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# THE EFFECT OF PARENTAL ATTENTION ON MATHEMATICS LEARNING OUTCOMES IN GRADES X AND XI STUDENTS OF SMK KHAMAS ASEMBAGUS

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**Abstract**: One of the external factors that can affect student learning outcomes is the family environment, in this case, the attention of parents. Research has been carried out to determine whether or not there is an influence of parental attention on student learning outcomes in mathematics. This research is a quantitative study using the *Ex-Post Fact method* . Sampling was carried out using a *probability sampling technique of the simpler random* type which was carried out on 111 respondents consisting of class X and XI at SMK Khamas Asembagus. Data collection techniques used are observation, documents and questionnaires. The results showed $\boldsymbol{r_{hitung} > r_{tabel}}$that 0.237 > 0.1865 at *Cronbach's Alpha* = 0.1865, this indicates that the instruments used in this study are valid and reliable. Meanwhile, the results of the T test were $\boldsymbol{t_{hitung} > t_{tabel}}$2.545 > 1.65895 (with $\propto = \mathbf{0,05}$) and the Effectiveness of the Regression Line (EGR) was 3.25% which indicated that there was an influence of parental attention on student learning outcomes in Mathematics Subject of 3.25%. Based on the results of the analysis of research data, it can be concluded that the alternative hypothesis (Ha) is accepted and the null hypothesis ($H_0$) is rejected, meaning that there is an influence between parents' attention to student learning outcomes in Mathematics Subject which is equal to 3.25%.

**Keywords: Attention of Parents, Learning Outcomes**


## INTRODUCTION

Education is basically a conscious effort to optimize the talents and potential of children to gain excellence in life. Excellence in the field of intellectual and graceful moral attitude is a hope for the creation of intelligent and character human beings. Education is a way to educate the nation's life in accordance with the preamble to the 4th paragraph of the 1945 Constitution and wants to achieve the goals of national education. In general, national education has experienced significant progress, but despite the success experienced, there are deficiencies that still need to be improved, namely student learning outcomes, especially mathematics learning outcomes.

Learning outcomes are influenced by internal and external factors(Hadiyanti et al., 2021). One of the external factors is family. In the family, parents are also one of the determinants of student success in achieving good learning outcomes. Parents' attention to students can help to motivate students in achieving these learning outcomes. Parents' attention helps and encourages children to be more successful in their education. Parents also have an obligation to provide affection and create a conducive environment at home. A conducive environment can have a positive influence so that children will concentrate on learning activities and support children to achieve maximum learning results.

The quality of education is closely related to learning achievement. Learning achievement is an evidence of learning success or the ability of a student to carry out learning activities in accordance with the weight achieved. Students will feel proud and happy when the achievements

are good. instruments (curriculum, facilities and infrastructure and educators) (Mawarsih, Susilaningsih, & Hamidi, 2013). Learning achievement is influenced by many factors both from within and outside of students. suggests that the factors that influence learning outcomes are divided into two, namely internal factors and external factors. Internal factors are factors that come from within students, such as learning discipline, physiological conditions (physical condition of students), psychological conditions (intelligence, talent, interest, motivation). External factors are factors that come from outside the student's self, such as environmental factors, family, tools .

Family is an environment education first and foremost. It is said to be the first education because the child first gets the influence of education from and in in his family. While it is said to be the main education because even though children get education from school and society, but responsibility Education still lies with the parents . Family , in this case parents have a big role in children's learning success. Other parents as educators as well as mentors and also responsible for children. The responsibility of parents is not only to send their children to school but more than that they also have to pay attention to their children's learning activities at home.

Parental factors are very important influence. M Dalyono in [3] revealed that "parents who do not or do not pay enough attention to their children's education, may be indifferent, do not pay attention to their children's learning progress will be the cause of learning difficulties". The lack of attention from parents is caused by parents being busy with their work and there is an assumption that education is the role of the teacher at school. They think that with children getting education at school, knowledge and subject matter, parents' attention and responsibility have been fulfilled(Ambarsari & Hasanah, 2022; Hadiyanti et al., 2021; Nur Hasanah, Surur, Seituni, & Mukholid, 2023; Kusuma, Susanto, Yuliati, Maharani, & Hasanah, 2021; Murtikusuma et al., 2022; Nuryami, Janan, & Hasanah, 2022; Pendidikan, 2023; Pendidikan, Hasanah, & Ambarsari, 2022).

Parents ' role as educators and as mentors is responsible for paying attention to children's learning activities when at home. Parents certainly want their children to grow, smart and smart. To achieve this, the role of parents is a very important factor. This is in accordance with what was stated (Pradipta, Wintoro, & Budiyanto, 2022). Whereas parents who pay less or do not pay attention to their child's education, for example they are indifferent to their child's learning, do not pay attention at all(Nur Hasanah et al., 2023). The interests and needs of their children in learning, such as not setting study time, not providing or completing learning tools, not paying attention to whether their child is studying or not, not wanting to know how their child's learning is progressing, difficulties experienced in learning and so on, this can lead to children are less successful in their studies(Nuryami et al., 2022). Parental attention can be interpreted as the soul awareness of parents to care for their children, especially in providing and meeting their children's needs both in terms of emotion and material.

Attention is something that is very important for children because parents' attention has an influence on children's development. Parental attention is needed as reinforcement in the child's learning process, this attention can be done by accompanying children in learning activities at home, imposing children's study hours at home and asking children about learning activities at school(N. Hasanah, Hobri, Fatekurrahman, Kusuma, & Hadiyanti, 2021). The parents' attention will be very impressive to the child so that the child's learning enthusiasm is higher. Attention that is too disciplined is also not a good thing that must be applied in the family because it will cause a rebellious attitude in children because children feel pressured and cannot express their opinions(Pendidikan et al., 2022)(Kusuma et al., 2021) .

Parents as caregivers play a very decisive role in the development of children. If parents succeed in educating and guiding their children at home, of course, school education will work well, of course, children's learning outcomes at school will also be low. But on the contrary if parents fail to educate their children properly. Argues that parenting in the family is a phrase that brings together four important elements, namely parenting, parents, children, and family. Pattern is a parenting style which consists of two words, namely pattern and parenting(Hadiyanti et al., 2021). Based on the opinions of the experts stated above, it can be concluded that parents have a responsibility in shaping and nurturing their children from a psychological and physiological perspective. Both parents are required to be able to direct and educate their children so that they can become generations that are in accordance with the goals of human life.

Based on the description above, the researcher is interested in conducting research on "The Effect of Parental Attention on Student Learning Outcomes in Mathematics Subjects".

## METHOD

The approach method in this study is a quantitative approach and the type of research used is a non-experimental type using the *Ex-Post Facto research method*(Puspitasari & Hasanah, 2019) , because researchers want to know how much influence parents' attention has on student learning outcomes and the research design is a two-way study. whose goal is to find out whether there is an influence of the independent variable on the dependent variable. The technique of determining the location of the research is *Purposive Sampling Area*. This technique is a sampling method by selecting a group of subjects based on certain characteristics or characteristics which are seen as having a close relationship with the characteristics or characteristics of the previously known population [7] and the purpose of taking this technique is because there is only one research location without any choice. another place.

The sampling technique used is *Simple Random Sampling*. This sampling technique is a technique that is used in random sampling by using a lottery as an alternative and can also be the absence of students with odd or even numbers. According to (Taylor & Irawati, n.d.) argues that *Simple Random Sampling* is random sampling(Nur Hasanah, Ambarsari, Surur, Darmawati, & Rakhman, 2022).

Data collection techniques using the method of observation, questionnaires (questionnaire) and documentation. In the observation method used is the method of direct observation and open technique to find out how much influence parents' attention has on student learning outcomes in mathematics. As for the questionnaire method, a closed questionnaire was used and in the form of a *checklist* (√) using 4 alternative answers to the questionnaire, namely "Always", "Often", "Sometimes", and "Never". The purpose of distributing this questionnaire is to seek information and obtain data related to the influence of parental attention on student learning outcomes in mathematics.

The data collection techniques used in this study are as follows;

1.) Method Questionnaire

According to Sudaryono (2017:207), a questionnaire is something technique or know how data collection no directly (researcher no ask answer live with respondent). Type the questionnaire used in the research, namely questionnaire closed so he asked already arranged in a manner structured. The instrument used in the questionnaire uses a Likert scale. The questionnaire questions used were partly quoted from Hendriyanto's thesis (2016).

2.) Method Documentation

Technique this is data collection with look a number of document like book master, report or book report education, books personal, mail description and so forth. According to Sudaryono (20 1 7) that is an activity aimed at obtaining data directly from the research site, including relevant books, regulations, activity reports, photos, documentary files, and relevant data in research. So the documentation method is done by looking for documentation data related to research objectives.

**Technique Data Processing**

a) Editing is editing is check list questions that have submitted by para data collector. So, it can be concluded editing is a activities performed by a researcher for researching and correct existing data obtained moment study.
b) Coding is classifying answer from on respondent into the assessment category . So, coding is a gift code on step data classification and code the used on grain question from existing variables on questionnaire including gift score. Whereas the questionnaire used is a questionnaire closed.

   As for the answers has available, so the score used is;

   a. Respondents who answered always given score : 3
   b. Respondents who answered were sometimes given score : 2
   c. Respondents who answered no once given score : 1

c) Tabulation

   After editing and coding steps Next is tabulation. The definition of tabulation according to Arikunto (2013: 278) is work that contains tables, answers that have been given an answer category code are then entered into the table. Data is element absolute in research, which data the still must be analyzed use technique certain appropriate with data properties. Though steps study done with fine, but if analysis the data wrong or no relevant so conclusions reached no can be accounted for answer. Remember results obtained from study this form numbers or quantitative data so researcher use method statistics (Puspitasari & Hasanah, 2019).

After conducting research and collecting data, the first steps are *Editing* , *Coding* and *Tabulation*(Pendidikan, 2023) . Furthermore, the data that has been obtained and which has been processed can be analyzed using validity tests and reliability tests to determine the validity and reliability of the instruments used in this study. Data analysis techniques are used to process data into information, so that the characteristics of the data become easy to understand(Pendidikan et al., 2022). The purpose of data analysis is to describe the data so that it can be understood and then make conclusions from the data obtained (Sadikin & Hamidah, 2020). Because the data obtained in this study were quantitative data, the researchers used the Anova test statistical analysis technique, namely the T test and Regression significance test.

## RESULT AND DISCUSSION

To obtain data from a number of respondents taken from students in class X and class XI TKJ and MM at Khamas Asembagus Vocational School with a total number of students, namely 155 students, a questionnaire model was used which was distributed to respondents to collect research data on parental concern. The questionnaire consists of 25 question items. And data on student learning outcomes were obtained from students' test scores in mathematics. Random sample determination was carried out as shown in Table. 1 in the following.

**Table 1.** Determination of the number of samples

| No | Class | Amount | |
|---|---|---|---|
| | | Population | Sample |
| 1. | X TKJ 1 | 2 5 | $\frac{112}{155} \times 25 = 18$ |
| 2. | X TKJ 2 | 2 4 | $\frac{112}{155} \times 24 = 17$ |
| 3 | XMM | 31 | $\frac{112}{155} \times 31 = 22$ |
| 4. | XI TKJ 1 | 28 | $\frac{112}{155} \times 28 = 20$ |
| 5. | XI TKJ 2 | 29 | $\frac{112}{155} \times 29 = 21$ |
| 6. | XI MM | 18 | $\frac{112}{155} \times 18 = 13$ |
| Amount | | 155 | 111 |

The obtained questionnaire data was converted into quantitative data which was then processed using the *Microsoft Excel program* and *SPSS software version 17.0*. From the results of *scoring* and tabulation, it can be seen that the number of samples that will be taken with details of the number of samples that have been calculated from class X and XI are 111 students of Khamas Asembagus [10] .

The data obtained from the value of the parent participation questionnaire given to students can be seen in the table below;

**Table 2.** Distribution of parents' attention

| Class intervals | Frequency (f i ) | Fk | Middle Value (Xi) | Fi. Xi |
|---|---|---|---|---|
| 54-57 | 11 | 11 | 55.5 | 610.5 |
| 58-61 | 10 | 21 | 59.5 | 595 |
| 62-65 | 8 | 29 | 63.5 | 508 |
| 66-69 | 11 | 40 | 67.5 | 742.5 |
| 70-73 | 17 | 57 | 71.5 | 1215,5 |
| 74-77 | 3 | 60 | 75.5 | 226.5 |
| 78-81 | 1 | 61 | 79.5 | 79.5 |
| Amount | 61 | | 472.5 | 3977,5 |

Based on the table data above, the distribution of parental participation questionnaire values was obtained from the questionnaire given to students as research respondents totaling 27 questions with 61 student respondents . Based on the results of the analysis, a range value of 25 was obtained with the largest data being 79 and the smallest data being 54, for class determination results a value of 7 was obtained, and for class width a value of 4 was obtained with the lower class limit minus 0.5 and the upper limit plus 0.5. To find out the highest score obtained by students can be seen in the histogram image below

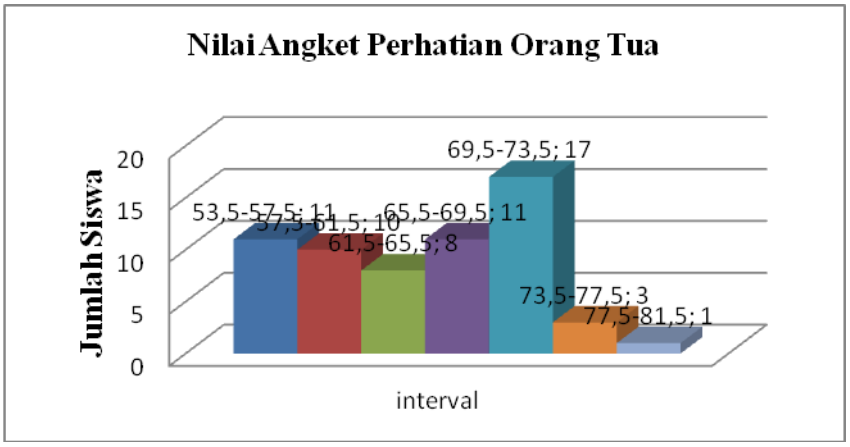


**Figure 1.** Parental Attention Histogram

Data collection was carried out by distributing questionnaires to students, the results of the questionnaire were then *scored* and tabulated so that the results of the questionnaire regarding parental attention could be known. Furthermore, the data was tested for validity and reliability tests to determine the correctness and suitability of the instruments used. From the results of the calculation of the validity and reliability tests using SPSS version 17.0 which has been carried out, it is obtained $r_{hitung} > r_{tabel}$, so that all 25 items [8] questions on the instruments used for data collection by distributing questionnaires to class X and XI students at SMK Khamas Asembagus are valid and reliable.

The data obtained from the learning outcomes obtained from the report cards of odd semester students, can be seen in the table below;

**Table 3.** Distribution of Student Report Card Grades

| Class intervals | Frequency (f i ) | Fk | Middle Value (Xi) | Fi. Xi |
|---|---|---|---|---|
| 78-80 | 26 | 26 | 79 | 2054 |
| 8 1 -83 | 2 1 | 47 | 82 | 1 722 |
| 84-86 | 3 | 50 | 85 | 255 |
| 87-89 | 5 | 55 | 88 | 440 |
| 90-92 | 0 | 55 | 9 1 | 0 |
| 93-9 5 | 5 | 60 | 94 | 470 |
| 96-98 | 1 | 6 1 | 97 | 97 |
| Amount | 6 1 | | | 5038 |

Results data study participant educate obtained from student report cards on eye math lesson . Based on the results of the analysis, the range value is 1.6 with the largest data being 96 and the smallest data being 80. For the results in determining class length, a value of 7 is obtained, and for class width, a value of 3 is obtained, with the lower class minus 0.5 and the upper limit plus 0.5. To find out the highest scores obtained by students can be seen in Figure 4.2 histogram below.

Then a simple correlation coefficient analysis (T test) was carried out to determine the

relationship between parents' attention to student learning outcomes in subjects with results $r_{hitung}$exceeding $r_{tabel}$. This means that there is a relationship between parents' attention to student learning outcomes in mathematics. As for the results of the significant correlation test, it was obtained that the significance number exceeded $t_{tabel}$so that the calculation could be said to be significant.

For simple regression results, it is known that the regression equation is Y = 71.964. It can be said that the average value of Y (student learning outcomes in mathematics) is 71.964.

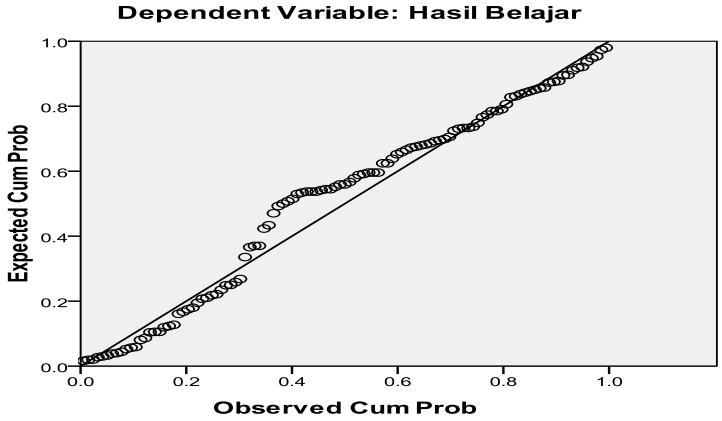


**Figure 2**. Simple Regression Line SPSS Output

From the SPSS results in Figure 1 it can be seen that these variables have a fairly close relationship. This is because the points on the scatter diagram are located close to each other by a line that can be drawn through that point. These variables have a positive relationship, because the points on the scatter diagram show symptoms from left to top right. And these variables have a linear correlation because the points on the scatter diagram show straight line symptoms.

Furthermore, data analysis was carried out using the calculation of the Regression Line Effectiveness (EGR) formula and obtained a result of 3.25%. This shows that the effectiveness of the regression line contributed by parents' attention to student learning outcomes in even semester mathematics at SMK Khamas Asembagus is only 3.25%.

To prove the hypothesis (Ha) is accepted, an ANOVA test or T test is carried out, the hypothesis will be proven if $t_{hitung}$it is greater than $t_{tabel}$( $t_{hitung} > t_{tabel}$) with a significant level of 5%. The magnitude obtained $t_{hitung}$is 2.545 greater than $t_{tabel}$1.65895 at *N* = 111. Thus it can be said that the alternative hypothesis (Ha) is accepted and the null hypothesis (H $_0$ ) is rejected.

## CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that there is a significant influence between parents' attention to student learning outcomes in mathematics at SMK Khamas Asembagus. This shows that Ha is accepted and H0 is $_{\text{rejected}}$ . The results of the EGR calculation were obtained at 3.25%, indicating the magnitude of the correlation or relationship between the influence of parents' attention on mathematics learning outcomes, while 96.75% was influenced by other factors not examined in this study. The magnitude of the correlation number (relationship) between parents' attention to student learning outcomes in Even Semester Mathematics Subject at SMK Khamas Asembagus is relatively low.

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## REFERENCES

Algebra, L., Breaz, S., & Modoi, G. C. (2018). *Nil-clean companion matrices*. (March 2015). https://doi.org/10.1016/j.laa.2015.10.005

Ambarsari, I., & Hasanah, N. (2022). *Peran Pembelajaran Pemodelan Matematika di Sekolah*. *10*(3), 1110–1120.

Hadiyanti, N. F. D., Hobri, Prihandoko, A. C., Susanto, Murtikusuma, R. P., Khasanah, N., & Maharani, P. (2021). Development of mathematics e-module with STEM-collaborative project based learning to improve mathematical literacy ability of vocational high school students. *Journal of Physics: Conference Series*, *1839*(1). https://doi.org/10.1088/1742-6596/1839/1/012031

Hasanah, N., Hobri, Fatekurrahman, M., Kusuma, M. A., & Hadiyanti, N. F. D. (2021). Development of lesson study for learning community based learning tools using google classroom media and its impact on students' creative thinking skills. *Journal of Physics: Conference Series*, *1839*(1), 0–13. https://doi.org/10.1088/1742-6596/1839/1/012017

Hasanah, Nur, Ambarsari, I. F., Surur, M., Darmawati, E. S., & Rakhman, F. (2022). *Training Motivasi Belajar Matematika Berbasis Thinking Smart Game pada Siswa MI Multiple Sarina Info Artikel Abstrak dalam meningkatkan kualitas pendidikan di Indonesia [ 1 ]. Bangsa ini telah jenjang dan tingkat pendidikan , agar diperoleh sumber daya ma*. *1*(2), 62–68.

Hasanah, Nur, Surur, M., Seituni, S., & Mukholid, A. (2023). *The influence of lesson study for learning community based learning on students ' creative thinking ability The Influence of Lesson Study for Learning Community Based Learning on Students ' Creative Thinking Ability*. *050025*(January).

Kusuma, M. A., Susanto, Yuliati, N., Maharani, P., & Hasanah, N. (2021). Thinking process of 7th class students in understanding quadrilateral concepts based on Van Hiele theory. *Journal of Physics: Conference Series*, *1839*(1). https://doi.org/10.1088/1742-6596/1839/1/012012

Martono, N. (2014). Metode Penelitian Kuantitatatif disi Revisi 2. *Metode Penelitian Kuantitatif*, 1–127. Retrieved from https://play.google.com/books/reader?id=tUl1BgAAQBAJ&hl=id&pg=GBS.PT20

Mawarsih, S. E., Susilaningsih, & Hamidi, N. (2013). Pengaruh Perhatian Orang Tua dan Motivasi Belajar Terhadap Prestasi Belajar Siswa SMA Negeri Jumapolo. *Jupe Uns*, *1*(3), 1–13. Retrieved from https://core.ac.uk/download/pdf/290553005.pdf

Murtikusuma, R. P., Anon, H., Anon, S., Oktavianingtyas, E., Putri, I. W. S., Anon, N., & Insani, K. (2022). The Development of Learning Device of Lesson Study for Learning Community Using Google Classroom and Quizizz Media and Their Effect on Students Creative Thinking Skills. *International Journal of Scientific and Research Publications (IJSRP)*, *12*(3), 160. https://doi.org/10.29322/ijsrp.12.03.2022.p12323

Nuryami, N., Janan, T., & Hasanah, N. (2022). the Influence of Realistic Mathematics Education on Year 8 Students' Spatial Ability of Cuboids and Cubes. *Kalamatika: Jurnal Pendidikan Matematika*, *7*(1), 69–84. https://doi.org/10.22236/kalamatika.vol7no1.2022pp69-84

Pendidikan, J. (2023). *PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS GAME TEBAK STKIP PGRI Situbondo , Indonesia PENDAHULUAN Salah satu pelajaran yang dianggap*

*sulit oleh siswa yaitu matematika namun pada disisi lain , matematika merupakan sebuah subjek yang sangat penting dalam keh*. *10*(1), 171–180.

Pendidikan, J., Hasanah, N., & Ambarsari, I. F. (2022). *Pengaruh Metode Kuis Menggunakan Aplikasi Quizizz dan Ice Braking Terhadap Motivasi Belajar pada Materi Sistem Persamaan Linear Tiga Variabel*. *10*(3), 1133–1142.

Pradipta, R. A., Wintoro, P. B., & Budiyanto, D. (2022). Perancangan Pemodelan Basis Data Sistem Informasi Secara Konseptual Dan Logikal. *Jurnal Informatika Dan Teknik Elektro Terapan*, *10*(2). https://doi.org/10.23960/jitet.v10i2.2541

Purwaningsih, C., & Syamsudin, A. (2022). Pengaruh Perhatian Orang tua, Budaya Sekolah, dan Teman Sebaya Terhadap Karakter Religius Anak. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *6*(4), 2439–2452. https://doi.org/10.31004/obsesi.v6i4.2051

Puspitasari, Y., & Hasanah, N. (2019). *NASIONAL TERHADAP HASIL BELAJAR MATEMATIKA SISWA KELAS X MANURUL FATA TAHUN PELAJARAN 2017 / 2018*. *6*(1), 34–43.

Rini, E. S. (2016). Pengaruh perhatian orang tua dan kedisiplinan siswa terhadap prestasi belajar matapelajaran IPS. *Jurnal Penelitian & Pendidikan IPS*, *9*(2), 1131–1149.

Sadikin, A., & Hamidah, A. (2020). Pembelajaran Daring di Tengah Wabah Covid-19. *Biodik*, *6*(2), 109–119. https://doi.org/10.22437/bio.v6i2.9759

Siregar, N. R. (2017). Persepsi siswa pada pelajaran matematika: studi pendahuluan pada siswa yang menyenangi game. *Prosiding Temu Ilmiah X Ikatan Psikologi Perkembangan Indonesia*, 224–232.

Taylor, P., & Irawati, S. (n.d.). *Communications in Algebra On R-Ideals of a Dubrovin Valuation Ring R*. (November 2014), 37–41. https://doi.org/10.1081/AGB-120027865