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The Effect of Smartphone Addiction on Students' Learning Motivation

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ABSTRACT

This study aims to determine the effect of smartphone addiction on learning motivation through time management. The population of this study were student representatives from five study programs of Universitas Pendidikan Indonesia Purwakarta campus and the sample was taken using proportional random sampling technique. This study used a quantitative approach. The data collection method in this study used interview observation. The data analysis technique used in this study was descriptive statistical analysis. The results showed that: 1) smartphones have no influence on learning motivation, 2) organizational activities and time management have a significant influence on learning motivation, 3) smartphones and organizational activities have a significant influence on time management, 4) time management cannot be a mediator of the influence of smartphones on learning motivation.

Keywords: *Smartphone addiction, Learning motivation, Time management, Organizational activity, Effect (significant), Mediator*

1. Introduction

Smartphone use has become an integral part of everyday life, especially among university students. However, the increased use of smartphones not only brings benefits, but also raises concerns about the dependence or addiction to these devices. The phenomenon of smartphone addiction has received increasing attention due to its potential to affect various aspects of life, including students' learning motivation.

Learning motivation is an important factor in determining students' academic success and learning achievement. However, excessive smartphone use can affect concentration and focus on learning, potentially reducing motivation to learn. On the other hand, involvement in organisational activities on campus can provide valuable social and learning experiences for students, but also requires proper time allocation so as not to interfere with academic activities.

Time management is an important key in maintaining a balance between various activities, including academic, social, and personal activities. Students' ability to manage their time can have a direct impact on their learning motivation. However, it is unclear whether time management can be a mediator in the relationship between smartphone use, organisational activities, and study motivation.

This study aims to explore the complex relationship between smartphone use, involvement in organisational activities, time management, and learning motivation among university students. By taking into account these various factors, it is expected to provide a deeper understanding of how smartphone use and organisational activities contribute to college students' learning motivation, as well as the role of time management as a mediator in the relationship.

1.1. Smartphone Use and its Impact on Learning Motivation

Smartphone use among university students has increased significantly in recent years. Smartphones offer various functions that can support academic activities, such as quick access to information, learning applications, and efficient communication tools. However, smartphone addiction can also have a negative impact on learning motivation. Junco (2015) found that the use of social media through smartphones can disrupt study concentration and reduce academic performance. Lepp, Barkley, and Karpinski (2015) also identified that excessive smartphone use is associated with decreased academic performance and increased anxiety. This factor will result in questions to the respondents 'Does the use of smartphones have an impact on learning motivation?' and 'How often do respondents use smartphones on a daily basis?'

1.2. Organisational Activity Factor and its Effect on Learning Motivation

Involvement in organisational activities on campus has a significant positive impact on the development of students' social and leadership skills. These activities provide opportunities for students to learn to work in teams, manage time, and participate in decision making. Research by Tieu et al. (2010) showed that students who are active in organisations tend to have higher learning motivation and better time management skills. However, if not balanced with effective time management, participation in organisations can also interfere with study time. From this factor, it will generate questions to respondents 'Does involvement in organisations affect Smartphone Addict?' and 'Does the same affect learning motivation?'

1.3. Time Management as a Determinant of Learning Motivation

Time management is the ability to plan and control how time is spent on certain activities, including studying. This ability is very important for students to manage various academic and non-academic demands. Britton and Tesser (1991) found that students who have good time management skills tend to have higher academic achievement and lower stress levels. Effective time management helps students to stay focused on their academic goals and increases motivation to learn. From this factor will generate questions to respondents 'How is the

respondent's time management of Smartphone use every day?' and 'How is the time management of all activity involvement with the determinants of learning motivation?'

1.4. Mediating Effect of Time Management

Previous research suggests that time management may serve as a mediator in the relationship between smartphone use and learning motivation. For example, research by Wang et al. (2014) showed that although smartphone use can disrupt learning focus, good time management can help students to stay productive and motivated. Similarly, structured organisational activities can provide time management skills that can increase learning motivation (Britton & Tesser, 1991). From this factor, it will generate a question to the respondent 'Are respondents able to manage their time every day and make a mediator for Smartphone management and learning motivation?'

In light of these findings, this study aims to further explore the relationship between smartphone addiction, organisational activities, time management, and study motivation among university students. It is hoped that this research can provide a deeper insight into how these factors influence each other and contribute to students' learning motivation, as well as these factors into a question to the sample during the interview to determine the sample into three categories: addiction, non-addiction, and functional addiction.

2. Methods

This research methodology combines a literature study approach with quantitative data collection through interviews. The literature study approach is used to gain an in-depth understanding of the relationship between smartphone use, participation in organisational activities, time management, and students' learning motivation. We will conduct a systematic review of relevant literature, including scientific journals, books, and online sources that can provide insight into the research topic. Furthermore, quantitative data will be collected through interviews with students from five study programmes at Universitas Pendidikan Indonesia Purwakarta campus, which semester students are and whether they are actively participating in organisations or not, the sample is drawn using proportional random sampling technique. The interviews will focus on their understanding of smartphone use, participation in organisational activities, personal time management, and their level of learning motivation. The use of interviews as a data collection method will allow us to gain a deep insight into students' experiences and perceptions related to this research topic. The data collected will be analysed descriptively and statistically to identify patterns, trends, and relationships between the variables under study. It is hoped that this method will provide a comprehensive understanding of the factors that influence students' learning motivation in the context of smartphone use, participation in organisational activities, and time management.

3. Results and Discussion

3.1. Results

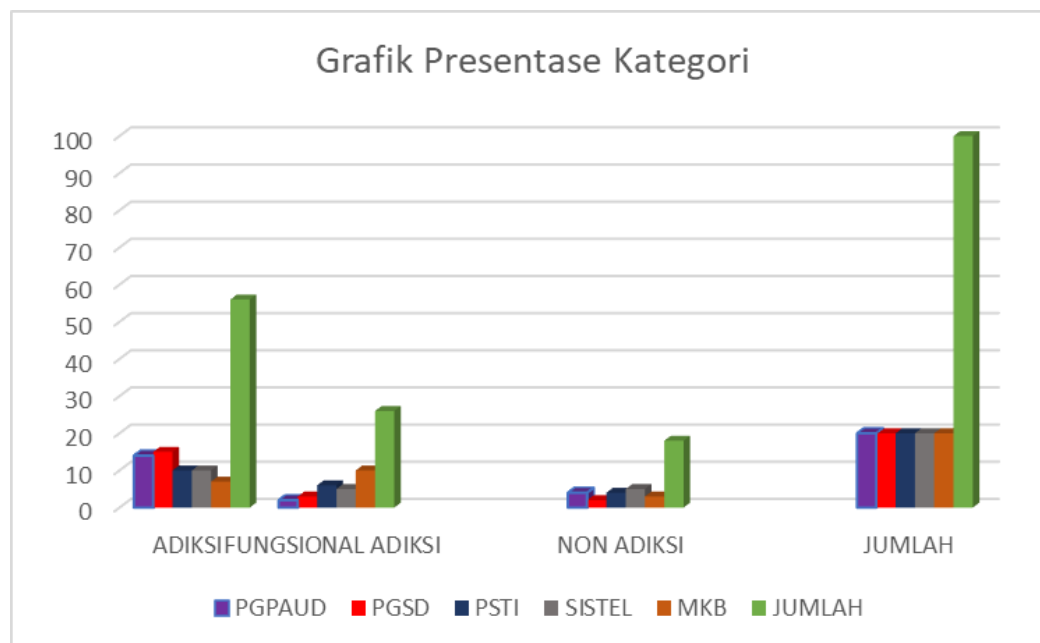
Based on the results of observational interviews with student representatives from five study programs at Universitas Pendidikan Indonesia (UPI) Purwakarta Campus, data were obtained which were categorised into three groups: addiction, functional addiction, and non-addiction. Table 1 shows the distribution of the number of students in each category from each study programme.

Table 1. Results of Interview Observation

Study Program	Adiction	Fungsional Adiction	Non Adiction	Total
PGPAUD	14	2	4	20
PGSD	15	3	2	20
PSTI	10	6	4	20
SISTEL	10	5	5	20
MKB	7	10	3	20
Total	56	26	18	100

From the table above, it can be seen that:

- 56% of students fall into the addiction category.
- 26% of students fall into the functional addiction category.
- 18% of students fall into the non-addiction category.



Graphic 1. Percentage Category of Student Addiction

Distribution of Addiction among Students

Based on the observation results, it can be seen that the majority of respondents fall into the addiction category. This shows that excessive smartphone use is a significant problem among UPI Purwakarta Campus students. Smartphone addiction can cause disruption in students' academic and social life, as mentioned by Lepp, Barkley, and Karpinski (2015) that smartphone addiction is associated with decreased academic performance and increased anxiety.

Functional category of addiction

A total of 26 students were in the functional addiction category. Students in this category may use smartphones intensively, but can still manage the use to not interfere too much with their academic activities. This suggests that despite smartphone dependence, some students are able to compensate with good time management, supporting the findings of Wang et al. (2014).

Non-addiction category

A total of 18 students were in the non-addiction category, indicating that they used smartphones in a more controlled way and did not let the use interfere with their learning motivation. This shows the importance of effective time management to maintain a balance between technology use and academic activities.

3.2. Discussion

Some important findings of this research are:

1. **Smartphones and Learning Motivation:** Excessive smartphone use does not have a direct influence on learning motivation. However, smartphone addiction can disrupt students' learning focus and concentration.
2. **Organisational Activities and Time Management:** Organisational activities and time management have a significant influence on learning motivation. Students who are active in organisations and have good time management skills show higher learning motivation.
3. **Smartphone and Time Management:** Smartphone use and involvement in organisational activities have a significant effect on students' time management. However, time management skills cannot be an effective mediator between smartphone use and study motivation.
4. **The Role of Time Management:** Effective time management can help students overcome the negative impact of excessive smartphone use. Students who can manage their time well tend to have higher learning motivation despite intensive smartphone use.

To help students overcome this challenge, here are some recommendations for good time management:

1. **Create a Daily and Weekly Schedule:**

Students are advised to make a schedule that covers all daily and weekly activities, including study time, break time, and other activities. This will help them manage their time more efficiently and ensure that all tasks can be completed on time.

2. **Using the Pomodoro Technique:**

Using the Pomodoro technique can help divide study time into short sessions (e.g. 25 minutes of studying followed by a 5-minute break). This method is effective for maintaining focus and reducing fatigue.

3. **Prioritise Tasks Based on Importance and Deadline:**

Students need to make a list of tasks that need to be completed and prioritise based on importance and deadlines. Focusing on the most important and urgent tasks first helps ensure that crucial work is not delayed.

4. **Limit Smartphone Use during Study Hours:**

To reduce distractions, students are advised to switch off notifications or use 'Do Not Disturb' mode during study hours. Setting a specific time to check smartphones can help maintain concentration during study sessions.

5. **Utilise Time Management Apps:**

Time management apps such as Google Calendar, Todoist, or Trello can be used to help organise your schedule and remind you of tasks that need to be completed, so that you can stay on top of things.

4. Conclusion

This study has explored the effect of smartphone addiction on students' learning motivation through time management. Based on observational interviews with student representatives from five study programmes at Universitas Pendidikan Indonesia Purwakarta Campus, it was found that smartphone addiction is a significant problem among students, with the majority of respondents falling into the addiction category.

This conclusion suggests that although smartphone addiction is a real challenge, good time management skills can reduce its negative impact on learning motivation. Therefore, it is important for educational institutions to develop programmes and interventions that help students improve their time management skills and manage smartphone use more wisely. This will support the improvement of their learning motivation and overall academic performance.

By adopting these recommendations, students can more effectively manage their time, thereby reducing the negative impact of smartphone addiction on study motivation. Educational institutions can also play an active role by providing the necessary resources and support to assist students in improving their time management skills. This will ultimately support the improvement of students' learning motivation and overall academic performance.

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