Analysis of the Influence of Gadget Use on Cadet Discipline and Dormitory Life at Sorong Maritime Polytechnic.

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ABSTRACT

This study investigates the influence of gadget use on cadet discipline and dormitory life at Sorong Maritime Polytechnic. The research identifies two key aspects: (1) the direct impact of gadget use on cadet discipline and (2) the influence of gadget use on cadet life within the dormitory. Using a quantitative approach, data was collected from 274 cadets, employing a Likert scale questionnaire. The findings reveal that gadget use significantly affects both cadet discipline and their daily life in the dormitory. Specifically, gadgets contribute to improving cadet discipline by aiding in reminders and supporting time management, which is particularly beneficial for cadets between the ages of 19 and 21. Furthermore, gadgets offer a form of entertainment that helps cadets cope with the limited social and recreational activities available in dormitory life, thereby improving their well-being. However, the study suggests that while gadgets can be a useful tool for enhancing discipline, there should be regulations to limit their usage, ensuring that cadets do not become overly dependent on them. Additionally, promoting a more social and cooperative environment within the dormitory is recommended to complement the benefits of gadget use. This research provides insights into how gadgets can be leveraged to improve cadet life and discipline, while also offering suggestions for policy adjustments at the institution level.
Keywords: Gadgets, Discipline, Dormitory Life

INTRODUCTION

Currently, the number of Indonesian people accessing the internet has reached 150 million people who are spread across various regions. Data obtained from the Ministry of Communication and Information stated that mobile internet users number around 142.8 million people with a penetration percentage of 53% (Rahiem, 2020). The internet access time per day for Indonesian people is eight hours 36 minutes, of which 3 hours are used to play social media, after that two hours watching streaming videos, the next hour is used to stream music. The rest is done to do business and also to access information.

Gadgets also have the potential to cause depression and mental health problems in childhood and adolescence. This will have an impact on character disorders (Sundus, 2018). Adolescents in the process of finding their identity, technology and exposure to such rapid information can have a negative impact on individuals including distorted body image perceptions, risky sexual behavior, easy access to pornography, commercialization, risk of obesity and decreased academic achievement (Vargo et al., 2021).

Mobile phones or gadgets are no longer just a tool for communication, but also a lifestyle, appearance, and trend. Initially, mobile phones were only used by people who really needed them, such as office workers, business people, officials or teachers. However, now mobile phones are not only used by important people but also school-age children. The use of mobile

phones in the world of education is a problem that needs to be studied in depth because in the mind it seems that mobile phones are only useful for sending Short Message Service (SMS), listening to music, watching audiovisual shows, and games (Rikala, 2015).

The word discipline comes from Latin, namely "discipulus" which means "learning". Discipline can be applied to teaching. According to research conducted by Ariesandi (2008), discipline means the process of training the mind and character of children which is carried out in stages so that it is hoped that someone has self-control and is useful for society. According to research by Pohan (2024), it is said that discipline can train and also educate life to be more orderly. In this case, it proves that discipline is not only limiting, restraining or punishment as is commonly thought.

From the results of research conducted by Choiri (2017) it states that there are three educational environments that can support children's learning process, namely the family environment, school environment and surrounding environment (society). In the context of education, society is the third environment after family and school. In research conducted by Choiri (2017) it is seen that the community environment has an important influence on children's learning process. Because most of the time children are in the family and community. For that it is a necessity for society to participate in education both directly and indirectly. Because society is an assistant in the process of maturing individuals as members of a group in a society. The learning process in society is not limited by space and time. As long as children interact and socialize with the environment, it can be said that it is their learning process. Through this literature research, it is hoped that it can determine how far the role of the community environment is in helping children's learning process.

A more recent definition of environmental psychology was put forward by Hauhs (2017), namely as a discipline that studies the relationship between individuals and the natural and artificial environment. This means that environmental psychology looks at the influence of the environment on human experience, behavior and well-being, as well as the influence of individuals on the environment. From several definitions, several characteristics of environmental psychology are obtained, namely interdisciplinary, holistic approach, theory and application oriented, the relationship between humans and their behavior is reciprocal and mutually influential.

In a study conducted by Munawwir (2024) regarding the influence of gadget use on students' obligatory prayer discipline, it was shown that gadget use has a positive impact on gadget use. This is different from a study conducted by Bahagia (2022) which stated that gadgets can cause students to be undisciplined in learning and make children lazy to learn.

Excessive use of gadgets (cell phones) will result in negative impacts as stated by a pediatrician from the United States named Cris Rowan. This can be supported by the results of research by Harfiyanto et al. (2015) showing that social interaction patterns are lacking, students prefer to use gadgets and will not respond to students they have just met when they meet somewhere, the form of interaction that occurs through interaction using gadgets can be two, associative processes and disassociative processes. The associative process is a form of social interaction that occurs using gadgets, students often work together to do assignments, homework, exchange information, while the disassociative process is conflict, there has never been a serious conflict, what happens is only differences of opinion and misunderstandings that can be resolved directly by students. The negative impact of using gadgets is that students lose track of time. It can be interpreted that using

gadgets affects students' social interactions which have a negative impact on students' difficulty in time management.

METHOD

In this research using quantitative approach procedure. Quantitative approach is used because the information to be used to analyze the impact between variables is claimed with value. Based on the level of description of the role of the variable so that this research is associative causal, which is intended to identify the effects of 2 or more variables (Umar, 2005).

According to Pugu (2024), the definition of Population is an area consisting of objects/subjects where there is quality and also has certain characteristics so that it can be determined by researchers to be studied and conclusions can be drawn. While the population used in this study is Cadets from the Sorong Shipping Polytechnic. The population of the Sorong Shipping Polytechnic is 274 people. According to Arikunto's statement (2013), the sample is a representative of the population that can be used in research. Based on Arikunto's opinion (2017), it can be explained that: if the population is less than 100, then it would be better if all the population were used as samples, while if the population has more than 100 samples, the sample can be at least 10-25%. The data obtained from each variable obtained was analyzed using Smart PLS software version 4.1.

Table 1. Research Respondents

No.	Respondent profile	Number of people)	Percentage (%)
Gender			
1	Man	189	69
2	Woman	85	31
Educational level			
1	JUNIOR HIGH SCHOOL	4	1.5
2	SENIOR HIGH SCHOOL	163	59.5
3	DIPLOMA	107	39.1
Age			
1	17 years	2	0.7
2	18 years	19	6.9
3	19 years old	48	17.5
4	20 years	71	25.9
5	21 years	64	23.4
6	22 years	35	12.8
7	23 years	19	6.9
8	24 years old	16	5.8

In this study, 3 variables were used, consisting of 1 independent variable, namely the use of gadgets (X), while for the dependent variables there are two, namely the discipline variable (Y1) and the next variable is the life of cadets (Y2). The framework of this study can be seen in Figure 1.
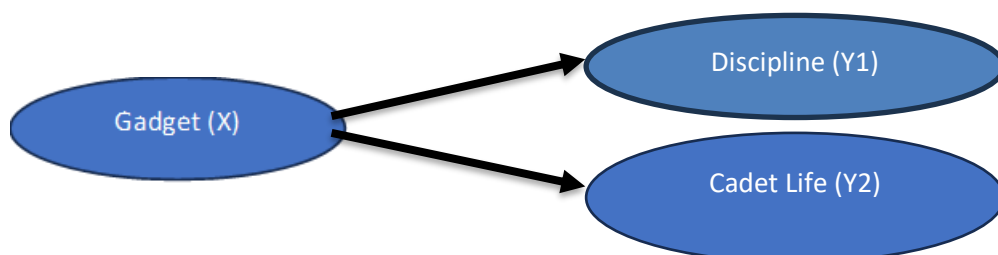
Figure 1. Research framework

Process The data collection carried out in writing this research is adjusted to various situations and conditions that occur in the actual state of the research, namely by using several techniques, namely: 1) conducting Field Studies, 2) conducting Literature Studies.

In obtaining the desired data, the technique used in measuring research results is by using a Likert scale, so that respondents' answers can be assessed. The Likert scale can be used to measure attitudes, opinions and perceptions of a group of people or a person about the existence of a social phenomenon that occurs (Sugiyono, 2004). In this study, the Likert scale instrument measurement was used to fill out the questionnaire that had

been arranged in the form of a question sentence.

Analysis using Partial least squares (PLS) is one of the alternatives that is often used in OLS regression, canonical relationships, and can even be used in structural equation modeling (SEM) based on covariance in the independent variable system and research responses (David & Garson, 2016). In this study, data processing was carried out using Smart PLS software series 4.1..

RESULTS and DISCUSSION

In this study, the theoretical model used is described in the conceptual model of this study, as shown in Figure 2.
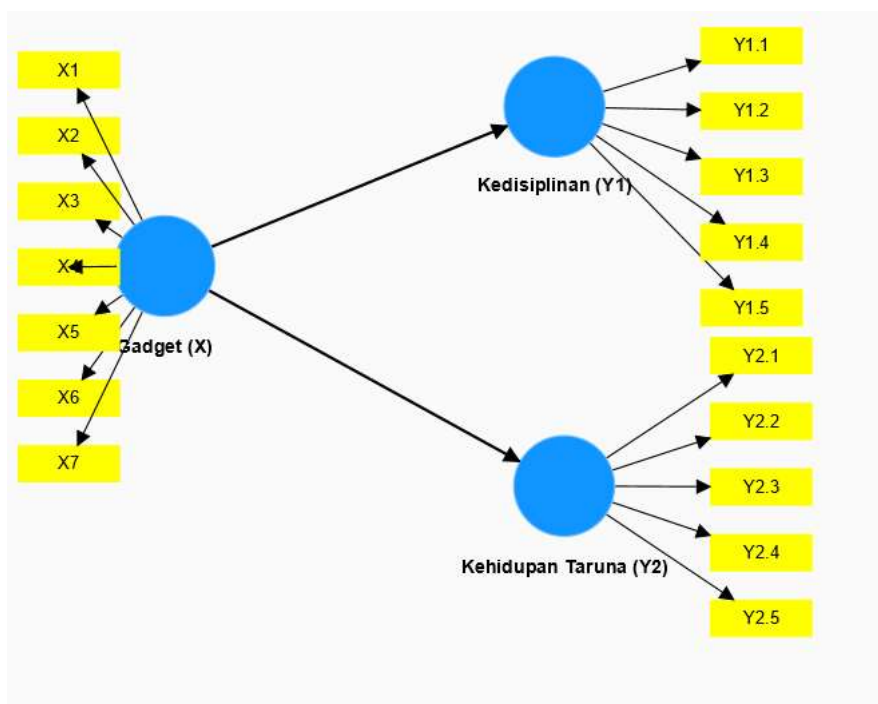

Figure 2.Research construct

The results of a construct can be declared reliable if the value of Cronbach Alpha is met with a minimum value of 0.60 (Nunally and Bersttein 1994). Meanwhile, according to Henseler et al, (2009) the value of the composite reliability obtained must have a minimum value of 0.60. The lowest value of AVE owned must be 0.50 so that its validity can be considered

construct (Sudjana Budhi, 2003). Based on the statement from Budhi (2003), to obtain construct results, researchers need to do some elimination of indicators that have values below 0.60. In order to obtain the results of Construct Reliability and Validity that have the appropriate value, several variables must be adjusted to comply with existing provisions. To obtain

appropriate results, the data calculation process is carried out 2 times, with the results of Construct Reliability and Validity as follows:

Table 2. Results of valid Construct Reliability and Validity and Lacker form

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Gadgets (X)	0.856	0.857	0.913	0.777
Discipline (Y1)	0.812	0.92	0.861	0.607
Cadet Life (Y2)	0.762	0.762	0.864	0.68

	Gadgets (X)	Discipline (Y1)	Cadet Life (Y2)
Gadgets (X)	0.881		
Discipline (Y1)	0.616	0.779	
Cadet Life (Y2)	0.677	0.62	0.824

From the results of the data processing above, it is obtained that all indicators have a higher correlation coefficient number for each of their own variables compared to the correlation coefficient number of the indicator with other variables, so that in the end it is summarized that each indicator in the block is a variable or construct former in the column.

In doing pGoodness of Fit testing needs to be done in order to find out whether the data in measuring the relationship in each variable is good or not. There are two indicators used in this test, namely the coefficient of determination and the model suitability test.

This determination coefficient can be used to see how much the independent variable contributes so that it can explain its relationship with the dependent variable. The determination coefficient can be done by looking at the R-Squared statistical value for each relationship in each existing variable. While this analysis is to determine the percentage of endogenous construct variability that may be explained by exogenous construct variability. This analysis is also to determine the goodness of the structural equation model. The higher the R-square value indicates the greater the exogenous variable can explain the endogenous variable so that the better the structural equation. Attached is the output value of the R Square value as follows:

Table 3. R-square and HTMT

	R-square	R-square adjusted
Discipline (Y1)	0.379	0.376
Cadet Life (Y2)	0.459	0.456

	Gadgets (X)	Discipline (Y1)	Cadet Life (Y2)
Gadgets (X)			
Discipline (Y1)	0.624		
Cadet Life (Y2)	0.838	0.689	

Henseler et al. (2015) proposed the heterotrait-monotrait ratio (HTMT) assessment of correlations. In short, HTMT is the ratio of the inter-trait correlations to the within-trait correlations. HTMT is the mean of all indicator correlations across constructs measuring different constructs (i.e., heterotrait-heteromethod correlations) relative to the (geometric) mean of the average correlations of indicators measuring the same construct. Technically, the HTMT approximation is an estimate of what the true correlation between two constructs would be if they were both perfectly measured (i.e., if they were perfectly reliable). This true correlation is also referred to as the disattenuated correlation. A disattenuated correlation between two constructs close to 1 indicates a lack of discriminant validity.

Table 4. Path coefficients Direct Effects Values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Gadget (X) -> Discipline (Y1)	0.616	0.625	0.043	14,472	0,000
Gadget (X) -> Cadet Life (Y2)	0.677	0.681	0.055	12,368	0,000

In table 4, it is the result of bootstrapping which is a formation of research results. Where in table 4 it can be seen that the output has a direct relationship (direct effect) all variables have a p-value less than the significance level of 0.05 so that the value of the direct effects is significant. So it can be concluded:

- The relationship between gadgets and discipline

  from these results it can be shown that the gadget variable on discipline has a significant influence. Where it can be interpreted that gadgets can make Sorong Maritime Polytechnic cadets disciplined. The results of this study have the same results as the study conducted by Luthfi (2020). While the study conducted by Adeng (2018) is not the same as the results of this study.

- The relationship between gadgets and the lives of cadets

  For the gadget variable on the life of cadets has a significant influence. Where it can be interpreted that the use of gadgets can make Sorong Maritime Polytechnic cadets change their life patterns in the dormitory.

CONCLUSION

Based on the analysis carried out from the research results that have been conducted, the following conclusions can be drawn:

a. The use of gadgets on cadet discipline has a very positive influence, because the age of the cadets as respondents is roughly between 19 - 21 years, where this age range still has a dependence on the use of gadgets to help as a reminder to help cadets to be more disciplined.

b. The use of gadgets has a positive impact on the lives of cadets, because it is possible that the use of gadgets can be an additional form of entertainment during dormitory life, where dormitory life is very minimal with personal entertainment so it is hoped that by being allowed to use gadgets, cadets can be comfortable living in the dormitory.

6.2 Suggestion

The following are suggestions that can be given to the Sorong Maritime Polytechnic and to researchers who wish to develop this research, namely:

a. For Sorong Maritime Polytechnic, it would be better if in Discipline Education there is a time limit on the

use of gadgets so that cadets can practice discipline without depending on gadgets as a reminder so that a disciplined attitude can grow from within the soul of each cadet. In addition, in dormitory life there should be a social life and cooperation so that a sense of togetherness can emerge rather than just dependence on the use of gadgets.

b.   For further research, data can also be collected from the supervisors, trainers and lecturers as assessors of the attitudes of the Sorong Maritime Polytechnic cadets.

REFERENCES

Ariesandi, S. (2008). Rahasia mendidik anak agar sukses dan bahagia. *Jakarta: Gramedia Pustaka Utama.*

Arikunto, S. (2017). Metode peneltian. *Jakarta: Rineka Cipta*, 1–221.

Bahagia, B., Wibowo, R., Muniroh, L., Al Wahid, A., Rizkal, R., Noor, Z. M., & Halim, A. K. (2022). The Impact 0f Playing Games and the Role Of Parents to Control Student Behaviour in Online Learning From a Teacher's Perspective Amid Pandemic Covid-19. *Jurnal Basicedu*, 6(3), 5320–5328.

Choiri, M. M. (2017). Upaya pemanfaatan lingkungan sekitar sebagai sumber belajar anak. *Refleksi Edukatika: Jurnal Ilmiah Kependidikan*, 8(1).

Harfiyanto, D., Utomo, C. B., & Budi, T. (2015). Pola interaksi sosial siswa pengguna gadget di SMA N 1 Semarang. *JESS (Journal of Educational Social Studies)*, 4(1).

Hauhs, M., y Widemann, B. T., & Klute, G. (2017). Bridging disciplinary gaps in studies of human-environment relations: A modelling framework. *Modern Africa: Politics, History and Society*, 5(2), 35–76.

Munawwir, M., Faizah, R. M., Rif�ah, S. N., Basyiroh, L. A., Safitri, N. J., Maharani, A. P., & Ramadhany, A. W. (2024). Pengaruh Penggunaan Gadget dan Kedisiplinan Siswa Terhadap Prestasi Belajar PAI Kelas V SDN Kutisari II Surabaya. *Innovative: Journal Of Social Science Research*, 4(3), 63–70.

Pohan, M., Dewi, S. F., Montessori, M., & Putra, E. V. (2024). The Teacher's Role in Forming Character of Care for the Environment and Student Discipline. *Jurnal Penelitian Pendidikan IPA*, 10(8), 5807–5815.

Pugu, M. R., Riyanto, S., & Haryadi, R. N. (2024). *Metodologi Penelitian; Konsep, Strategi, dan Aplikasi*. PT. Sonpedia Publishing Indonesia.

Rahiem, M. D. H. (2020). The emergency remote learning experience of university students in Indonesia amidst the COVID-19 crisis. *International Journal of Learning, Teaching and Educational Research*, 19(6), 1–26.

Rikala, J. (2015). *Designing a mobile learning framework for a formal educational context*. University of Jyväskylä.

Sundus, M. (2018). The impact of using gadgets on children. *Journal of Depression and Anxiety*, 7(1), 1–3.

Vargo, D., Zhu, L., Benwell, B., & Yan, Z. (2021). Digital technology use during COVID-19 pandemic: A rapid review. *Human Behavior and Emerging Technologies*, 3(1), 13–24.