1 is a research model from the calculation results of the measurement model or outer model. Testing on the outer model is *convergent validity*, *discriminant validity*, *composite validity*, *average variance extracted (AVE)* dan *cronbach's alpha*.

2) Convergence Reability

In calculating convergent reliability seen in outer loading, the limit requirement used is 0.7. The indicator can be said to meet convergent reliability if it meets the outer loading value > 0.7 .

Variable	Indicator	Outer Loading	Information
Peer Social Environment (X1)	X1.1	0.969	Valid
	X1.2	0.917	Valid
	X1.3	0.979	Valid
Learning Strategies (X2)	X2.1	0.851	Valid
	X2.2	0.923	Valid
	X2.3	0.961	Valid
Academic Achievement (X3)	X3.1	0.859	Valid
	X3.2	0.815	Valid
	X3.3	0.876	Valid
Students	Y1.1	0.963	Valid

UNJ (Y)	Y1.2	0.927	Valid
	Y1.3	0.977	Valid

Table 4.1 Convergence Reliability

From the table above, it can be seen that the variables that meet the convergent reliability calculation are X1.1, X1.2, X1.3, X2.1, X2.2, X2.3, Y1.1, Y1.2, Y1.3, Z1.1, Z1.2, Z1.3 because the results are >0.7 .

3) Discriminant Validity

Discriminant Validity is used as one of the outer model value testers and ensures that the concepts in each latent variable are different from each other. Discriminant Validity needs to be done to find out how precisely the measuring instrument performs its measuring function.

	Peer Social Environment (X1)	Students Learning (X2)	Academic Achievement (X3)	Student UNJ (Y)
Peer Social Environment (X1)	0.955			
Learning Strategies (X2)	0.909	0.913		
Academic Achievement (X3)	0.719	0.827	0.850	
Students UNJ (Y)	0.947	0.964	0.795	0.956

Table 4.2 Discriminant Validity

4) Composite Reliability

Composite Reliability can be used to test the value of reliability on each indicator in a research variable. In the calculation of Composite Reliability there is a maximum variable value. The variable value must be more than 0.7.

Variable	<i>Composite Reliability (rho_c)</i>
Peer Social Environment (X1)	0.969
Learning Strategies (X2)	0.937
Academic Achievement (X3)	0.887
Students UNJ (Y)	0.969

Table 4.3 Composite Reliability

From the table above, it is shown that the variables of use of Peer Social Environment (X1), Learning Strategies (X2), Academic Achievement (X3) and UNJ Students (Y) are reliable variables because they have a value >0.7 .

5) Cronbach's Alpha

Variables in the Cronbach's alpha calculation can be said to be reliable if the Cronbach's alpha value is > 0.7 .

Variable	Cronbach's Alpha
Peer Social Environment (X1)	0.952
Learning Strategies (X2)	0.900
Academic Achievement (X3)	0.818
Students UNJ (Y)	0.952

Table 4.4 Cronbach's Alpha

From the table above, it can be seen that each variable in the study has a Cronbach's alpha value > 0.7 . It can be concluded that all variables in this study are valid.

6) Inner Model

a) R-Square

	R-square	R-square adjusted
Student UNJ (Y)	0.958	0.955

Table 4.5 R-Square

The R-Square value in the table above shows that the R-Square value has an effect of 0.958 or 95.8%. With this it can be said that the influence of X1, X2, X3 on Y is strong.

b) F-Square

F-square is used to calculate the magnitude of the influence between variables with effect size. F-Square has the condition that it cannot be < 0.02 .

	F-square
Peer Social Environment (X1-Y)	0.702
Learning Strategies (X2-Y)	0.825
Academic Achievement (X3-Y)	0.010

Table 4.6 R-Square

From the F-Square table above, it can be seen that the first relationship has a strong influence (0.825), the second relationship has a strong influence (0.702), and the third relationship has a weak influence (0.010).

c) Variance Inflation Factor (VIF)

	Peer Social Environment (X1)	Learning Strategies (X2)	Academic Achievement (X3)	Students UNJ (Y)
Peer Social Environment (X1)				5.877
Learning Strategies (X2)				8.980
Academic Achievement (X3)				3.224
Students UNJ (Y)				

Table 4.7 Variance Inflation Factor (VIF)

The Variance Inflation Factor (VIF) value has a requirement of <5 , if the VIF value is >5 then it can be stated that there is an error.

d) Path Coefisient

	Peer Social Environment (X1)	Learning Strategies (X2)	Academic Achievement (X3)	Students UNJ (Y)
Peer Social Environment (X1)				0.415
Learning Strategies (X2)				0.556
Academic Achievement (X3)				0.037
Students UNJ (Y)				

Table 4.8 Path Coefisient

The value criteria for the path coefficient is that if the value is positive, then the influence of the variable that it influences.

5. Discusion

Based on the data processing carried out by the researcher, the hypothesis proposed in this research can be accepted. Below are the results of the discussion of each hypothesis:

H1: Peer Social Environment Towards UNJ Students

This study aims to test whether there is an influence between the peer social environment on the learning motivation of UNJ students. The peer social environment is defined as the interaction, association, and influence received by students from their peer groups on campus and off campus. There are several indicators used in this study, namely emotional support, academic influence, social and recreational activities. The first hypothesis shows a significant influence between the peer social environment on UNJ students. This is supported by a coefficient value of 0.415 and a p value of 41.5%. Based on these calculations, it can be interpreted that the peer social environment has an influence on UNJ students.

H2: Learning Strategies Towards UNJ Students

This study aims to test whether there is an influence between learning strategies applied by students on their academic achievement at UNJ. Learning strategies in this study refer to the approaches and methods used by students in understanding, processing, and remembering lecture materials. This study uses several indicators to measure learning strategies, namely: cognitive strategies, metacognitive strategies, resource management strategies. The second hypothesis shows a significant influence between learning strategies on UNJ students. This is supported by a coefficient value of 0.556 and a p value of 55.6%. Based on these calculations, it can be interpreted that learning strategies.

H3: Academic Achievement Toward UNJ Students

This study aims to analyze the factors that influence the learning achievement of UNJ students. Learning achievement in this study is measured through the Cumulative Achievement Index (IPK). This study examines several factors that are suspected to have an influence, namely: learning motivation, social environment (peers and family) and learning strategies. The third

hypothesis shows a significant influence between learning strategies on UNJ students. This is supported by a coefficient value of 0.037 and a p value of 03.7%. Based on these calculations, it can be interpreted that learning strategies have an influence on UNJ students.

6. Conclusion, Implication, and Recommendation

Conclusion

1. Peer Social Environment (X1) has a positive and significant effect on UNJ students (Y) with a coefficient value calculated at 0.415 and a p value of 41.5%.
2. Learning Strategy (X2) has a positive and significant effect on UNJ students (Y) with a coefficient value of 0.556 and a p value of 55.6%.
3. Academic Achievement (X3) has a positive and significant effect on UNJ students (Y) with a coefficient value calculated at 0.037 and a p value of 03.7%.

Implication, and Recommendation

Based on the conclusions that have been presented previously, several recommendations or suggestions can be submitted for further researchers that can be used as a reference, evaluation and reference material to deepen and obtain better research results. Some of these recommendations include:

1. For Academics

It is expected that universities in Indonesia, especially UNJ, can develop programs that support the formation of a positive peer social environment among students. This program can be in the form of more structured orientation activities to facilitate interaction between new students, the formation of study groups or mentoring facilitated by lecturers or senior students, and the provision of space and facilities that support positive social interaction on campus.

2. For Students

It is expected that students need to be more selective in choosing a peer social environment. It is important to interact with peers who have high learning motivation, good study habits, and support each other in achieving academic goals.

3. For Further Researchers

Further researchers can add other relevant variables, such as campus academic climate, family support, or student personality factors, to enrich understanding of the factors that influence learning strategies and academic achievement. In addition, researchers can also use more diverse research methodologies, such as qualitative research or mixed methods, to obtain more comprehensive data.

7. Reference

- Boer de, H., Donker-Bergstra, A. S., & Kostons, D. D. N. M. (2012). *Effective Strategies for Self-regulated Learning : A Meta-Analysis Hester de Boer In cooperation with : Hanke Korpershoek Margaretha P . C . van der Werf. January 2013, 1–72.*
- de Boer, H., Bergstra, A., & Kostons, D. (2012). Effective strategies for self-regulated learning : de Boer , Hester ; Bergstra , Anouk ; Kostons , Danny Publisher ' s PDF , also known as Version of record Publication date : Effective Strategies for Self-regulated Learning : A Meta-Analysis Hester de Bo. *Groningen: GION Onderzoek/Onderwijs.*
- Desmita. (2009). Developmental Psychology of Students, a guide for parents and teachers in understanding the psychology of elementary, middle, and high school children. In *PT REMAJA ROSDAKARYA Bandung.*

- Dick and Carey, M. (1996). *Dick, Carey, dan Carey, op. cit ., hh. 6-7. 1*, 84–116.
- Farida, I. N., & Niswatin, R. K. (2017). Penggunaan Algoritma Naive Bayes Untuk Mengevaluasi Prestasi Akademik Mahasiswa Universitas Nusantara PGRI Kediri. *Jurnal Sains Dan Informatika*, 3(2), 122–127. <https://doi.org/10.34128/jsi.v3i2.113>
- Makrifatullah, S. H. (2018). *Pengaruh Prestasi Akademik, Prestasi Non Akademik, Bauran Promosi Terhadap Keterserapan Peluang Kerja Di Dunia Usaha Industri Peserta Didik Smkn 6 Kota Malang. 1996*, 21–29. <https://repository.stie-mce.ac.id/188/>
- Schuster, C., Stebner, F., Leutner, D., & Wirth, J. (2020). Transfer of metacognitive skills in self-regulated learning: an experimental training study. *Metacognition and Learning*, 15(3), 455–477. <https://doi.org/10.1007/s11409-020-09237-5>
- Suparyanto dan Rosad. (2020). Prestasi Akademik. *Suparyanto Dan Rosad*, 5(3), 248–253.
- Suprananto, K. (2012). Pengukuran dan penilaian pendidikan. *Graha Ilmu*, 10, 375–388.
- Taber, K. S. (2023). Educational Psychology. *Contemporary Trends and Issues in Science Education*, 56, 193–207. https://doi.org/10.1007/978-3-031-24259-5_14