Management of Student Development on The Impact of Smartphones Through the Role of Parents During the Pandemic

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Abstract. The purpose of the study was to determine the development of students during the pandemic on the impact of using smartphones through the role of parents in managing their children at home. This research is a type of quantitative research through an experimental approach. The data analysis technique used descriptive statistical analysis. The sample of this study was 6th-grade elementary school students with a population of 75 students. The sampling technique in this study is a simple random sampling technique. The results showed that students who took part in learning during the pandemic using smartphones without the role of their parents resulted in negative behaviors, such as addiction to online games, playing more than studying, and uttering bad words from their mouths. Meanwhile, students who take part in learning during the pandemic using smartphones through the role of parents have a good impact on student development, such as the use of smartphones for learning needs, and the lack of dirty words. The novelty of this study is the importance of the role of parents in educating students about the use of smartphones during the pandemic. The reason is that the learning process is mostly done online due to the Covid-19 pandemic.

Keywords: student development; smartphone impact; the role of parents.

Parents are the key and the frontline in the process of child growth and development, playing a role in regulating, supervising, being responsible, supporting, trying to develop the quality of children's education at home and at school. Conditions of technological progress and development, parents as primary educators need to monitor children's involvement in these conditions. So parents must have that understanding. Thus, education and teaching for the next generation can have a good impact on life in the future. Parents have an obligation to pay attention to the future of their children, especially education (Rifai, 2016), because with the acquisition of education, each individual can manage in anticipating the realities of life in the form of challenges and problems (Wajdi, 2021). Covid-19 makes great changes to individual lives and creates socio-emotional-psychological problems (Uzun et al., 2021). This situation forces the individual to live unnaturally. Families with children experience stress, such as school closures, parents taking on additional responsibilities such as homeschooling. (Rusan Lateef, Ramona Alaggia, 2021). The Covid-19 pandemic has
exacerbated the learning technology gap in the education system. (Enrico Gandolfi, Richard E. Ferdig, 2021). The subjective well-being of parents raising children is disproportionately affected by the Covid-19 pandemic (Westrupp et al., 2021). These difficulties include ambiguity, social and physical isolation, economic problems, and health that have implications for parenting stress for parents (Taubman – Ben-Ari et al., 2021).

Globalization is a culture that can change the culture of a nation to follow other nations that have a higher civilization. Entering the globalization era of MEA (ASEAN Economic Community), competition between nations is getting tougher, so it takes a generation of nations that are not only qualified but also competitive (Armadi & Astuti, 2018). Indonesia is a developing country that seeks to face and compete with life's problems in order to move towards a developed country. (Farid Wajdi, 2021). Efforts to improve the quality of basic education need to be carried out in order to prepare a generation that understands global needs by providing guidance (Hasan et al., 2020).

Currently, technology is changing education from face-to-face interaction to virtual so that learning is done online (virtually). Online learning is an educational process through the internet using an education management system (Febliza & Okatariani, 2020). The development of information and communication technology has a significant influence on education (Hasyim & Haling, 2017). In life, humans have the need for tools to interact and communicate well. So they look for and create systems (tools) for easy communication and obtaining information and entertainment with various features presented by gadgets (Lioni et al., 2018). Gadgets are tools that open windows of information, games, hobbies, and entertainment that affect students' thinking, behavior, and attitudes. Gadgets can cause students to be undisciplined in learning and make children lazy to study (Hudaya, 2018).

Previous research has stated that Gadgets have various interesting, varied, interactive, and flexible features and applications that appeal to everyone (parents, young, teenagers, and children). Gadgets have benefits for humans if used properly and appropriately, but gadgets also have a negative impact, especially for children if used without parental supervision (Sunita & Mayasari, 2018). Excessive and inappropriate use of gadgets (smartphones) affects the personality and character of students. The personality of students should be of particular concern in instilling their character. Because personality and character will greatly affect the development of students (Rahmandani et al., 2018). The need for special rules in order to have a positive impact that motivates and optimistic the child, not a negative impact that causes something and harms the child in the future (Aswadi & Lismayanti, 2019).

The reality in the field, students are more fun, active, happy, and comfortable using smartphones in games both online and offline compared to online learning. This situation is even more massive for students when all countries are experiencing the Covid-19 pandemic. Before Covid-19, parents still limited the use of smartphones for their children, but at times like this learning is done online, so the situation is different. In order to be able to follow the lesson well, the choice is to use cellphones as a medium and of course to follow the active role of parents to help when learning is carried out. The positive and negative impacts that children get when using smartphones are due to the guidance of their parents and their environment. These technological advances have impacts, namely positive and negative. The positive impact is that humans easily access Information, connect with other people quickly through social networks. The negative impact of smartphone use on elementary school children is excessive use, plus the absence of healthy control mechanisms both at school and at home (Purba & Sidabutar, 2020).

Based on this description, this research is motivated by the condition of elementary school students who are more massive in using smartphones for online and offline games compared to the learning needed during the pandemic. The impact leads to inappropriate speech and behavior. Thus, there is a need for the role of parents in developing student behavior towards the impact of using smartphones, whether there is no pandemic or when the world is hit by a pandemic.

METHOD

This research is a type of quantitative hypothesis testing about the impact of smartphone use during the Covid-19 pandemic on elementary school students through the role of parents. The research approach is the
experimental pretest-posttest control group design as described below.

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment (E)</td>
<td>O1</td>
<td>X1</td>
<td>O3</td>
</tr>
<tr>
<td>Control (C)</td>
<td>O2</td>
<td>X2</td>
<td>O4</td>
</tr>
</tbody>
</table>

Source: (Sugiyono, 2015).

These symbols have the following meanings: E = Experiment Group; K = Control Group; O1 = Pre Test Experiment Group; O2 = Pre Test Control Group; X1 = Treatment (Smartphone impact); X2 = treatment (role of parents); O3 = Post Test Experiment Group; O4 = Control Group Post Test. The variables in this study consisted of two variables, namely the development of students on the impact of smartphones as dependent variable and the role of parents in managing student development as independent variable.

The population and research sample were elementary school students in grade 6 (a, b, c) for the 2019/2020 school year at SD Negeri 1 Laloeha Kolaka. The population in this study was 75 students. The sampling technique used in this study was a simple random sampling technique. The provisions for the number of samples that the author uses in this study are based on the Slovin formula method as a measuring tool to calculate the sample size with the following formula:

\[ n = \frac{N}{1 + N \varepsilon^2} \]

- \( N \) : Total population
- \( n \) : Number of samples
- \( \varepsilon \) : Error in taking samples set at 10%

The sample taken in this study was randomly based on the previous sample formula, namely:

\[ n = \frac{75}{1 + 75 (0.1)^2} \]

Based on the results of these calculations, the number of samples met was 43 students. Thus, the next step is to determine the experimental group and the control group. Determination of the experimental group and control group is done by listing the population units on a special sheet that is equipped with codes for each population unit. Then the codes are written on small sheets that are folded or rolled up one by one. After that, the folded sheet is put into a box (Bungin, 2010). The results of the shuffle sheet lottery stated that 22 students were in the experimental group category and 22 students were in the control group category.

Data was collected by giving questionnaires as a medium to analyze research results in the form of a series of written questions to respondents. Questionnaires were given to the experimental group and control group to get an idea of the role of parents to their children on the impact of smartphones before and after being provided with assistance during the pandemic and during the pandemic.

Observations were made to find out students who used smartphones before the pandemic and during the pandemic. The data analysis technique in this study used descriptive statistical data analysis techniques. This study also uses inferential statistical data analysis techniques to test the truth of the research hypothesis. The analysis was carried out to determine the impact of smartphones through the role of parents of IV grade students at SDN 1 Laleoha Kolaka during the Covid-19 pandemic.

RESULTS AND DISCUSSION

Result

Experimental Process

The observation technique was carried out to record student activities in using smartphones during the pandemic through the involvement of parents' roles. The aspects
observed were the use of smartphones at certain hours (during online learning, asking for permission to use smartphones when finished studying, limiting time using smartphones, emphasizing that children do not say dirty words, and being accompanied and supervised by parents when using smartphones in outside study hours).

Results of the Role of Parents

Based on the results of the evaluation of the role of parents, it shows that the research sample has increased understanding and is able to manage student development about the impact of smartphone use properly.

Description of Student Development Management on the Impact of the Experiment Group's Smartphones before and After Parental Role Assistance during the Pandemic Period

Table 1. Level of the role of parents regarding the impact of smartphones at SDN 1 Laloeha Kolaka for pre-test of the experimental group

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>16</td>
<td>73.0</td>
</tr>
<tr>
<td>Very Low</td>
<td>6</td>
<td>27.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The level of the role of parents regarding the impact of smartphones at SDN 1 Laloeha Kolaka in the experimental group in the pretest as many as 6 respondents (27%) was in the very low category and 16 respondents (72%) were in a low category.

Table 2. Level of the role of parents in managing student development regarding regarding the impact of smartphones at SDN 1 Laloeha Kolaka for post-test of the experimental group

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>8</td>
<td>38.0</td>
</tr>
<tr>
<td>High</td>
<td>14</td>
<td>62.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
</tr>
</tbody>
</table>

After the role of parents in managing student development regarding the impact of smartphones in 3 stages, the impact of smartphone use is reduced, where 14 respondents (63%) are in the high category and 8 respondents (36%) are in a low category. Thus the dominant respondents are in the high category.

Description of Student Development Management on the Impact of Control Group Smartphones before and After Parental Role Assistance during the Pandemic Period

Table 3. Level of the role of parents regarding the impact of smartphones at SDN 1 Laloeha Kolaka for pre-test of the control group

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>18</td>
<td>81.0</td>
</tr>
<tr>
<td>Very Low</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The level of the role of parents of students about the impact of smartphones at SDN 1 Laloeha Kolaka in the control group at pretest there were 18 respondents (81%) who were in the low category and 4 respondents (18%) were in the very low category, meaning that students tended to have a strong impact with smartphone use.

Table 4. Level of the role of parents regarding the impact of smartphones at SDN 1 Laloeha Kolaka for post-test of the control group

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>18</td>
<td>81.0</td>
</tr>
<tr>
<td>Very Low</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Whereas at the time of the posttest this condition did not show any significant changes, where 18 respondents (81%) were in a low category and 4 respondents (18%) were in the very low category, meaning that the tendency had no impact on the use of smartphones for students in the group the control has not changed.

Hypothesis testing

Because of the data are categorical so man whitney was used to analyzed them the result is followed:
Test Statistics

<table>
<thead>
<tr>
<th>Test</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>110.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>363.000</td>
</tr>
<tr>
<td>Z</td>
<td>-3.592</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
</tr>
</tbody>
</table>

This means that the management of student development regarding the impact of smartphones through the role of parents during the pandemic is more influential in reducing the impact of smartphone use in the experimental group compared to the control group without a significant role in the impact of smartphone use on children (students). It was showed by the the Asymp hypothesis test. Sig. (2-tailed) the two-tailed test is 0.000 that is lower than 0.05.

**Discussion**

Based on the results of research on the management of student development on the impact of smartphones through the role of parents during the pandemic, the experimental group on the pre-test results was in a low category. This means that students with the attitude of frequently using smartphones outside of class hours have a very bad impact if there is no role of parents as managers, educators, influencers, directors, role models, companions, and protectors. As with several observations of elementary school children (students) in this study, there were some students who were addicted to smartphone use, were more and more comfortable with online games came out with disrespectful and bad words from their mouths due to the absence of role control parents of students. Statistically, it can be proven, that at the time of the pretest as many as 6 respondents (27%) were in the very low category and 16 respondents (72%) were in a low category. From the results of this study, it shows that student behavior in using smartphones has changed, that is, students use smartphones only when online learning is taking place, when using smartphones students are willing to play online games close to their parents, student are not too massive in using smartphones outside lesson hour.

Based on the results of inferential statistical analysis, the role of parents is very influential in reducing the use of smartphones outside of class hours which can cause students to be lazy to learn. The results of the null hypothesis test (Ho) are declared to be rejected and the consequence is that the working hypothesis (H1) is accepted. So it can be concluded, that there is a difference between the impact of smartphone use without going through the role of the parents and the role of parents when using the smartphone of SD Negeri 1 Laloeha Kolaka students, namely the role of parents is very influential in reducing the negative effects that occur due to the massive use of cell phones smart outside of class hours. The results of the analysis show that the average behavior of the experimental group students through the role of parents in using smartphones is more disciplined and has fewer words and bad behavior due to the impact of the smartphone.

Based on this description, the important role of parents in the first education at home is the basic foundation for children's education, in order to have good behavior (personality).

**Role of Main Educator (Parents)**

Education as a means of shaping the human person plays an important role in dealing with situations and conditions of life. With education, a person is able to solve problems and face his life. The life of the world today is faced with a global pandemic in the world. But life must go on with the time and the trust given by God. Humans as creatures of God have a role, especially humans who act as parents (educators). The role is an integrated interaction activity that is reflected in a person's behavior towards his duties and responsibilities in achieving a goal. From an educational perspective, this role is reflected in the activity process between the interaction of the teacher (educator) and student behavior in the teaching and learning process.

Educational progress can be seen in the quality of students because they are the central point in the teaching and learning process (Triastuti & Sudira, 2019). Education as the key to success and human progress in facing life's challenges and overcoming problems is the most important thing that humans must go through, because education is a process of coaching, developing, and being able to direct humans to the path of goodness.

The important role of parents, in this case, is to avoid words and behavior that are obscene, disrespectful, and contrary to moral ethics, both from the point of view of religion, culture, and state ideology. The following are some of the functions and roles of parents, among others: 1) as managers, managing their
household life, including arranging education for their children; 2) as educators, have the responsibility to provide good education to their children as the next generation to be able to face future challenges; 3) as an influence, influencing children's thoughts and behavior in acting and acting as a process of forming personality traits; 4) as a guide, directing their children to act and face a good life so that the goals and results are for their happiness in the future; 5) as a role model, providing an example and behavior in accordance with religious values, culture, and national character; 6) as a companion, supervising and communicating, in order to create a harmonious relationship and avoid bad behavior in order to socialize with the community; and 7) as a protector, providing protection for their children to avoid problems that have not been able to be faced in their lives. Hypnotherapy-based communication models can reduce the level of online game addiction and can influence student behavior, ideas, and attitudes in a dialogical manner (Rachayu & Banat, 2020).

Forming and guiding children to become quality human resources must obtain quality education accompanied by the cultivation of good character values taught through the example of parents in the family environment so that these children are able to face the global era, challenges, and problems of life. Even if the pandemic is contained, another impending crisis will require more flexible technologies and more agile innovation processes (Brem et al., 2021). Efforts that can be made are to build character through the education system, both at the macro level, starting from the implementation stage in learning experiences and habituation in life situations (reinforcement) as well as at the micro-level in the form of value/character development, among others through teaching and learning activities in the classroom, daily activities in the form of education unit culture, co-curricular and/or extra-curricular activities as well as daily activities at home and in the community (J Jasrudin, Z Putera, 2020). The values of character education are reflected in the procession of cultural application (A Ramly, F Wajdi, 2020).

Based on this description, education through the role of parents has a very large impact. If students learn without good roles and management, it will have a negative impact, as happened to students before and during the pandemic in using smartphones for the learning process.

CONCLUSIONS AND SUGGESTIONS

Based on the results of research on the management of student development on the impact of smartphones through the role of parents during the pandemic in fourth-grade students at SDN 1 Laleoha Kolaka, student behavior has a very bad impact if using smartphones outside class hours without the role of people. So there needs to be a role for parents, especially during the pandemic when students are learning online. The level of parental role of students at SDN 1 Kolaka in the experimental group before the role of parents, from the results of the pre-test, was in a low category. While the level of impact after the role of parents the post-test results showed a reduced change in student behavior. Then the level of the role of parents in the control group before and after the role of parents in managing student development regarding the impact of smartphones from the results of both pre-test and post-test results did not show significant changes or remained in a low category. Thus, the suggestion in the study is the need for an extra role from parents as primary educators in the family environment in managing the development of children (students) at home, especially during the pandemic, and the need for good communication and supervision in managing children's educational development through the role of parents.

REFERENCES


