



The Influence of Student Self Leadership and Self-Directed Learning on Learning Outcomes in XI TKRO Class Students at Turen Vocational High School

Syamsul Hadi, Erwin Komara Mindarta*, Agus Maulana

Department of Mechanical and Industrial Engineering, State University of Malang, Malang, Indonesia

**Corresponding author. E-mail: erwin.komara.ft@um.ac.id*

ABSTRACT

Knowing the magnitude of the influence and the level of self-leadership and independent learning ability in class XI TKRO students at Turen Vocational School on the learning outcomes obtained when carrying out learning activities at school is the aim or intent of this research. The quantitative survey method was used as a technique in this study using a sample of 88 students in class XI TKRO at Turen Vocational School. The information or conclusions obtained in this study indicate that there is an influence between students' self-leadership and self-directed learning on learning outcomes in class XI TKRO students at Turen Vocational School, which is significantly proven by the value of the results of hypothesis testing $0.000 < 0.05$ with the average student having ability of Students Self Leadership and Self-Directed Learning high category.

Keywords: *Students Self Leadership, Self-Directed Learning, Learning Outcomes.*

1. INTRODUCTION

The completeness of student learning outcomes is an indicator of the success of a learning or education at school. According to Wibowo [1] the success of a lesson is the achievement of students obtained in learning activities at school as evidenced by the value of learning outcomes. Sudjana [2] revealed that student learning outcomes are expressed as an increase in subtaxonomic values obtained by students from the process of learning activities. From this discussion interprets learning outcomes as the value obtained by students in the form of an increase at the subtaxonomic level through learning activities at school.

Subagia & Wiratma [3] explain that students in the learning process have different behaviors and characters. The character of the student in the individual is the main factor (internal factor) in the formation of learning outcomes, the character of the student is self-directed learning or independent learning. According to Musthofa [4] independent learning is the behavior of students' initiative and activeness during the learning process to improve their own learning outcomes without depending on others. Irvani [5] explained that the ability of Self Directed Learning in students aims to make students responsible for their own learning such as recognizing and defining goals on the needs of their

own learning resources, and evaluating their own learning outcomes.

Lasfeto & Ulfa [6] explained that the ability of Self Directed Learning in students arises because it is influenced by factors in students who are able to regulate or control themselves marked by students being able to understand self-concept, motivation, and student behavior when carrying out learning. Independent learning in students will occur if students have the ability to control themselves so that they are responsible for carrying out learning activities. Students' ability to self-regulate is one of the student's characteristics, namely Self Leadership.

Self Leadership is a self-leadership character that must be possessed by students. Wong Flores [7] explains that students at the late adolescent level are an important period in developing Self Leadership skills to be active in their learning activities at school, community and in the industrial world. Students Self Leadership emerged as an extension of the concept of self-management. Goldsby et al. [8] explained that self-leadership is an influence on oneself in the form of direction and motivation to achieve one's own goals. Another opinion from Alawiyah (2018)[9] self-leadership is a process of directing and motivating

oneself to carry out tasks and work properly and optimally.

In independent learning at this time students are directed to be active and independent in their learning so that learning goals can be achieved. Likewise with Turen Vocational High School students, especially TKRO competency competency students. Based on observations made by researchers at Turen Vocational School, there are students who are less active and are not responsible for their learning. This is marked by the behavior of students playing gadgets during class hours when the teacher is not in class. With this it can be concluded that the level of awareness and responsibility of students for their learning needs is still lacking, so that it can result in student learning outcomes not being optimal.

From these problems it is felt that students need to have the character of Self Leadership so that students are encouraged to be active in their learning. The ability of Self Leadership in students will affect each student's learning process independently. Students who have the ability to learn independently can absorb knowledge maturely and can complete learning tasks with maximum learning outcomes. This explains that student self-leadership or self-leadership possessed by students during the learning process is an important factor in making students more independent in achieving maximum learning outcomes.

Based on the discussion above, the intent or purpose of this study was formed, namely to find out how much influence and level of ability students have on self-leadership and self-directed learning on students' learning outcomes obtained during learning activities at school. The quantitative survey method was used as a technique in this study using a sample of research in class XI TKRO at Turen Vocational School.

2. RESEARCH METHODS

Quantitative survey method was used as a technique in this study to obtain data and analyze data using statistical formulas. Questionnaires are used as a tool for data collection in quantitative survey research (Sugiyono, 2017) [10]. Described in the framework of the relationship between variables as follows:

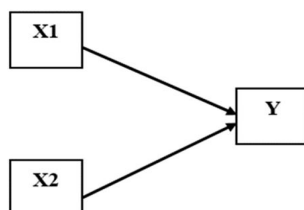


Figure 1. Relationship Framework

Information:

X1 : Student Self Leadership (SSL)

X2 : Self Directed Learning (SDL)

Y : Learning outcomes.

This research was carried out in May - July 2022 at the Turen Vocational School, Jalan Panglima Sudirman No.2, Turen, Kec. Turen, Malang Regency, East Java as the research location. TKRO class XI students as many as 4 classes were selected as research samples.

The probability of a simple random sampling type sample with the Isaac and Michael formula is used as a sampling technique in this study (Mukhadis, 2016) [11]. Samples were taken from the existing population with an error rate of 5%, in a population of 105 students, a sample of 88 students was obtained. Samples were randomly selected using a lottery application such as the social gathering application based on the serial number of student absences.

Questionnaires and documentation were chosen as a way of collecting research data. Sugiyono (2017) [10] explained that questionnaires are a number of questions or written statements submitted to respondents as a data collection tool. The reason for the researcher using a questionnaire is to obtain relevant data or information according to the circumstances of the respondent through the answers given by the respondent. Documentation in this study is in the form of report cards containing data on student learning outcomes.

To obtain data on students' self-leadership abilities, the ASLQ questionnaire research instrument used by Houghton et al. (2012) [12]. The rating scale on the Abbreviated Self-Leadership Questionnaire (ASLQ) questionnaire uses a five-point Likert scale, which represents the range of meaning from strongly disagree to strongly agree as the respondent's answer choices for answering each question item. The ASLQ questionnaire has three indicators and 9 question items to determine the value of Self Leadership in class XI TKRO students at Turen Vocational School. The indicators on the ASLQ questionnaire are used as assumptions from the 9 question items given to respondents.

1. Behavior focused strategies

Behavior focused strategies can occur because students focus on behavior and orientation on self-discipline. In this indicator students are emphasized on self-management to make study plans, observe students' self-behavior, and carry out assignments under any conditions so that in this indicator students' behavior is more aware of their own learning process.

2. Natural reward strategies

Natural reward strategies or natural reward strategies are strategies that aim to develop students' positive thinking about the tasks given so

that they are maximized in their completion, meaning that students have the perception that each task must be done optimally and pleasantly so that it can increase students' self-motivation to learn. Houghton et al. (2012) [12] describe two main natural reward strategies consisting of building more naturally pleasurable experiences into activities and engaging in rewarding activities.

3. Constructive thinking strategies

Constructive thinking strategies or constructive thinking strategies are strategies that focus on students' efforts to grow and develop mindsets under any conditions. This strategy can evaluate and increase students' self-confidence in building positive performance. (Houghton et al., 2012) [12] explained that constructive thinking strategies consist of three sub-scales, namely: visualizing successful performance, self-talk, and self-evaluating.

Then to obtain data or self-directed learning values for students, researchers used the Yurdugül & Demir (2017) [13] adoption questionnaire research instrument, namely the Self Directed Learning Questionnaire (SDLQ). The rating scale on the Self Directed Learning Questionnaire (SDLQ) uses a seven-point Likert scale, namely to find out the range from the meaning that is very inappropriate to the meaning that is very suitable as the respondent's answer choices for answering each question item. In Yurdugül & Demir's (2017) [13] questionnaire, the Self Directed Learning Questionnaire (SDLQ) has four indicators and 8 question items to determine the self-directed learning abilities of class XI TKRO students at Turen Vocational School. The indicators on the SDLQ questionnaire are used as assumptions from the 8 question items given to respondents.

4. Self Motivation

Self motivation or self-motivation is the ability of students to encourage or influence themselves to always be responsible for the learning process independently. Self-motivation in students can increase enthusiasm in students to always interpret the learning process in achieving maximum learning outcomes.

5. Self Management

Self-management or self-management is the ability of students to make their own learning goals and plans and carry out learning using appropriate learning strategies and resources in achieving maximum learning outcomes independently.

6. Self Modification

Self modification or self-renewal is the student's ability to adapt to new learning conditions, receive input or feedback from others, and be able to find or create their own learning atmosphere.

7. Self-monitoring

Self Monitoring is the ability of students to evaluate their learning processes and outcomes independently. This means that students know the problems faced by students during the learning process and are able to solve problems faced by themselves or with the help of others.

In this study, before collecting data on self-leadership and self-directed learning students, validity and reliability tests were carried out on the ASLQ and SDLQ questionnaire instruments. Then descriptive analysis is used to describe or describe a variable under study. The classical assumption is carried out as a prerequisite in testing the hypothesis of linear regression analysis. Furthermore, hypothesis testing was carried out to determine the magnitude of the influence or relationship on variable X on variable Y and the value of the coefficient of determination as a percentage of the influence exerted on variable X on Y together.

3. RESULTS AND DISCUSSION

The test results in this study are first at the level of validity and reliability of the SSL and SDL questionnaire instruments where each item of SSL and SDL questionnaire questions has a significance value of <0.05 which indicates that each item is valid and at a reliable level the SSL and SDL questionnaire instruments each has a Cronbach's Alpha value of 0.802 for the SSL value and 0.847 for the SDL value. The results of this study can be concluded that the SSL and SDL questionnaire research instruments are valid and very reliable.

The test results on the descriptive statistical analysis show the mean, mode, standard deviation, maximum, minimum, and sum values for the SSL, SDL, and learning outcomes variables.

		Statistics		
		SSL	SSL	HASIL BELAJAR
N	Valid	88	88	88
	Missing	0	0	0
Mean		36.23	41.25	84.31
Median		37.50	41.00	85.00
Mode		45	56	86
Std. Deviation		6.819	9.920	3.864
Variance		46.499	98.397	14.928
Range		23	43	16
Minimum		22	13	75
Maximum		45	56	91
Sum		3188	3630	7419

Figure 2. Results of analysis of descriptive statistical data

From the table of results of the analysis of descriptive statistical data above, a table of interval frequency distribution is formed for the variable which aims to show data on the SSL, SDL, and learning outcomes obtained from the respondents.

Table 1. SSL frequency distribution table

Intervals	Frequency	Percentage
22–24	6	7%
25–27	7	8%

28 – 30	9	10%
31–33	9	10%
34–36	9	10%
37–39	13	15%
40–42	15	17%
43–45	20	23%

The SSL interval class frequency distribution data has the highest frequency in the 43-45 interval class with 20 respondents at 23%. The smallest interval frequency is in the 22-24 interval class with 6 respondents at 7%.

Table 2. SDL frequency distribution table

intervals	Frequency	Percentage
13 – 18	2	2%
19 - 24	2	2%
25 -30	8	9%
31 -36	15	17%
37 -42	21	24%
43 -48	18	20%
49 -54	14	16%
55 -60	8	9%

The SDL interval class frequency distribution data has the highest frequency in the 37-42 interval class with 21 respondents at 24%. The smallest interval frequency is in the 13-18 interval class with 2 respondents at 2%.

Table 3. Table of frequency distribution of Learning Outcomes

intervals	Frequency	Percentage
75–77	7	8%
78 – 79	8	9%
80–81	6	7%
82–83	7	8%
84–85	18	20%
86–87	25	28%
88 – 89	12	14%
90 – 91	5	6%

Data on the frequency distribution of class interval learning outcomes has the highest frequency in the class interval 86-87 with 25 respondents at 28%. The smallest interval frequency is in the 90-91 interval class with 5 respondents at 6%.

Then the calculation of the trend of variables is done to describe the frequency of category level intervals on the variables SSL, SDL, and Learning Outcomes.

Table 4. The results of calculating the trend of the SSL category

intervals	Frequency	Percentage (%)	Category
45 – 40	35	40%	Very high
39 – 36	14	16%	Tall
35 – 32	14	16%	Enough

31–28	12	14%	Low
27–22	13	15%	Very low
Total	88	100%	

By looking at the results of the analysis of descriptive statistical data, it is known that the mean value of the SSL variable is 36.23. Based on the table of trends in the SSL category, the mean value is 36.23, which is in the 39-36 interval with the high category. This means that students or respondents have a high level of SSL ability.

Table 5. The results of calculating the SDL category trend

intervals	Frequency	Percentage (%)	Category
56–46	28	32%	Very high
45 – 39	25	28%	Tall
38–31	19	22%	Enough
30 – 25	11	13%	Low
24 – 13	5	6%	Very low
Total	88	100%	

By looking at the results of the descriptive statistical data analysis, it is known that the mean value of the SDL variable is 41.25. Based on the SDL category tendency table at an average value of 41.25, it is found at intervals of 45 – 39 with the high category. This means that students or respondents have a high level of SDL ability.

Table 6. Results of the calculation of the trend in the Learning Outcome category

intervals	Frequency	Percentage (%)	Category
0 – 75	1	1%	Not enough
76–85	55	63%	Good
86 – 100	32	36%	Very good
Total	88	100%	

By looking at the results of the analysis of descriptive statistical data, it is known that the average value of the learning outcomes variable is 84.31. Based on the trend table of learning outcomes categories at an average value of 84.31 there are at intervals of 76 – 85 with a good category. This shows that students have good learning outcomes.

3.1. The Effect of Student Self Leadership on Learning Outcomes

To determine the effect of student self-leadership on learning outcomes, it is necessary to test the hypothesis using linear regression. The results of this test show that

the significance value is $0.000 < 0.05$, which means that there is a significant influence between students' self-leadership on learning outcomes. Then based on the results of calculating the tendency of the SSL variable category, the average value resulting from the answer data on the questionnaire that has been filled in by students has SSL ability in the high category. This can happen because each indicator on the ASLQ questionnaire describes the student's condition according to the answer chosen by the student.

The indicators for Behavior focused strategies show that students are able to set specific goals for their learning process to achieve, find out how good the quality of their learning is at school, and carry out learning according to the goals set for themselves. The Natural Reward Strategies indicator shows that students are able to position themselves as successful behaviors in carrying out tasks, have high self-confidence or are optimistic to always succeed in completing each task and are able to understand themselves by giving gifts to themselves after completing tasks. -the task. The Constructive Thought Strategies indicator shows that students are able to understand,

Students Self Leadership can influence student learning outcomes because in Students Self Leadership abilities there is the ability to influence students themselves to be responsible for their performance or learning process marked by students being able to make plans in accordance with their learning goals, being able to position themselves as successful students in completing their tasks, and able to understand, deal with and evaluate any learning problems faced by the students themselves. Wong Flores (2020) [14] says that Students Self Leadership can influence student learning outcomes which are marked by the number of students who are able to carry out their work and study procedures according to the criteria marked by students who are responsible for their learning so that these students can achieve maximum learning outcomes.

3.2. The Effect of Self Directed Learning on Learning Outcomes

To determine the effect of self-directed learning on learning outcomes, it is necessary to test the hypothesis using linear regression. The results of this test show a significance value of $0.002 < 0.05$, which means that there is a significant effect between self-directed learning and learning outcomes. Then based on the results of the calculation of the tendency of the SDL variable category, the average value resulting from the answer data on the questionnaire that has been filled in by students has a high SDL ability category. This happens because each indicator on the SDLQ questionnaire describes the state of the students according to the answers chosen by the students.

On the Self Motivation indicator where students are able to motivate themselves to do assignments and are aware of their responsibilities in the learning process. On the Self Management indicator (self management) where in this indicator students are able to set goals and make their own study plans. Self Modification (self-renewal) in the ability of Self Directed Learning students are able to adapt to new learning conditions, receive input or feedback from others, and are able to find or create their own learning atmosphere. Self Monitoring (Self Monitoring) where in this indicator students are able to monitor, evaluate themselves, and have metacognitive awareness in carrying out the learning process.

SDL has an influence on student learning outcomes because in the ability of Self Directed Learning there is the ability of students to motivate, control, adjust, and evaluate the learning process and complete their own learning tasks without depending on others marked by the ability of students to make goals and planning their own study so that students are able to carry out their learning process independently and responsibly and get maximum learning outcomes. Yurdugül & Demir (2017) [13] said that students who get learning outcomes associated with higher independent learning.

3.3. The Effect of Students Self Leadership and Self Directed Learning on Learning Outcomes

To determine the effect of student self-leadership and Self Directed Learning on learning outcomes simultaneously (together) it is necessary to test the hypothesis using linear regression. The results of this test show that the significance value is $0.000 < 0.05$ with a determinant coefficient of 0.754 (75%), which means that Students Self Leadership and Self Directed Learning can significantly influence learning outcomes simultaneously by 75%.

The ability of SSL and SDL in students with high categories is a factor causing the formation of the influence between SSL and SDL on learning outcomes. This happens because the ability of SSL and SDL shapes the behavior of students who are already able to plan, carry out learning assignments, are able to identify and deal with learning problems, and adapt to new learning conditions, and are responsible for their own learning process without depending on others. .

Yurdugül & Demir (2017) [13] said that students who get learning outcomes associated with higher independent learning. Then it is supported by previous research, namely research by Yurdugül & Demir (2017) [13] which says that student learning outcomes can be influenced by self-directed learning which is characterized by the number of students who are able to carry out learning activities independently characterized by being able to identify their learning needs, study

plans and carry out learning. in accordance with the study plan so that these students can maximize in achieving learning outcomes.

4. CLOSING

4.1. Conclusion

A significance value of less than 0.05 explains that students' self-leadership has an effect on student learning outcomes and a mean value of 36.23 generated in students' answers means that students have high self-leadership abilities.

A significance value of less than 0.05 explains that self-directed learning has an effect on student learning outcomes and a mean value of 41.25 resulting in student answers means that students have high self-directed learning abilities.

The significance value is less than 0.05 and the R square value of 75% explains that self-directed learning influences student learning outcomes simultaneously.

4.2. Suggestion

1. For student

It is expected that students can develop Self Leadership and Self Directed learning abilities to improve the quality of their learning so that students will be better able to deal with learning situations under any conditions in order to get maximum learning results.

2. For Teachers

It is recommended for teachers to provide knowledge and assistance to students to develop Self Leadership and Self Directed learning abilities in schools in order to increase maximum student learning outcomes.

3. For Researchers

It is recommended for the next researcher to examine how to develop the character of Self Leadership and Self Directed learning or other student characters in order to improve the quality of student learning from within these students.

REFERENCES

- [1] Wibowo N. An Application of Mind Mapping Teaching Model to Enhance Natural Science Learning Achievement in the Fifth Grades in the First Semester at SD N 4 KALIUNTU. *International Journal of Elementary Education*, vol. 1(4), 2017, pp. 244-248. <https://doi.org/10.23887/ijee.v1i4.12965>

- [2] Sudjana N. *Dasar-dasar Pembelajaran*, Bandung. Sinar Baru Algesino. 2000.
- [3] I.W. Subagia, , I.G.L. Wiratma. Profile of Assessment of Student Learning Outcomes Based on the 2013 Curriculum. *JPI (Indonesian Education Journal)*, 5(1), 2016, p.39. <https://doi.org/10.23887/jpi-undiksha.v5i1.8293>.
- [4] U. Mustofa. The contribution of independent learning, learning facilities, and learning achievement of skills competencies to the performance of street vendors in multimedia expertise competency vocational high school students in the city of Malang. *Journal of Education*, 2 (11). 2017.
- [5] A.I. Irvani. The Correlation between Self-Directed Learning Ability and Problem Solving of Middle School Students Through Problem-Based Learning. *Journal of Teaching and Learning Physics*, 4(1), 2019, pp. 28–33.
- [6] D. B. Lasfeto, S. Ulfa. The relationship between self-directed learning and students' social interaction in the online learning environment. *Journal of E-Learning and Knowledge Society*, 16(2), 2020, pp. 34–41. <https://doi.org/10.20368/1971-8829/1135078>
- [7] I.B. Wong Flores. Self-Leadership and Superleadership: Examining the Leadership Development of University Undergraduate Students Using the Abbreviated Self-Leadership Questionnaire (Aslq). 2020.
- [8] M.G. Goldsby, E.A. Goldsby, C.B. Neck, C.P. Neck, R. Mathews. (2021). Self-leadership: A four decades review of the literature and trainings. *Administrative Sciences*, 11(1).
- [9] Alawiyah, R. (2018). The Application of Character Education for "Student Leadership" to Improve Independent Attitudes and Learning Achievement in Grade I Elementary Schools. *Proceedings of National Basic Education Seminar and Discussion*.
- [10] Sugiyono. (2017). *Quantitative Research Methods, Qualitative And R&D*.
- [11] Mustofa, U. (2017). The contribution of independent learning, learning facilities, and learning achievement of skills competencies to the performance of street vendors in multimedia expertise competency vocational high school students in the city of Malang. *Journal of Education*, 2 (11).

- [12] Houghton, JD, Dawley, D., & DiLiello, TC (2012). the Abbreviated Self-Leadership Questionnaire (ASLQ): a More Concise Measure of Self-Leadership. *International Journal of Leadership Studies*, 7(2), 216–232. http://regentuniversityonline.com/acad/global/publications/ijls/new/vol7iss2/IJLS_Vol7Iss2_Houghton_pp216-232.pdf
- [13] Yurdugül, H., & Demir, Ö. (2017). Öğretmen yetiştiren verbal programlarındaki öğretmen adaylarının e-öğrenmeye hazır bulunuşluklarının incelenmesi: Hacettepe üniversitesi örneği. *Hacettepe Eğitim Dergisi*, 32(4), 896–915.
- [14] Wong Flores, IB (2020). Self-Leadership and Superleadership: Examining the Leadership Development of University Undergraduate Students Using the Abbreviated Self-Leadership Questionnaire (Aslq).
- [15] Durnalı, M. (2020). The effect of self-directed learning on the relationship between self-leadership and online learning among university students in Turkey. *Tuning Journal for Higher Education*, 8(1), pp. 129–165. [https://doi.org/10.18543/TJHE-8\(1\)-2020](https://doi.org/10.18543/TJHE-8(1)-2020),

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

