


Development of Monopoly Games on Organisms Classification Material at VII Grade to Increase Motivation Learning

Isnanik Juni Fitriyah*  <https://orcid.org/0000-0002-9049-6374>

Wan Eka Yusi Saputri  <https://orcid.org/0000-0003-3260-0070>

^{1,2}Department of Science Education, Universitas Negeri Malang, Malang, Indonesia

ABSTRACT

Learning media that are less innovative and varied can result in reduced student learning motivation. One of the learning media that can be used is monopoly game. The research aims to determine the development, practicality, and effectiveness of the SIMAHI Monopoly game to increase learning motivation. This is development research with the ADDIE model which consists of analysis, design, development, implementation and evaluation. This research is a pre-experimental study with a one group pretest-posttest research design. Data collection was carried out by interviews and questionnaires. The data analysis used in this study was the prerequisite test (normality and homogeneity) and paired t-test. The results of this study indicate that the monopoly game is feasible to use with media validation of 80.88% and material validation of 93.85%, both of which are in the very valid category. For practicality the teacher gets 97.50% and students 85.98% including the very practical category. The SIMAHI monopoly game is effective for increasing learning motivation with a percentage of 11.19%. The results of the t-test show that there is a significant difference in average between students' learning motivation before and after using the SIMAHI Monopoly game learning media.

This is an open access article under CC-BY-NC 4.0 license.



ARTICLE INFO

Keywords:

Learning Media;
Monopoly Game;
Learning Motivation

Article History:

Received: 10 January 2025

Revised: 15 January 2025

Accepted: 20 January 2025

Published: 23 June 2025

How to Cite in APA Style:


Isna, I. J. F., & Yusi Saputri, W. E. (2025). Development of Monopoly Games on Organisms Classification Material at VII Grade to Increase Motivation Learning. *Educational Researcher Journal*, 2(2), 17-28. <https://doi.org/10.71288/educationalresearcherjournal.v2i1.22>

Introduction

Currently education has become a primary need for humans. In Indonesia, every human being has the right to get an education, it also develops during the ongoing process. Education is interpreted as a process of self-development in life so that life can continue (Alpian et al., 2019). With education, it is hoped that it will be able to become a tool to improve the quality of human resources and be able to solve existing problems (Isnanik Juni Fitriyah et al., 2021). One effort that can be done is through an educational process that can take place in schools.

Learning is one of the main things in the educational process. Learning involves the interaction of various components, including teachers, teaching materials and students. The continuity of the learning process is indeed also influenced by cognitive (intellectual) factors that are owned by each student. However, non-cognitive factors from students can also affect the learning process (Suharni & Purwanti, 2018). One of the non-cognitive factors that can influence the learning process is learning motivation. With the

* Corresponding author: Isnanik Juni Fitriyah Isna isnanik.fitriyah.fmipa@um.ac.id

 <https://doi.org/10.71288/educationalresearcherjournal.v2i1.22>

motivation to learn students can be encouraged to study enthusiasm. Student motivation can be shown by the enthusiasm of students in the learning process (Ainurrohmah & Handayani, 2020).

Learning motivation can be interpreted as a psychological factor that is non-intellectual in nature and plays a role in fostering enthusiasm for learning, feelings of pleasure, and enthusiasm for learning. If a student has strong motivation, it is likely that he will have great energy to carry out his learning activities (Sardiman, 2016). Learning motivation can also make a learning process take place effectively and learning objectives can be achieved (Emda, 2017).

Learning motivation can be influenced by the existence of learning media (Yuliani H & Winata, 2017). Learning media is also expected to be provided by the teacher to adjust to the teaching material. The goal is that the learning process that takes place can be efficient and effective. The use of learning media can also increase students interest and motivation to learn. The learning process can also be interesting if it uses learning media properly (Febrita & Ulfah, 2019). MMedia in learning can be interpreted as a tool to arouse students thoughts, attention, and abilities so that it can lead to the learning process (Tafonao, 2018).

But in reality there are different things when observations are carried out in the learning process. From the results of observations carried out in grade 7, it shows that students' learning motivation is sufficient. This is because during the learning process students cannot follow it properly, sometimes students play alone when they are bored during learning. In addition, when given a task, they are not fully optimal in completing their task. On the other hand, this can be caused by the effects of using less varied learning media and innovation in the classroom. Learning is done with existing learning media such as textbooks, worksheets, and the use of power points only. The monotonous learning process with the lecture method can also cause students to become bored and less active in learning.

Learning media when used effectively will help in achieving learning objectives. The conditions are different if the learning media is not used properly, even if there is no learning media. What happens is that the learning process will become monotonous, so students will feel bored with what is delivered by a teacher (Tafonao, 2018).

One type of learning media is a game. Monopoly game is an alternative type of game that can be used for learning media (Aghni, 2018). Monopoly game is one of the easiest games to play. Monopoly itself is a type of board game with a general game system, namely competition carried out by players to collect wealth by rolling dice according to their turn and then moving on the squares provided on the game board. Move on the game board according to the number shown on the dice, then take the card according to where the player stops (Umayah & Harmanto, 2019).

Monopoly games that are used as learning media can stimulate interesting learning activities and build a learning atmosphere that is fun and relaxed, but still does not eliminate the essence of learning (Suciati et al., 2015). The lack of availability of electronic devices such as LCDs also makes this monopoly game suitable for use as a learning medium in the classroom (Umayah & Harmanto, 2019).

The developed monopoly game focuses on the organisms classification. Material of organisms classification was chosen because learning concepts tend to memorize more (Rifa'i et al., 2020), contains concepts that are not easy to visualize, causing the teacher to prefer the lecture method (Insani, 2016), and quite a lot of material in it such as the characteristics of living things and the classification of the five kingdoms (Yusmar et al., 2017).

Based on the description above, a research entitled "Development of Monopoly Game-Based Learning Media Development in Class VII Middle School Living Creature Classification Material to Increase Learning Motivation" which aims to determine the development of monopoly game learning media that is valid/feasible in terms of material

as well as the media, the practicality of this learning media when used in learning, and the effectiveness of this monopoly media in increasing student learning motivation.

Method

The research carried out is a type of development research, meaning that research is aimed at producing certain products and can be used to test the feasibility of the products that have been produced (Sugiyono, 2013). This research develops a monopoly game learning media product that can be used in the long term. The research method used is pre-experimental design with the research design being One Group Pretest-Posttest Design. The use of this method is carried out by giving a pretest followed by giving treatment and ending with giving a posttest (Wahyuningrum et al., 2021). This method is used to determine whether the treatment is effective or not in increasing student motivation. The One Group Pretest-Posttest research design can be seen in the following table (Sugiyono, 2013).

Table 1. Research Design (One Group Pretest-Posttest)

| <i>Pretest</i> | <i>Treatment</i> | <i>Posttest</i> |
|----------------|------------------|-----------------|
| O ₁ | X | O ₂ |

The research was conducted using the ADDIE development research model. The ADDIE development model was proposed by Reiser and Molenda with stages consisting of analysis, design, development, implementation, and evaluation. The process of developing the ADDIE model can be seen in the figure below (F. Hidayat & Nizar, 2021).

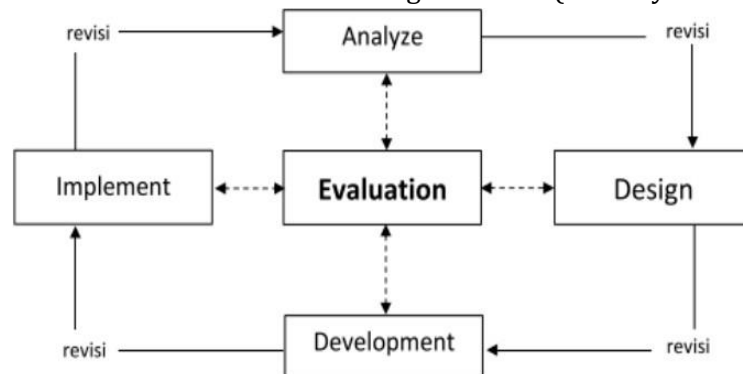


Figure 1. ADDIE Model Development Process Diagram

In the analysis phase, the research team conducted a needs assessment by gathering feedback from teachers and students through interviews and surveys. This helped identify the limitations of existing learning media and set the stage for designing a more engaging and interactive educational tool. The design phase focused on creating a prototype of the SIMAHI Monopoly game, considering both educational content and gameplay elements. We then moved on to developing the prototype, which involved testing the design with a small group of students to refine the game's mechanics and educational value.

This study used subjects, namely students of class VII SMP which were held at SMP Negeri 1 Karangploso in February 2023. The data collection carried out in this study included interviews, documentation, and questionnaires. Data collection was carried out with the help of research instruments, namely a list of questions and questionnaires, including validation questionnaires consisting of media validation and material validation, practicality questionnaires for teachers and students, and learning motivation questionnaires. Material and media validation questionnaires aimed at expert lecturers as material and media validators use a Likert scale with the following assessment criteria. The Likert scale is also used for practicality questionnaires for teachers and for students (Wahyuni & Dkk, 2022) and can be seen at table 2. In the material validation questionnaire, the aspect of correctness of the concept uses the Guttman scale with the

following assessment criteria score 1 for correct and score 0 for incorrect (A. A. Hidayat, 2021).

Table 2. Material and Media Validation Assessment Criteria

| Score | Criteria |
|-------|--------------------------------------|
| 4 | Strongly agree / Very good |
| 3 | Agree / Good |
| 2 | Disagree / Less Good |
| 1 | Strongly disagree / Strongly lacking |

The learning motivation questionnaire for students consisted of 23 questions using a Likert scale. A total of 23 questions were divided into 17 positive questions and 6 negative questions. The assessment criteria used for the learning motivation questionnaire are as follows (Bernard & Sunaryo, 2020).

Table 3. Learning Motivation Questionnaire Assessment Criteria

| Score | Positive Statement | Negative Statement |
|-------|--------------------|--------------------|
| 4 | Strongly agree | Strongly disagree |
| 3 | Agree | Don't agree |
| 2 | Don't agree | Agree |
| 1 | Strongly disagree | Strongly agree |

This learning motivation questionnaire is used to see the effectiveness of monopoly game learning media. Learning motivation questionnaires were given to students before and after learning using the monopoly game. This questionnaire was prepared according to the indicators of learning motivation. Indicators of motivation to learn include: (1) diligently facing assignments, (2) tenacious in facing difficulties, (3) showing interest, (4) preferring to work independently, (5) quickly getting bored with routine tasks, (6) being able to maintain in his opinion, (7) it is not easy to let go of things that are believed, and (8) like to find and solve problems (Sardiman, 2016).

After the data is obtained, data analysis will then be carried out using the following equation in order to find out the percentage of each data result obtained (Arikunto in (Ardhani et al., 2021)).

$$\text{Percentage (\%)} = \frac{\text{Total score obtained}}{\text{Overall score}} \times 100\%$$

After the data is processed into the form of a percentage, it is then classified based on the criteria below. For the validation of material and media experts are classified based on the table below (Ardhani et al., 2021).

Table 4. Media and Material Validation Category

| Percentage (%) | Criteria |
|----------------|--------------|
| 80-100 | Very valid |
| 66-79 | Valid |
| 56-65 | Pretty valid |
| 40-55 | Less valid |
| 0-39 | Invalid |

For data on the practicality of teachers and students whose percentages have been calculated, they are classified based on the criteria in the table below (Sugiyono in (Firdaus, 2021)).

Table 5. Learning Media Practicality Category

| Percentage (%) | Qualification |
|----------------|------------------|
| 81 – 100 | Very practical |
| 61 – 80 | Practical |
| 41 – 60 | Pretty Practical |
| 21 – 40 | Less Practical |
| 0 – 20 | Impractical |

The criteria used in the learning motivation questionnaire are based on the categories which can be seen in the table below (Nurmiati & Gazali, 2018).

Table 6. Learning Motivation Category

| Achievement level (%) | Qualification |
|-----------------------|---------------|
| 80-100 | Very high |
| 66-79 | High |
| 56-65 | Currently |
| 40-55 | Low |
| 0-39 | Very low |

After the learning motivation questionnaire data has been obtained, the motivational questionnaire data before and after will be tested first for its normality and homogeneity. If the data obtained is normal, it can be continued with the parametric test, namely the T test. The normality test is intended so that the sample data has a normal distribution, while for the homogeneity test it is intended that the data come from the same variance (Supranto & Abdullah, 2017). The T test on two paired samples will be carried out to test whether or not there is a significant average difference between the two samples (Thoifah, 2016).

Discussion

The research has been carried out in accordance with ADDIE's research stages. The first stage is the analysis stage. At the analysis stage, what was carried out by the researcher was an analysis of the needs of teachers and students related to existing problems. The results of the needs analysis include the availability of learning media which is still lacking, so that the available teaching materials and learning media are used. The learning media used mostly mention using textbooks, worksheets, and PPT. Lack of learning media, especially in the classification of living things also makes teachers teach more with the lecture method. Lack of teacher knowledge in learning media innovation is also one of the causes of the lack of learning media, so teachers are limited to using PPT or videos that are displayed (Isnanik Juni Fitriyah & Fardhani, 2022). Media that is less interesting can also result in not fully understanding the material so that motivation is also lacking (Affriyenni et al., 2020). The results of the analysis of student needs analysis also showed that 97% of students were interested in learning combined with games. In addition, as many as 91% of students are happy if there is learning media for classifying living things because they think it will be more fun and exciting. Therefore it is necessary to have creative and innovative learning so that students' learning motivation can increase (I J Fitriyah et al., 2021).

The material used in this study is the classification of living things. This material is studied in class VII junior high school even semester. The scope of material presented includes (1) the characteristics of living things, (2) the purpose of classification of living things, and (3) the classification of living things in 5 kingdoms.

The next stage is the design stage or the design of learning media products. At this stage what is done is to design the components in the monopoly game. The components contained in this monopoly game include (1) game box, (2) game board, (3) a set of cards,

(4) manuals, (5) pawns, (6) asset ownership pawns, (7) game dice, and (8) game points. In addition, at this stage the researcher also determines which materials are suitable for this monopoly game. At this stage, the product was designed with the help of Canva to design every completeness of the game. This monopoly game is named Monopoly SIMAHI "Classification of Living Things".

The main element of the monopoly game is the game board. The game board is designed with a size of 45 x 45 cm which is designed as attractive as possible. In each box available JS, TA, S, P, Reward, Boom, Jail, Let's play. The JS card or short answer contains description questions. The TA card or guess me contains questions accompanied by pictures. S or surprise cards are gift cards. The P card or punishment is a punishment card. Each JS, TA, S, and P cards total 15. Rewards are bonus questions that are also provided in reward cards. There are 10 reward cards provided. Boom is a punishment given by the teacher to students.

This stage is the development stage of the SIMAHI Monopoly product. This stage is the realization of the design that has been prepared in the previous stage. The first to be developed was the SIMAHI Monopoly board game. The game board measures 45 x 45 cm which consists of 36 squares, as shown in the figure below.



Figure 1. (a) Game Board, (b) Game Card

If you look at the game board, there are symbols P, S, TA, and JS. When the player stops at point P then takes a punishment card. If you get this card, the player will get the punishment that is written on the card that was taken. When the player stops at point S, they take a surprise card and get the profit according to what is written on the card. When the player stops at the TA point, they take my guess card and are required to answer the picture questions printed on the card. Furthermore, if the player stops at the JS point then he takes a short answer card and is required to answer the questions on the card.

When the player stops at point R then takes a reward card. Players will get points if they can answer questions on cards randomly chosen by the teacher. If the player stops at the boom point, then the player will get a punishment from the teacher according to his will. If a player stops at a prison let, then that player may not play the game for two rounds. The game starts from the let's play point.

Not only that, in this game is also equipped with a guidebook. The guidebook contains rules, game procedures, answer keys, and more. All provisions for running the SIMAHI Monopoly game have been regulated in the guidebook. Each statement answered by the player correctly will be given points according to what is written on the card.

After the product is developed, before implementing it to students, the product is validated first. This stage is carried out in order to determine the feasibility of the product that has been developed previously (Heni Putri et al., 2021). Validation was carried out by validators who were two lecturers in S1 Science Education. Validation is done for material and media. The following are validation results obtained from material experts.

Table 7. Results of Material Expert Validation

| No. | Aspect | Percentage | Category |
|-----|------------------|----------------|-------------------|
| 1. | Learning | 90.00 % | Very Valid |
| 2. | Content/material | 94.44 % | Very Valid |
| 3. | Concept truth | 100.00% | Very Valid |
| | Average | 93.85 % | Very Valid |

In table 7 above, it shows that 93.85% of the percentage obtained from the results of material validation belongs to the very valid category. From this validation, researchers are given suggestions for adjusting learning objectives with appropriate learning outcomes. This also shows that the suitability of the curriculum, and the correctness of the content are aspects of the learning media being developed (Heni Putri et al., 2021). The results of the media validation state that the SIMAHI monopoly game learning media is feasible to try out. Meanwhile, for media validation from expert lecturers, the following results were obtained.

Table 8. Results of Media Validation

| No. | Aspect | Percentage | Category |
|-----|---------------------|----------------|-------------------|
| 1. | Physical appearance | 85.00 % | Very Valid |
| 2. | Usage | 80.00 % | Very Valid |
| 3. | Graphics | 81.94 % | Very Valid |
| 4. | Language | 75.00 % | Valid |
| | Average | 80.88 % | Very Valid |

Table 8 above shows that 80.88% obtained the results from media validation which belong to the very valid category. The suggestions given by media validation as a whole are found in writing and word selection, so it needs to be improved. This is because language is the main component that needs to be considered in the development of learning media (Heni Putri et al., 2021). In addition, the preparation of sentences and the use of language are also necessary so that the contents of the media can be conveyed clearly and easily understood (Sarip et al., 2022). Also stated by Riduwan in Pramita & Agustini (2016) if an assessment result is obtained with a minimum percentage of 61% and/or classified as good or very good category, the product developed is declared valid (Pramita & Agustini, 2016). It can be concluded that the validation of material and media is valid for development.

After all validation results have been declared feasible to be tested, the next step is implementation. The implementation was carried out at SMP Negeri 1 Karangploso by testing it on 31 students in class VII. Students are given the opportunity to use this media in learning. Questionnaires were given to students to measure their learning motivation before and after learning using the SIMAHI Monopoly game learning media.

The final stage of the learning media development process is the evaluation stage. At this stage, the teacher and students give their responses to test the practicality of monopoly game learning media. The practicality of learning media refers to the ease with which learning media is used for both teachers and students which can produce interesting and fun learning (Milala et al., 2022). The following are the results of the SIMAHI Monopoly practicality test from teachers and students.

Table 9. Teacher Practical Results

| No. | Aspect | Percentage | Category |
|-----|------------------|------------|----------------|
| 1. | Learning | 95.83 % | Very Practical |
| 2. | Content/material | 93.75 % | Very Practical |
| 3. | Usage | 100.00 % | Very Practical |
| 4. | Language | 100.00 % | Very Practical |

| No. | Aspect | Percentage | Category |
|-----|----------------|----------------|-----------------------|
| 5. | Appearance | 100.00 % | Very Practical |
| | Average | 97.50 % | Very Practical |

Table 10. Student Practical Results

| No. | Aspect | Percentage | Category |
|-----|----------------|----------------|-----------------------|
| 1. | Appearance | 90.05 % | Very Practical |
| 2. | Usage | 86.09 % | Very Practical |
| 3. | Content | 83.06 % | Very Practical |
| | Average | 86.07 % | Very Practical |

From table 9 it can be seen that the practicality test of this media is 97.50% while from table 10 it can be seen that the student practicality test results obtained 85.98%. These two practicality test results indicate that monopoly game media is classified as very practical when used when learning activities take place. Also stated by Riduwan in Pramita & Agustini (2016) if the results of an assessment with a minimum percentage of 61% are obtained which are classified as good or very good categories, the product as a result of development is declared practical (Pramita & Agustini, 2016). Based on the practicality test, it can be concluded that the SIMAHI Monopoly as a learning medium is practically applied in teaching and learning activities.

In addition, it also looks at the effectiveness of the SIMAHI Monopoly media to increase student learning motivation when used during the learning process. The results obtained to see the effectiveness of SIMAHI Monopoly learning media can be seen in the table below.

Table 11. Results of the Learning Motivation Questionnaire

| No. | Indicator | Percentage | |
|-----|--|----------------|----------------|
| | | Before | After |
| 1. | Diligently facing assignments | 71.77 % | 83.33 % |
| 2. | Tenacious in facing difficulties | 84.68 % | 88.91 % |
| 3. | Showing interest | 66.94 % | 85.48 % |
| 4. | Preferring to work independently | 74.60 % | 77.42 % |
| 5. | Quickly getting bored with routine tasks | 59.41 % | 81.99 % |
| 6. | Being able to maintain in his opinion | 70.56 % | 82.66 % |
| 7. | It is not easy to let go of things that are believed | 71.37 % | 79.84 % |
| 8. | Like to find and solve problems | 73.39 % | 82.26 % |
| | Average | 72.16 % | 83.35 % |

The average learning motivation before using and after using the SIMAHI Monopoly game can be seen in table 11 above. The percentage before using this game was 72.16% in the high category, while after using the Monopoly SIMAHI game the average percentage was 83.35% in the very high category. Questionnaire data on learning motivation before and after which has been averaged is then carried out by a statistical test first which begins with a prerequisite test, namely the normality test and homogeneity test. After that, proceed with the paired t-test. SPSS software is used in this study to assist in statistical tests. The following presents the results of statistical tests.

Table 12. Statistical Test Results

| No | Test Type | Sig. | Conclusion |
|----|----------------|-------|----------------------|
| 1. | Normality test | | |
| | Before | 0.065 | Normally distributed |
| | After | 0.200 | Normally distributed |

| No | Test Type | Sig. | Conclusion |
|----|------------------|-------|--------------------------------|
| 2. | Homogeneity Test | 0.124 | Homogeneous |
| 3. | Paired T-Test | 0.000 | H0 is rejected, H1 is accepted |

In table 12, number 1 above, shows if the significance value of the questionnaire data before and after were 0.065 and 0.200, respectively. Both have a large value that exceeds the significance level of the test (α), which is 0.05. This states that the two data have a significance value greater than 0.05 and it is concluded that the data is normally distributed. On the other hand, if the significance value is less than 0.05, then the data is not normally distributed (Supranto & Abdullah, 2017). Furthermore, the homogeneity test of the questionnaire data was carried out before and after the use of the SIMAHI Monopoly. The results of the data homogeneity test are in accordance with the table below.

Based on table 13, number 2 can be seen that the significance value of the learning motivation questionnaire data is 0.0124. This result has a value greater than 0.05. If the significance value obtained is more than 0.05 then the data obtained includes homogeneous data, and vice versa (Supranto & Abdullah, 2017). Based on these results, the data is homogeneous.

The hypothesis formulated in this study is, H0: there is no significant difference in average between students learning motivation before and after using Monopoly SIMAHI learning media, while H1: there is a significant difference in average between students learning motivation before and after using the media SIMAHI Monopoly game learning. After conducting the t test, the significance value (2-tailed) is obtained in table 13 number 3 from the data, the magnitude is 0.000 which is less than 0.05. If the results of significance (2-tailed) are obtained <0.05 then there is a rejection of H0, and vice versa (Thoifah, 2016). Based on the results of the T test above, it was concluded that there was a rejection of H0 and acceptance of H1, so that it can be said that there was a significant difference on average between students learning motivation before and after using the SIMAHI Monopoly game learning media.

The average percentage of monopoly use has increased by 11.19%. This acquisition can be said to be effective in increasing student motivation. This is because the average score obtained from the learning motivation questionnaire after treatment has a higher value than the average score before being given treatment (Riawan et al., 2020).

Other research conducted by Nurmiati and Gazali (2018) also showed that with the monopoly game, learning motivation increased from 77.56% to 82.62%. (Nurmiati & Gazali, 2018). In line with that, the research conducted by Ria (2013) showed that students' learning motivation increased from 3.22 to 4.44, which was originally classified as a moderate category to a very high category (Sartikaningrum, 2013). In addition, it was also shown in the research by Sibuea & Handayani (2019) that it was also stated that there was an increase in learning motivation from 49.19 to 50.91 (Sibuea, 2019). Suwarno & Suratnih (2018) in his research showed the results that there was a significant difference between student learning motivation before and after using Bio-Monopoly in the medium increase criteria with an N-gain value of 0.424 (Suwarno & Suratsih, 2018).

Based on the results of research that has been done, it can be seen that monopoly learning media can play a role in increasing learning motivation. Even though the monopoly game which is used as a learning medium has the same goal as the monopoly game in general, in this case it is intended to master the knowledge contained therein. With this game, new learning experiences are obtained by students, including playing but not eliminating the essence of learning and making the atmosphere in the classroom during the learning process more fun and not boring. (Putra & Nisa, 2021). During the research it was also seen that during the learning process the students had extraordinary enthusiasm. Dedek Irwan in his research also stated that monopoly games can motivate students, streamline learning time, increase learning activities that take place to be more active and fun, as well as learning resources for students and teachers (Irwan, 2017).

While the SIMAHI Monopoly game proved effective in increasing student motivation, several factors could influence its success. For instance, students with a higher intrinsic motivation to learn may benefit more from interactive learning tools, suggesting that the game may be more effective when used in conjunction with other motivational strategies. Further research could explore how the game might be adapted for different learning environments or subject areas to maximize its impact.

Conclusion

The conclusions obtained based on this research, namely that the SIMAHI Monopoly game learning media is valid and practical can be developed to increase student motivation. The percentages obtained from the results of the validation of material experts and media expert validation were obtained respectively at 93.85% and 80.88% and both were classified as very valid categories. For practicality for teachers and students both successively obtained results of 97.50% and 85.98% which were classified as very practical categories to use. By using this monopoly game media, there is a significant difference between the average before and after using the media. In addition, it is also known that the SIMAHI Monopoly is effective in increasing student learning motivation by 11.19%, from 72.16% to 83.35%.

This research is still limited to organisms classification material, further research can develop it with different material so that there are variations in the material. Teachers are expected to optimize the available learning media, so that learning can be in a pleasant atmosphere but still gain knowledge. In addition, there is a need for time management so that learning can be effective and efficient because in this game it takes quite a long time.

Acknowledgements

The researcher would like to thank all those who have helped in this research. Especially for science teachers and students of SMP Negeri 1 Karangploso who have helped in this research. Acknowledgments are also conveyed to the State University of Malang for providing the opportunity for researchers to carry out this research

References

- Affriyenni, Y., Swalaganata, G., Mustikasari, V. R., & Fitriyah, I. J. (2020). Pengembangan Media Pembelajaran Fisika pada Materi Optik Geometri Berbasis Augmented Reality dengan Unity dan Vuforia. *JIPVA (Jurnal Pendidikan IPA Veteran)*, 4(2), 160–174. <https://doi.org/10.31331/jipva.v4i2.1301>
- Aghni, R. I. (2018). Fungsi Dan Jenis Media Pembelajaran Dalam Pembelajaran Akuntansi. *Jurnal Pendidikan Akuntansi Indonesia*, 16(1). <https://doi.org/10.21831/jpai.v16i1.20173>
- Ainurrohmah, F., & Handayani, R. (2020). The Influence of Motivation, Learning Discipline, Teacher Competence, and Parental Support on Academic Achievement of Students (Study on Gama English Course Sukoharjo). *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(4), 1320–1332. <http://jurnal.stie-aas.ac.id/index.php/IJEBAR/article/view/1626>
- Alpian, Y., Anggraeni, S. W., & Unika Wiharti., N. M. S. (2019). *PENTINGNYA PENDIDIKAN BAGI MANUSIA*. Jurnal Buana Pengabdian. <https://journal.ubpkarawang.ac.id/index.php/JurnalBuanaPengabdian/article/view/581/537>
- Ardhani, A. D., Ilhamdi, M. L., & Istiningsih, S. (2021). Pengembangan Media Pembelajaran Berbasis Permainan Monopoli pada Pelajaran IPA. *Jurnal Pijar Mipa*, 16(2), 170–175. <https://doi.org/10.29303/jpm.v16i2.2446>
- Bernard, M., & Sunaryo, A. (2020). Analisis Motivasi Belajar Siswa MTs dalam Pembelajaran Matematika Materi Segitiga dengan Berbantuan Media Javascript Geogebra. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 4(1), 134–143. <https://doi.org/10.31004/cendekia.v4i1.173>

- Emda, A. (2017). KEDUDUKAN MOTIVASI BELAJAR SISWA DALAM PEMBELAJARAN. *Lantanida Journal*, 5(2), 93–196.
- Febrita, Y., & Ulfah, M. (2019). Peranan Media Pembelajaran Untuk Meningkatkan Motivasi Belajar Siswa. *Prosiding DPNPM Unindra 2019*, 0812(2019), 181–188.
- Firdaus, Z. A. (2021). Pengembangan Media Monopoli Untuk Keterampilan Menulis Pembelajaran Pantun Siswa Kelas V Sekolah Dasar Ziza Alifiani Firdaus Abstrak. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, 09, 3254–3263.
- Fitriyah, I J, Affriyenni, Y., Hamimi, E., Affifah, J. R., & Permatasari, C. A. (2021). ... Peningkatan Keterampilan Guru Dalam Mengembangkan Media Pembelajaran Berbasis Digital Sebagai Pendukung Pembelajaran *Kepada Masyarakat ...*, 2(1), 1–6. <https://journal.itk.ac.id/index.php/sepakat/article/view/556>
- Fitriyah, Isnani Juni, & Fardhani, I. (2022). Increase Students' Motivation in Learning Science by Developing Instructional Media in The Form of Powtoon. *Jurnal IPA & Pembelajaran IPA*, 6(2), 111–118. <https://doi.org/10.24815/jipi.v6i2.24639>
- Fitriyah, Isnani Juni, Mulyati, Y., & Fardhani, I. (2021). Optimization of Microsoft Office 365 for Blended Learning-Based Learning in Natural Science Subjects. *JCER (Journal of Chemistry Education Research)*, 5(2), 88–92. <https://doi.org/10.26740/jcer.v5n2.p88-92>
- Heni Putri, D. A., Ardi, A., Alberida, H., & Yogica, R. (2021). Validitas Media Pembelajaran E-Learning Berbasis Edmodo pada Materi Sel untuk Peserta Didik Kelas XI SMA/MA. *Journal for Lesson and Learning Studies*, 4(2), 230–237. <https://doi.org/10.23887/jlls.v4i2.34443>
- Hidayat, A. A. (2021). *Menyusun Instrumen Penelitian & Uji Validitas-Reliabilitas*. https://books.google.co.id/books?id=0dAeEAAAQBAJ&printsec=frontcover&hl=id&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Hidayat, F., & Nizar, M. (2021). Model Addie (Analysis, Design, Development, Implementation and Evaluation) Dalam Pembelajaran Pendidikan Agama Islam. *Jurnal Inovasi Pendidikan Agama Islam (JIPAI)*, 1(1), 28–38. <https://doi.org/10.15575/jipai.v1i1.11042>
- Insani, M. D. (2016). STUDI PENDAHULUAN IDENTIFIKASI KESULITAN DALAM PEMBELAJARAN PADA GURU IPA SMP SE-KOTA MALANG. *Jurnal Pendidikan Biologi*, 7(2), 81–93.
- Irwan, D. (2017). *PENGEMBANGAN MEDIA PERMAINAN (GAME) MONOPOLI PADA PEMBELAJARAN FISIKA MATERI BESARAN DAN SATUAN PADA TINGKAT SEKOLAH MENENGAH PERTAMA (SMP)*. Universitas Islam Negeri Ar-Raniry.
- Milala, H. F., Endryansyah, Joko, & Agung, A. I. (2022). KEEFEKTIFAN DAN KEPRAKTIKAN MEDIA PEMBELAJARAN MENGGUNAKAN ADOBE FLASH PLAYER. *Jurnal Pendidikan Teknik Elektro*, 11(2), 195–202.
- Nurmiati, & Gazali, Z. (2018). MEDIA PEMBELAJARAN PERMAINAN MONOPOLI BIOLOGI MATERI KLASIFIKASI MAKHLUK HIDUP UNTUK MENINGKATKAN MOTIVASI BELAJAR SISWA SMP. *Bioscientist : Jurnal Ilmiah Biologi*, 6(2), 103–107.
- Pramita, A., & Agustini, R. (2016). PENGEMBANGAN MEDIA PERMAINAN ULAR TANGGA PADA MATERI SENYAWA HIDROKARBON KELAS XI SMA UNTUK MENINGKATKAN PEMAHAMAN KONSEP SISWA. *Unesa Journal of Chemical Education*, 5(2), 336–344.
- Putra, M. J. A., & Nisa, M. (2021). *The Development of Monopoly Game as Media for Science Learning at Elementary School*. 9490(3).
- Riawan, R. I., S, S., & Subekti, E. E. (2020). *Keefektifan Media Pembelajaran Buku Aktivitas Peta Si Pintar dalam Meningkatkan Motivasi Belajar Siswa The Effectiveness of Si Pintar Map Activity Book Learning Media to Increase Student Learning Motivation*. 4(2), 95–104.
- Rifa'i, M. R., K, R. A., & Hasanah, R. (2020). PERSEPSI MAHASISWA DALAM MENGGUNAKAN APLIKASI PLANTNET PADA MATA KULIAH KLASIFIKASI MAKHLUK HIDUP. *Vektor : Jurnal Pendidikan IPA*, 1, 29–37.
- Sardiman. (2016). *Interaksi dan Motivasi Belajar Mengajar*. Rajawali Pers.

- Sarip, M., Amintarti, S., & Utami, N. H. (2022). *Validitas Dan Keterbacaan Media Ajar E-Booklet Untuk Siswa SMA / MA Materi Keanekaragaman Hayati*. 1(1).
- Sartikaningrum, R. (2013). *PENGEMBANGAN MEDIA PEMBELAJARAN PERMAINAN MONOPOLI AKUNTANSI UNTUK MENINGKATKAN MOTIVASI BELAJAR SISWA KELAS X PROGRAM KEAHLIAN AKUNTANSI SMK NEGERI 1 TEMPEL*. Universitas Negeri Yogyakarta.
- Sibuea, M. F. L. (2019). PENINGKATAN HASIL BELAJAR DAN MOTIVASI BELAJAR SISWA SEKOLAH DASAR MELALUI MEDIA PEMBELAJARAN MONOPOLI MATEMATIKA (MONOTIKA). *Jurnal MATEMATICS PAEDAGOGIC*, IV(1), 23–32.
- Suciati, S., Septiana, I., & Untari, M. F. A. (2015). Penerapan Media Monosa (Monopoli Bahasa) Berbasis Kemandirian Dalam Pembelajaran Di Sekolah Dasar. *Mimbar Sekolah Dasar*, 2(2), 175–188. <https://doi.org/10.17509/mimbar-sd.v2i2.1328>
- Sugiyono, D. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Penerbit Alfabeta.
- Suharni, & Purwanti. (2018). Upaya meningkatkan motivasi belajar siswa. *G-Couns: Jurnal Bimbingan Dan Konseling*, 3(1), 131–145.
- Supranto, J., & Abdullah, S. (2017). *Pengantar Statistik untuk Berbagai Bidang Ilmu*. RajaGrafindo Persada.
- Suwarno, R. N., & Suratsih. (2018). PENGEMBANGAN MEDIA EDUCATIONAL GAME “BIO-MONOPOLI” SEBAGAI MEDIA PEMBELAJARAN SUBMATERI RANGKA DAN TULANG, MATERI SISTEM GERAK UNTUK SISWA SMA/MA KELAS XI IPA. *Jurnal Prodi Pendidikan Biologi*, 7(2), 102–113.
- Tafonao, T. (2018). Peranan Media Pembelajaran Dalam Meningkatkan Minat Belajar Mahasiswa. *Jurnal Komunikasi Pendidikan*, 2(2), 103. <https://doi.org/10.32585/jkp.v2i2.113>
- Thoifah, I. (2016). *Statistika Pendidikan dan Metode Penelitian Kuantitatif*. Madani.
- Umayah, R., & Harmanto. (2019). Penerapan Media Pembelajaran Monopoli Berbasis Paikem dalam Peningkatan Aktivitas dan Prestasi Belajar Peserta Didik pada Mata Pelajaran PPKN di Kelas VII SMP Negeri 1 Jabon. *Kajian Moral Dan Kewarganegaraan*, 07(02), 1023–1037. <https://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-pendidikan-kewarganegaraa/article/view/30124/27613>
- Wahyuni, E. R. P., & Dkk. (2022). Pengembangan Media Pembelajaran Videoscribe pada Materi Hubungan Simbol dengan Makna Sila Kedua Pancasila Kelas IV SDN Margorejo 1/403 Surabaya. *Jurnal Kewarganegaraan*, 6(2), 3773–3779. <http://journal.upy.ac.id/index.php/pkn/article/view/3566>
- Wahyuningrum, S. R., Putri, A. P., & Jamaluddin, M. (2021). Pre-Experimental Design Bimbingan Kelompok dengan Teknik Assertive Training dalam Peningkatan Keterampilan Komunikasi Siswa di SMK Kesehatan Nusantara. *NUANSA: Jurnal Penelitian Ilmu Sosial Dan Keagamaan Islam*, 18(1), 14–28. <https://doi.org/10.19105/nuansa.v18i1.4242>
- Yuliani H, K., & Winata, H. (2017). Media Pembelajaran Mempunyai Pengaruh Terhadap Motivasi Belajar Siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 2(1), 259. <https://doi.org/10.17509/jpm.v2i1.14606>
- Yusmar, A. S., Syamswisna, & Marlina, R. (2017). Meningkatkan Hasil Belajar Siswa pada Materi Klasifikasi Makhluk Hidup melalui Pembelajaran Kooperatif Tipe Jigsaw di SMP. *Jurnal Pendidikan Biologi*, 4(2), 1–15.