
JUNIOR HIGH SCHOOL STUDENTS' PERCEPTIONS ON THE IMPLEMENTATION OF MONTESSORI APPROACH IN VOCABULARY LEARNING

Niko Albert Setiawan¹, Ouda Teda Ena²

Sanata Dharma University

niko.albert.setiawan@gmail.com¹, ouda@usd.ac.id ²

Abstract

Montessori approach is mostly used in the kindergarten and elementary school, especially in Indonesia. To explore the approach in the higher level of education, the research took place in a private Montessori Junior High School in Yogyakarta, Indonesia. This study is intended to investigate the students' perceptions on the implementation of Montessori approach to improve their vocabulary due to the fact that vocabulary is central to language learning. The research participants are students in grades seven and eight. There were three research instruments in this study, namely observations, questionnaire, and Focus Group Discussion (FGD). Three different research instruments were used to make sure that the data obtained was valid. The researchers crosschecked the results from each instrument to triangulate data consistency. Based on the findings, the students have positive perceptions on the implementation of Montessori approach for vocabulary learning. The implementation of Montessori approach promotes its unique learning activities, teacher's personal guidance, and students' learning awareness, internal motivation, and interest. The students perceived that the implementation of Montessori approach can improve their vocabulary.

Keywords: *Montessori approach, Junior High School, vocabulary learning, students' perception*

INTRODUCTION

Indonesia is one of the countries in which the government introduces English as one of the compulsory subjects in Junior High School. The approach applied in most of Indonesian schools is the traditional approach. In fact, there are a lot of approaches developed and innovated by researchers and educators around the world. One of the approaches which has been developed, especially in the

United States, is Montessori approach. Montessori is not a teacher-centered approach, but it focusses on the students' learning needs (Lillard, 1996, p. 3).

In the previous research, the researchers conducted a research about Montessori approach to enhance students' speaking fluency. The result of the study is "...most of the students ... have positive perceptions on the impact towards the implementation of Montessori approach on their speaking fluency" (Setiawan & Widianingtyas, 2017, p. 175). The results showed the positive students' perceptions on the implementation of Montessori approach in enhancing their speaking fluency. In this study, the researchers intended to discover the impact of the approach on another language element. It is proven that vocabulary is central to language because it does not only build cognitive system of knowledge but also the flow of the communication (Coady & Huckin, 1997; Zimmerman, 1994). Hence, lack of vocabulary can lead some negative influences to four English language skills namely speaking, listening, writing, and reading. In relation to this issue, sizable vocabulary is required to help people transfer and receive messages.

The uniqueness of the Montessori approach and the importance of vocabulary made this study necessary to be done. This study was conducted in a Montessori school in Yogyakarta, Indonesia. This Junior High School is included in the lower Adolescent Montessori, the third plane in Montessori education (Montessori, 1992; Montessori & Gutek. 2004; Henke, 2015). The researchers chose this Junior High School since it is one of the schools which implements Montessori approach in its teaching-learning processes in Indonesia. The purpose of this study is to investigate the students' perceptions on the use of Montessori approach to enhance their vocabulary.

REVIEW

The problem in this research is concerned about the students' perceptions on the implementation of Montessori approach to enhance their vocabulary. To answer the formulated problem, the researchers employed the perception theory from Kreitner and Kinicki (1992), Mozkowitz and Orgel (1969), and Robbin (2001) in order to develop the research instruments to collect the data from the

students. The Montessori theory (Montessori, 1992; Montessori & Gutek, 2004; Henke, 2015) was used as a base in designing the research instruments and analyzing the research results. Specifically, the theory of language acquisition by Krashen (2013) was used to determine whether the environment, friends, and teachers of the students could help them to acquire and learn English, especially vocabulary skills. Ryan and Deci's (2000) theory about motivation which is divided into intrinsic and extrinsic was used to explore the perceptions of the students towards vocabulary learning in their class. Researchers believe that effective vocabulary learning must concern about the receptive and productive knowledge to understand others and to be understood by others (Craik & Lockhart, 1972; Nagy, Anderson & Herman, 1987; Webb, 2005). In this study, the researchers intended to investigate the students receptive and productive vocabulary learning based on their perceptions.

Montessori Approach

Lillard (1996) describes that Montessori approach focusses on the children and their needs (p. 3). In 1994, there were Montessori schools in fifty-two countries on six continents, and their number continued to expand worldwide. (Lillard, 1996, p. 3). Nowadays, Michael Olaf Montessori Company (n.d.) state that "there are at least 4,000 certified Montessori schools in the United States and about 7,000 worldwide". Australia is one of the countries whose government recognizes Montessori approach as an alternative national curriculum. Michael Olaf Montessori Company (n.d.) say that

In 2011, Montessori Australia received official notification from the Australian Curriculum Assessment and Reporting Authority (ACARA) that the Montessori National Curriculum (MNC) has been recognised as an alternative national curriculum framework to be included on ACARA's Recognition Register

In Montessori approach, there are four stages of development identified. Montessori categorizes four specific planes (developmental stages). Each plane is divided into two sub-planes. The first plane is from birth to six; second plane, from age six to twelve; third plane, from age twelve to eighteen; and the fourth plane, from age eighteen to twenty-four. (Montessori, 2004; Lillard, 1996; Lillard, 2005).

Lillard (1996) states that “the success of Montessori education depends upon its wise application in three major facets: the prepared environment; the prepared adult; and freedom with responsibility” (p. 77). Lillard (2005) describes the Montessori approach into eight principles, namely learning by doing, liberty, interest, diminishing of extrinsic rewards and punishments, learning with and from peers, learning in context, teacher’s personal guidance, and order in environment and mind (p. 29).

In this study, the school was included in the lower Adolescent Montessori, the third plane in Montessori education. The students included in this stage were from age twelve to eighteen. In this stage, students undergo significant physical transformation to reach maturity. The students in this stage learn about their economic and social roles in the society (Lillard, 1996; Montessori, 2004). This stage has a function to prepare the students in the real world by focusing on the understanding of social and economic roles. Henke (2015) believes that the students in this stage develop their critical thinking and their social and moral values and ideals (p. 10). Lillard (1996) states that devising a lesson plan which combines intellectual study and discovery with real life situations is the challenge of the educators (p. 157).

Vocabulary

According to Read (2000), in the common perspective, vocabulary is described as knowledge to recognize the meanings of words (p. 16). Furthermore, Neumann and Dwyer (2009) define vocabulary as the words we must know in order to communicate adequately: expressive vocabulary (e.g. words in speaking) and receptive vocabulary (e.g. words in listening) (p. 385). In addition, researchers have indicated that vocabulary is central to language because it does not only build cognitive system of knowledge, but also the flow of the communication (Coady & Huckin, 1997; Zimmerman, 1994). Taylor(1990) states that vocabulary should have necessary roles to adult learners since its learning is not affected greatly by the modern age. Nagy and Anderson (1987) suggest that at least three until seven words are acquired in each day by a learner to have

adequate word knowledge (p. 1). In other words, it needs around 1000-2000 words per year to have sizable word amounts.

Researchers believe that effective vocabulary learning should be related to the receptive and productive knowledge to understand others and to be understood by others (Craik & Lockhart, 1972; Nagy, Anderson & Herman, 1987; Webb, 2005). From their theories, we can infer that the improvement of both the students' receptive and productive knowledge is important. It means that the students should not only learn how they recall their existing vocabulary, but also how they make use of their vocabulary in daily routines. Consequently, vocabulary learning method should enable the learners to experience more profound learning involving their receptive and productive knowledge.

METHODS

To solve the research problem, the researchers applied the mixed methods. According to Creswell and Creswell (2017) mixed methods research "focuses on combining both quantitative and qualitative research and methods in a research study" (p. 204). To answer the research question, the researchers clustered the qualitative and the quantitative data result.

The researchers conducted a concurrent triangulation strategy (see Figure 1). Creswell and Creswell (2017) state that "this model generally uses separate quantitative and qualitative methods as a means to offset the weaknesses inherent within one method with the strengths of the other" (p. 213). The researchers decided to implement mixed methods by reason of the ability to gain the advantages from both qualitative and quantitative methods.

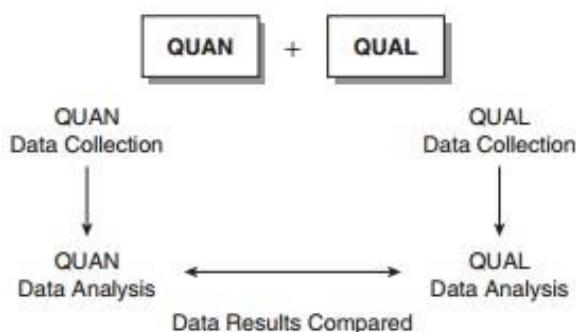


Figure 1. Concurrent triangulation strategy (Creswell & Creswell, 2017)

The participants of the research were seven and eight grade students of the school. The total number of the students was 11. The researchers observed the class three times. Focus Group Discussion (FGD) was conducted once with five selected students that represented different exposure to English language and their perceptions on whether Montessori Approach improved their vocabulary skills.

RESULTS AND DISCUSSION

The data were analyzed from the observations, questionnaire, and FGD. The result of the research was that the students' perceptions on the implementation of Montessori approach to enhance their vocabulary were positive.

The Importance of Montessori Learning Environment and Learning Activities

The learning environment and learning activities which were also found in the Montessori principles were emphasized. The students' perceptions on the learning process to enhance their vocabulary were presented in Figure 2.

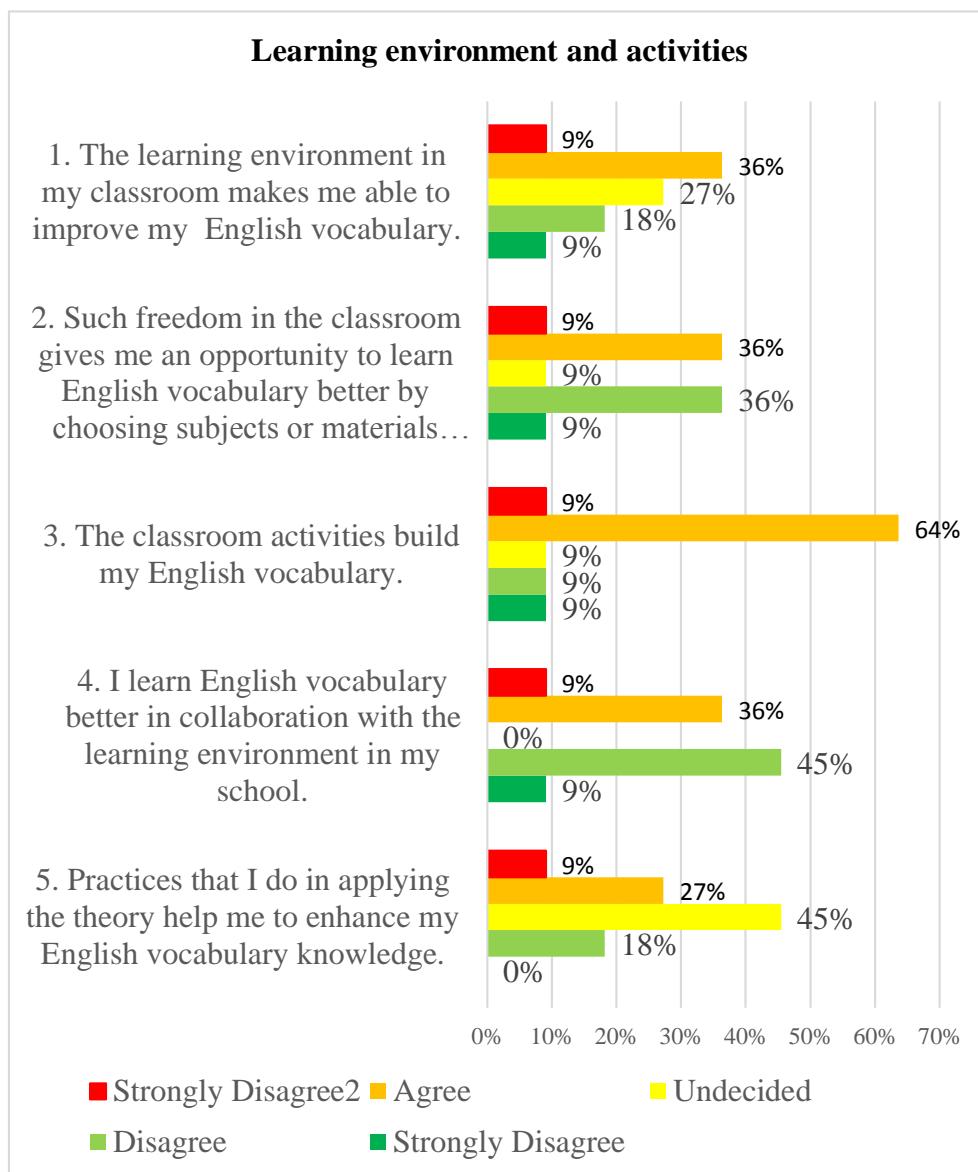


Figure 2. The importance of Montessori learning environment and activities

There were five statements from the result of the questionnaire that were elaborated in this section. Given the first statement, 45% of the students chose “agree and strongly agree” (agree 36% & strongly agree 9%), 27% of the students chose “undecided” and 27% of the students chose “strongly disagree and disagree” (strongly disagree 9% & disagree 18%). In this statement, most of the students

interpreted that learning environment often made them able to improve their vocabulary. It was in accordance with the FGD result that the students could improve their vocabulary through the learning environment. The researchers found that the students had limited knowledge about what learning environment is. However, the researchers then gave the examples of the learning media within the class, such as computers and books. They agreed that the prepared environment could enhance their vocabulary, especially computers. The following excerpt is the example of the Focus Group Discussion about the prepared environment in the school (see Excerpt 1). ‘R’ refers to the researcher and ‘S’ refers to the students.

- R : *From the apparatuses that you have specified, do they help you in improving your vocabulary?*
S5 : *Not for me.*
S2 : *It is helpful for me ...*
...
R : *But, books and **computers** are included in the **prepared environment**.*
S 1-5 : *Oh, I see.*
S2 : *I have said about computer.*
S5 : *Hahaha, it is helpful, Sir.*
S2 : *Yes, **computer** is helpful [in improving my vocabulary].*

Excerpt 1. The conversation about the prepared environment in Montessori

Based on the observation, the learning environment of the class was well-prepared. There were learning apparatuses, books, and computers for the students to access. Based on the FGD, most of the students chose computer for the most practical tool to enhance their vocabulary. The following excerpt is the example of the Focus Group Discussion about the most helpful thing prepared environment in the school (see Excerpt 2).

- S5 : *For me, the thing which is **most helpful** to improve my **vocabulary** is computer, Sir.*
R : *Why?*
S5 : *I am too lazy to search on the dictionary.*
S3 : *Hahaha.*

S5 : *It has too many [words], Sir. It is better to search for the meaning [of the vocabulary] on the google translate or for the definition on the [online] dictionary in the computer.*

S3 : *Simpler.*

S5 : *Yes.*

Excerpt 2. The conversation about the most helpful thing in the prepared environment

Researchers believe that effective vocabulary learning should concern about the receptive and productive knowledge to understand others and to be understood by others (Craik & Lockhart, 1972; Nagy, Anderson, & Herman, 1987; Webb, 2005). It was inferred that the students mostly used computer for receptive vocabulary learning.

In the second statement, 45% of the students chose “agree and strongly agree” (agree 36% & strongly agree 9%), 9% of the students chose “undecided” and 45% of the students chose “strongly disagree and disagree” (strongly disagree 9% & disagree 36%). Based on the data, some of the students interpreted that freedom in choosing what they learn on a day sometimes improved their vocabulary, while some of them rarely felt that.

In the third statement, 73% of the students chose “agree and strongly agree” (agree 64% & strongly agree 9%), 9% of the students chose “undecided” and 18% of the students chose “strongly disagree and disagree” (strongly disagree 9% & disagree 9%). Most of the students interpreted that classroom activities often built their vocabulary.

In the fourth statement, 45% of the students chose “agree and strongly agree” (agree 36% & strongly agree 9%), 0% of the students chose “undecided” and 55% of the students chose “strongly disagree and disagree” (strongly disagree 9% & disagree 45%). Most of the students rarely learnt vocabulary through the collaboration with the learning environment. The fourth statement was related with the first statement. Hence, the researchers implied that because the students did not understand clearly about the definition of learning environment, the questionnaire showed that most of the students rarely collaborate with the learning environment to enhance their vocabulary. Lillard (2005) states that the

environment in Montessori class is prepared for the students to collaborate with it in the learning process (p. 29).

In the fifth statement, 36% of the students chose “agree and strongly agree” (agree 27% & strongly agree 9%), 45% of the students chose “undecided”, 18% of the students chose “disagree” and no one chose “strongly disagree”. Lillard (2005) states that in Montessori education, children learn something well by doing it (p. 29). In the statement, most of the students perceived that sometimes the practices they did in applying their theories were able to improve their vocabulary.

In this section, the highest number of the students (73%) who chose agree and strongly agree was in the fourth statement. They interpreted that learning activities in their classroom improved their vocabulary. Based on the FGD result, all of the chosen students agreed that most of the subjects used English as a medium, except Indonesian and gardening subject. It could be the rational reason why students' vocabulary could be improved through the learning activities. S3 said “Maybe, it is because of [almost] all of the subjects learning use English)” (FGD). Based on the data from the FGD, the students acquired the vocabulary while they were studying. (Krashen, 2002; Krashen, 2013).

Based on the observation, the teaching and learning process in the class was included in both receptive and productive learning. In the teaching-learning process, the students did not only receive the vocabulary through reading and listening, but also produced it by speaking and writing. Therefore, it can be inferred that the learning activities in the classroom made students' vocabulary learning effective (Craik & Lockhart, 1972; Nagy, Anderson & Herman, 1987; Webb, 2005).

The Importance of Peer Collaboration and Teacher's Guidance

Multi-age peer collaboration and the personal teacher guidance were the focus of this section. The students' perceptions on multi-age peer collaboration and personal teacher guidance to enhance their vocabulary were presented in Figure 3.

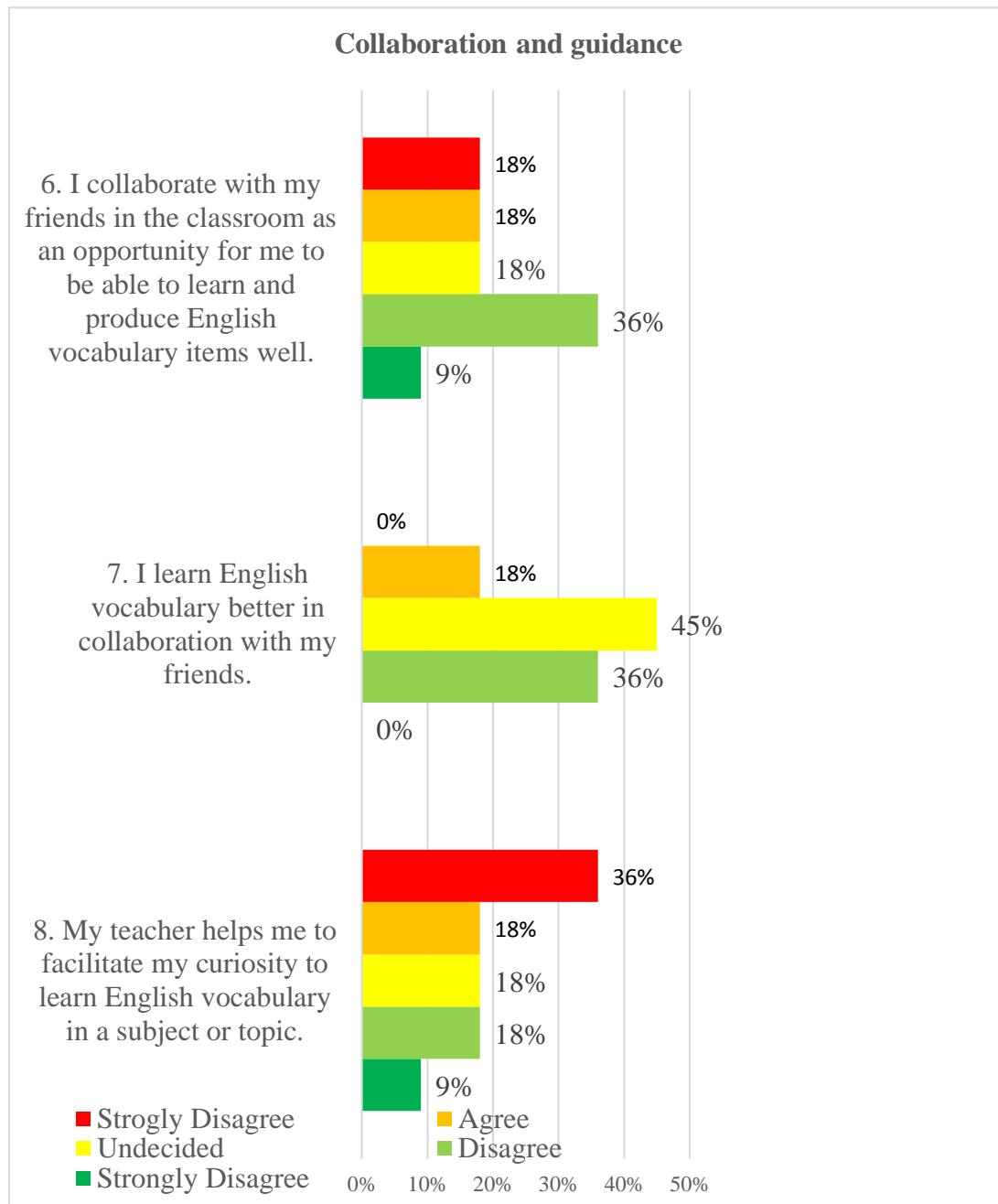


Figure 3. The importance of peer collaboration and teacher's guidance

There were three statements in this section. In the sixth statement, 36% of the students chose “agree and strongly agree” (agree 18% & strongly agree 18%), 18% of the students chose “undecided” and 45% of the students chose “strongly disagree and disagree” (strongly disagree 9% & disagree 36%). Most of the students rarely collaborated with their peers to learn vocabulary.

In the seventh statement, 18% of the students chose “agree”, no one chose “strongly agree”, 45% of the students chose “undecided”, 36% of the students chose “disagree”, and none of the students chose “strongly disagree”. Most of the students sometimes learned vocabulary better in the collaboration with their friends.

In the eighth statement, 55% of the students chose “agree and strongly agree” (agree 18% & strongly agree 36%), 18% of the students chose “undecided” and 27% of the students chose “strongly disagree and disagree” (strongly disagree 9% & disagree 18%). Most of the students interpreted that their teacher often helped them to facilitate their curiosity to learn vocabulary in a subject or a topic. This statement has the biggest number of students who chose the “agree” and “strongly agree” categories. This finding was related to the finding of the teacher’s personal guidance. Moreover, from the FGD analysis result, a student explained that he often asked his teacher if he had a problem about vocabulary. Excerpt 3 is about the role of teacher’s personal guidance in improving students’ vocabulary.

R : ... *How has the Montessori learning process in your school affected your vocabulary skills? Who want to answer first?*

S1 : *For me. My vocabulary has increased. For example, when I read something on the internet and find difficulties in understanding it. Besides searching on the internet, I sometimes asked the teacher and he or she will explain about it...*

Excerpt 3. The conversation about the role of teacher’s personal guidance in improving students’ vocabulary

It can be concluded that the most of the students preferred to ask for their teacher’s personal guidance rather than to collaborate with their peers if they face some difficulties related to vocabulary. Based on the observation, the students sometimes consulted to the teacher about the material that they had not understood. It happened mostly in their individual time and in the teaching-learning activities in the class. Lillard (1996) believes that prepared adult is one of the Montessori principle which has the big role in the success of the approach. In this study, the prepared adult was the prepared teacher (p. 77). Moreover, the

right amount of teacher's guidance will be associated with better students' outcomes (Lillard, 2005, pp. 29 & 257). Better students' outcomes in this research would affect their vocabulary positively through teacher's personal guidance and Montessori learning process.

The Importance Students' Awareness, Motivation, and Interest

This section focused on students' awareness, motivation, and interest. The students' perceptions on the implementation of those Montessori application to enhance their vocabulary was presented in Figure 4.

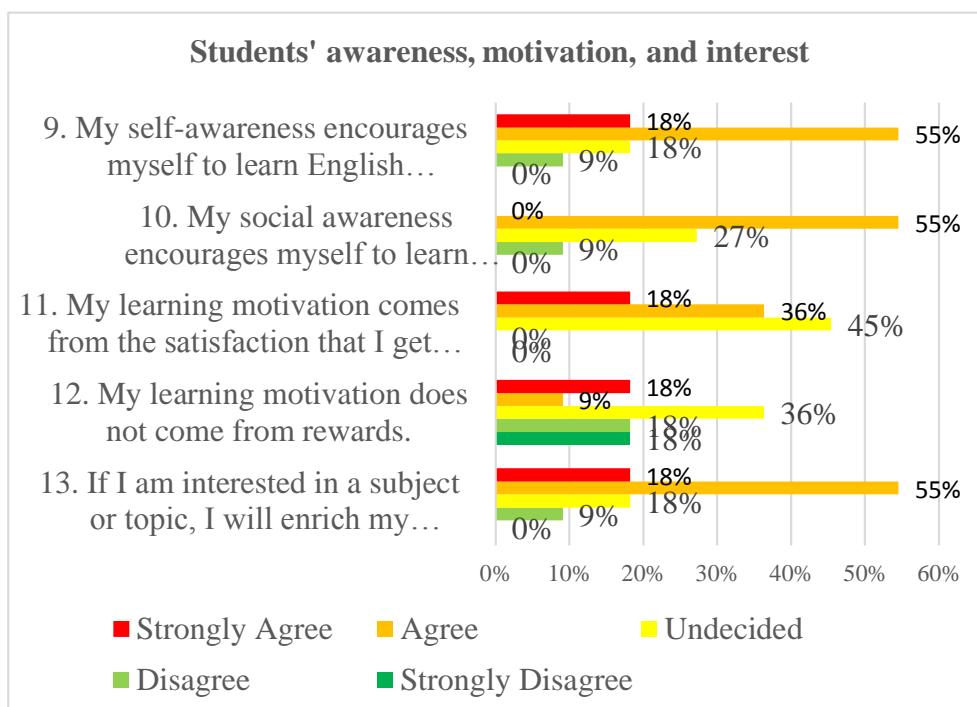


Figure 4. The importance of students' awareness, motivation, and interest

There were five statements that will be discussed in this section. In the ninth statement, 73% of the students chose "agree and strongly agree" (agree 54% & strongly agree 18%), 18% of the students chose "undecided", 9% of the students chose "disagree", and none of the students chose "strongly disagree". Most of the students' self-awareness often encouraged themselves to learn vocabulary.

In the tenth statement, 55% of the students chose “agree and strongly agree” (agree 36% & strongly agree 18%), 27% of the students chose “undecided”, 9% of the students chose “disagree”, and no one chose “strongly disagree”. Most of the students’ social awareness often encouraged them to learn vocabulary.

In the eleventh statement, 55% of the students chose “agree and strongly agree” (agree 36% & strongly agree 18%) and 45% of the students chose “undecided”. The learning motivation of most of the students often came from the satisfaction they had from learning.

In the statement number twelve, 27% of the students chose “agree and strongly agree” (agree 9% & strongly agree 18%), 36% of the students chose “undecided”, and 36% of the students chose “strongly disagree and disagree” (strongly disagree 18% & disagree 18%). The learning motivation of most of the students rarely did not come from rewards.

In the thirteenth statement, 73% of the students chose “agree and strongly agree” (agree 54% & strongly agree 18%), 18% of the students chose “undecided”, 9% of the students chose “disagree”, and none of the students chose “strongly disagree”. If they were interested in something, most of them often enriched their vocabulary to figure out what they were learning.

In this section, most of the students’ perceptions chose “agree” and “strongly agree” on the students’ awareness, motivation, and interest to improve their vocabulary, except for the statement number twelve. However, it is contrasting to the FGD data. The researchers found that reward and punishment the students agreed that external rewards and punishment are not their motivations in learning in class (See Excerpt 4)

- R : Do you feel that there are any reward and punishment?
S2 : For me, not.
R : No? How about you?
S5 : Reward and punishment? What do those mean?
S1 : For example, when you learn something ...
S5 : I see, then we are given something.
S1 : If you do not do it, you will be punished.
S5 : No.
R : No?
S2 : What for? They do not matter.
-

R : S1, do you feel it?

S1 : it [the learning process] is just free.

Excerpt 4. The students' clarification about their motivation in learning

Hence, most of the students in the FGD had misinterpreted statement number twelve. The reason was the double negative use in the questionnaire and the scale which were confusing.

The findings confirmed the theory of Montessori about the positive impact of the students' interests on their learning (Lillard, 2005; Cordova, Diane & Lepper 1996; Deci, Edward, Koestner & Ryan 2001; Hidi, Renninger, & Krapp 1992; Ryan & Deci 2000). Further, Lillard (2005) discusses that sense of control is important for people to be developed since it can improve their learning and well-being (p. 29). Furthermore, Lillard (2005) says that the use of extrinsic rewards negatively impacts the students' learning motivation when the reward is withdrawn (p. 29). Besides, McNamara (2016) who says that the purpose of Montessori education should not only be to fill children with knowledge, but rather to encourage their own natural desires to learn (p. 95). It also confirmed the students' social collaboration in Montessori education (Lillard, 1996, p. 29). In addition, Lillard (2005) believes that learning environment in Montessori education must be reconstructed in relation with the society for the students to adapt (p. 325).

CONCLUSION

Based on the findings, the students have positive perceptions towards the implementation of Montessori approach to enhance their vocabulary mastery. Montessori approach promotes the learning activities, teacher's personal guidance, and students' awareness, motivation, and interest. Most of the students agree that the implementation of Montessori approach can support them in enhancing their vocabulary. The advantages of Montessori will be maximum if the students who lack of learning motivation are given more personal guidance by the teacher. This study shows that the implementation of Montessori approach has positive impact on students' internal motivation. Because of the high learning motivation of the students, they perceived that their vocabulary mastery has improved considerably.

REFERENCES

- Coady, J., & Huckin, T. N. (1997). *Second language vocabulary acquisition: A rationale for pedagogy*. Cambridge: Cambridge University Press.
- Cordova, Diane I., and Mark R. Lepper. (1996). Intrinsic motivation and the process of learning: beneficial effects of contextualization, personalization, and choice [Electronic version]. *Journal of Educational Psychology*, 88, 715–30.
- Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing. A framework for memory research [Electronic version]. *Journal of Verbal Learning and Verbal Behaviour*, 11, 671-684.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Production
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: SAGE publications.
- Deci, Edward L., Koestner R., & Ryan R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again [Electronic version]. *Review of Educational Research*, 71, 1–27.
- Henke, J., (2015). The montessori approach to language in adolescence [Electronic version]. *Montessori Insights*, 8, 10-11. Retrieved from <https://montessori.org.au/publications/montessori-insights>
- Hidi, S., Renninger, K. A., & Krapp, A. (1992). The present state of interest research. The role of interest in learning and development, 433-446.
- Krashen. S. (2002). *Second language acquisition and second language learning*. California: Pergamon Press Inc.
- Lillard P. P. (1996). *Montessori today: A comprehensive approach to education from birth to adulthood*. New York: Random House, Inc..
- Lillard, A. S. (2005). *Montessori: The science behind the genius*. New York: Oxford University Press.
- Lillard, A. S. (2013). Playful learning and Montessori education [Electronic version]. *American Journal of Play*. 5, 157-186.

- Mcnamara, J. (2016). How the Montessori Upper Elementary and Adolescent Environment Naturally Integrates Science, Mathematics, Technology, and the Environment [Electronic version]. *The NAMTA Journal*. 41(2), 83-97.
- Michael Olaf Montessori Company. (n.d.), *Montessori FAQ's (Frequently Asked Questions)*. Retrieved on June 2, 2018, from <http://montessori.edu/FAQMontessori.html>
- Montessori Australia. (n.d.). *Montessori national curriculum*. Retrieved on June 2, 2018, from <https://montessori.org.au/montessori-national-curriculum>.
- Montessori, M. & Gutek, G. L. (2004). *The Montessori method: The origins of an educational innovation: including an abridged and annotated edition of Maria Montessori's the Montessori method*. Lanham, MD: Rowman & Littlefield.
- Montessori, M. (1992). *Education and peace*. Oxford: Clio Press.
- Montessori, M. (2014). *The Montessori method*. New Brunswick: Transaction Publishers.
- Nagy, W. E., Anderson, R. C. & Herman, P. A. (1987). Learning word meanings from context. during normal reading [Electronic version]. *American Educational Research Journal*, 24, 237–270.
- Neumann, S.B., & Dwyer, J. (2009). *Missing in action: vocabulary instruction*. The Reading Teacher, 62(5), 384-392.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Massachusetts: Heinle & Heinle Publishers.
- Read, J. (2000). *Assessing vocabulary*. Cambridge: Cambridge University Press.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: classic definitions and new directions [Electronic version]. *Contemporary Educational Psychology*, 25(1), 54-67. doi:10.1006/ceps.1999.1020.
- Setiawan, N. A., & Widiani Ngtyas, N. (2017). *Proceedings of the 4th International Language and Language Teaching Conference (LLTC) 2017: Montessori approach to enhance students' speaking fluency: A survey research in BOPKRI 2 JHS Yogyakarta*. Yogyakarta: Sanata Dharma University.
- Webb, S. (2005). Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge [Electronic version]. *Studies in Second Language Acquisition*, 27, 33–52.

Zimmerman, C. B. (1994). Self-selected reading and interactive vocabulary instruction: Knowledge and perceptions of word learning among L2 learners (Doctoral dissertation, University of San Francisco.