Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet

Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

Problematic Smartphone Use (PSU) and Learning Outcomes: Learning Motivation as a Mediator

Excellina Salsabillah[1*], Mohamad Arief Rafsanjani[2]
[1*,2]Economic Education, Faculty of Economics and Business, State University of Surabaya

*Corresponding Author Email: excellinasalsabillah.20031@mhs.unesa.ac.id

Article History
Received: 19-07-2024
Revised: 20-07-2024
Published: 26- 07-2024

Key Words:
Problematic Smarphone Use, Learning Motivation, and Learning Outcome

Abstract: Good learning outcomes enable students to develop important skills and knowledge in various fields with learning motivation having a very important role in the learning process, with high motivation it can help students to achieve achievement and with good learning motivation, students will reduce the habit of using smartphones excessively. This research aims to determine the relationship between problematic smartphone use and learning outcomes directly and indirectly through learning motivation. This research uses a quantitative approach, with an ex post facto type of research. The research sample was 288 students at SMA Al-Islam 1 Krian, using random sampling techniques. The measuring instruments used are the SAS-SV scale (10 items), and the SOS scale (10 items). The data analysis used is the Structural Equation Model (SEM) with the Partial Least Square (PLS) equation model in Smart-PLS 4 software. Statistical test results. The results of this research show that: PSU has no significant effect on learning outcomes, PSU has a significant effect on motivation learning, learning motivation does not have a significant effect on learning outcomes, and learning motivation cannot mediate the influence of PSU on learning outcomes.

How to Cite: Salsabillah, E., & Mohamad Arief Rafsanjani. (2024). Problematic Smartphone Use (PSU) and Learning Outcomes: Learning Motivation as a Mediator . *JMET: Journal of Management Entrepreneurship and Tourism*, *2*(2), 284–295. https://doi.org/10.61277/jmet.v2i2.145

https://doi.org/10.61277/jmet.v2i2.145

This is an open-access article under the CC-BY-SA License.

Introduction

Research on the reasons why some students are more driven to learn than others and the variables influencing their academic behavior has been extensively studied by educational psychologists. EVT, or expectation-value theory, is one of the primary theories of learning motivation. This theory is frequently applied to forecast and explain students' task preferences, perseverance in learning, and academic success (Elizabeth, What We Know About Expectancy-Value Theory, 2019). Theorists contend that learning outcomes, effort, persistence, and performance can all be directly impacted by students' subjective task value and prospects for success (Wigfield & Eccles, Expetancy Value Theory, 2014). Students seem to have less autonomy and choice than adults, who can choose what they want to learn and accomplish. This is due to the fact that learning paths have been established by schools and the national curriculum, which has limited their options. Their perceived talents are undermined by frequent evaluations of their performance, very competitive and outcome-oriented learning environments, and peer social comparisons, particularly in subjects where they struggle academically (Archambault, Eccles, & Vida, 2010).

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

Learning outcomes are the results achieved by students after participating in a learning activity, where the level of success is in the form of grades (Hachey, Wladis, & Conway, 2012). Efforts to improve learning outcomes are a major concern in the world of education (Wu, Guo, Yang, & Le, 2021). There are several factors that can influence learning outcomes, according to (Slameto, 2013) including: Internal factors and external factors. The focus in this research is external factors, namely Problematic Smartphone Use (PSU) and internal factors, namely learning motivation.

A smartphone or more familiarly called a smartphone is a cell phone that has the same capabilities as a computer (Alosaimi, Alyahya, Alshahwan, Mahyijari, & Shaik, 2019). Smartphones have become a media that is often utilized in kids and teenagers due to their crucial developmental stage, which is marked by intense curiosity and elevated dopamine levels in their brains (Norbury, Khurt, Winston, Roiser, & Husain, 2015). One such technology that may have unfavorable effects on use is smartphones. When consumers struggle to limit their usage of smartphones, it becomes problematic and interferes with their everyday routines (Horwood & Anglim, 2018).

PSU is the incapacity of a person to control their smartphone use which results in many negative impacts in daily life, including symptoms of social, behavioral and affective dependence in life (Billieux, Maurage, Lopez-Fernandez, & Griffiths, 2015). There is a negative impact of PSU behavior on learning activities, there are four potential causes of multitasking behavior or task switching (Junco, Cotten, & Bowman, 2012) First, during class or during study time, students' attention may be drawn to their smartphones by visual and audio notifications. Second, the FOMO, or the need to continually interact with the outside world and not miss what is occurring online, might cause a lack of focus that is important to obtain high learning outcomes (Firat & Yan, 2013). Third, using cellphones for study purposes may be the consequence of addicted behavior and cyberslacking, which is the practice of interfering with personal matters while working or studying (Vitak, Crouse, & LaRose, 2011). Finally, students may become bored as a result of a lack of desire to learn, in which case smartphone applications might offer a quick and alluring diversion (Hawi & Samaha, 2016).

The use of Smartphones in large amounts for various purposes is negatively related to the learning outcomes of College and High School students (Wang, 2021). The results of a study on college students in Saudi Arabia showed that they spent more than 8 hours using smartphones. As a result of PSU, they experience decreased sleep hours, lack energy, have an unhealthy lifestyle and this can certainly reduce learning outcomes (Alosaimi, Alyahya, Alshahwan, Mahyijari, & Shaik, 2019). According to a study, 293 college students who used their smartphones frequently for both work and play did not always have exceptionally high learning outcomes (Hawi & Samaha, 2016). Repeated habit patterns can weaken the goals of each individual and lead to increased addictive behavior. Although many studies say that Smartphone use is motivated, there are also researchers who show that Smartphone usage habits are motivated by personal interests. Therefore, the application of the concept of motivation may be useful for investigating the subconscious conditions in Smartphone use. Some researchers also argue that Smartphone users may lose control when they use them excessively or unconsciously (Ryding & Kuss, 2020).

Previous research says that there are intrinsic and extrinsic factors in PSU behavior, so that there is a relationship between motivation and PSU (Billieux, Maurage, Lopez-Fernandez, & Griffiths, 2015). Previous research says that motivation can be a major role in the behavior of every human being, even in problematic behavior such as addiction (Köpetz, Lejuez, Wiers, & Kruglanski, 2013). Internal factors that can affect student learning outcomes, the internal factor here is learning

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

motivation. Motivation is an effort made to create a pleasant atmosphere, so that doing something will feel lighter, more enthusiastic, and trying to give the best (Sardiman, 2008). When students are learning, learning motivation is an internal and external drive that results in behavioral changes with a variety of cues or supportive factors. This plays a significant part in one's ability to learn (Uno, 2008). Learning motivation refers to the motivation that underlies the desire to learn (Vallerand, 1992).

Learning motivation can be defined as a drive or driving force within students to carry out learning activities in order to achieve good learning outcomes (Lee, Chang, Lin, & Cheng, 2014). Learning motivation in student development is separated into Amotivation, Extrinsic Motivation, and Intrinsic Motivation. Numerous Western nations have published studies demonstrating the true influence of learning motivation on a range of learning outcomes. Higher levels of learning effort, perceived academic support, self-regulation, self-efficacy, self-confidence in academic performance, and learning outcomes, for instance, have all been linked to strong learning motivation (Alvaro & Taylor, 2015). Apart from the addiction to smartphones, learning results are also impacted by learning motivation, which is the drive to study and persevere through challenges to succeed (Singh, 2011). Previous research says that PSU in adolescents can affect learning activities and motivation in adolescents (Bukhori, 2019).

Research by (Zhou, 2022) examined the impact of smartphone use on learning outcomes and learning motivation, taking into account extroverted personality factors. The results show that smartphone addiction is negatively related to learning motivation, and extroversion personality factors moderate this relationship. (Hawi & Samaha, 2016) involved students and examined the relationship between smartphone addiction, stress, academics

performance, and life satisfaction. Although the main focus of this research is not learning motivation, research findings show that smartphone addiction is negatively related to academic performance, which can affect learning motivation. (Billieux, Maurage, Lopez-Fernandez, & Griffiths, 2015) research involved students in Oman and examined the impact of smartphone addiction on learning outcomes. Although not specifically exploring the relationship with learning motivation, there was a decline in academic performance

Caused by smartphone addiction can affect students' learning motivation. Although there is not as much research on the relationship between smartphone addiction and learning motivation as there is research on the relationship with learning outcomes, several studies have shown a negative relationship between smartphone addiction and learning motivation. However, more is needed research to deepen understanding of this relationship and the factors that moderate it.

Previous research only used PSU and learning outcomes variables. In this study, the researcher suspects that there is a variable that mediates between PSU and learning outcomes, namely the learning motivation variable. By adding variables, it is suspected that it can affect the research results. This study will be conducted on the subject of Economics. So, the researcher took the title "Problematic Smartphone Use (PSU) and Learning Outcomes: Learning Motivation as a Mediator".

Research Method

This research is quantitative with causal associative approach. The population in this research were students of SMA Al-Islam 1 Krian in grades X and XI with a total of 1.026 students consisting of 27 classes. The number of samples was 288 students with a random sampling technique using the slovin formula. Types and sources of data used in this study is this study is primary data and

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

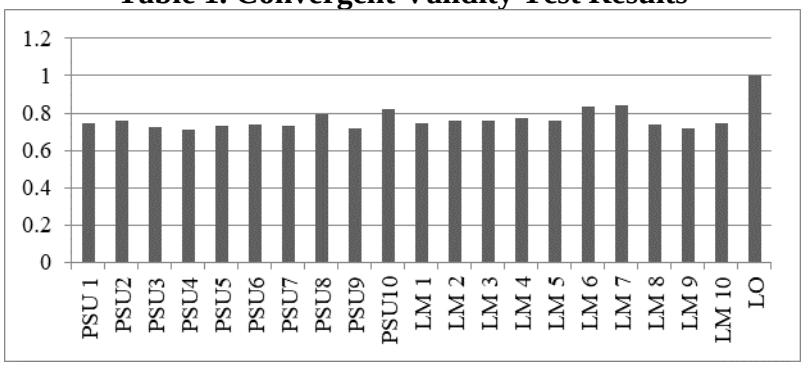
secondary data. Primary data in this research is the results of the questionnaire test which is interval data distributed to class X and XI students at SMA Al-Islam Krian. Secondary data in this study is the test scores daily economics subjects, literature studies, and journals. This research used questionnaires and documentation as data collection methods. Questionnaires and test instruments are use data collection. The questionnaires instrument was used on the variables of Problematic Smartphone Use (X), and Learning motivation (Z). The Smartphone Addiction Scale-Short Version (SAS-SV) is a PSU dimension designed to measure the PSU scale and was developed by (kwon, Yang, Cho, & Kim, 2013), that is constructed of 6 Subscale: daily life disturbance, positive anticipation, withdrawal, Cyberspace Oriented relationship, overuse, and tolerance. The Student Opinion Scale (SOS) is a scale for measuring the quality or type of a person's motivation developed by (Amy & Sundre, 2009) which consists of 10 items so that it can be used as an efficient and friendly scale for assessing student learning motivation. SOS constructed 0f 2 scale: Effort and Importance. In order for the total SPAI score (addiction score) to range from 26 to 104, participants were asked to rate items on a 4-point Likert scale: 1 = "strongly disagree," 2 = "somewhat disagree," 3 = "somewhat agree," and 4 = "strongly agree." One category labeled "disagree" was created by combining the "strongly disagree" and "somewhat disagree" categories. In a similar vein, the categories for "strongly agree" and "somewhat agree" were merged into one category called "agree." The instrument's validity and reliability will be evaluated prior to its distribution to real samples. Statistical techniques will be used to process the data once it has been collected.

Result and Discussion

Result of Measurement Model Analysis (Outer Model)

The outer model value of each indicator instrument on each variable, such as problematic smartphone use, learning motivation, and learning outcomes, is displayed in the outer model test results. Convergent validity, discriminant validity, average variance extracted (AVE), and dependability are all included in the outer model test. Determining the validity and reliability of the indicator instrument for each variable is the goal of the outer model test.

Table 1. Convergent Validity Test Results



Source: Results processed by Smart-PLS 4 (2024)

It can be seen in table 1 that all questions representing indicators are said to be valid if the outer loading or loading factor value is > 0.7 (Hair & Marko, 2014). While other questions with a value < 0.7 are declared invalid (*) so they are not needed again.

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

Table 2. Discriminant Validity Result (Fornel Lacker)

	LO	LM	PSU
LO	1,000		
LM	-0,060	0,768	
PSU	0,045	-0,310	0,748

Source: Results processed by Smart-PLS 4 (2024)

In table 2, the discriminant validity test requirements for the fornel larcker value using a comparison between the loading values of other constructs and the targeted construct that yields a greater number. In order for the questionnaire to be deemed genuine, the indicator with the lowest loading factor value must be eliminated in order to satisfy the standards.

Table 3. Discriminant Validity Result (Cross Loading)

	LO	LM	PSU
LO	1,000	-0,60	0,045
LM 1	-0,018	0,743	-0,162
LM 2	-0,077	0,760	-0,169
LM 3	-0,058	0,756	-0,199
LM 4	-0,013	0,775	-0,268
LM 5	-0,036	0,760	-0,155
LM 6	-0,093	0,836	-0,300
LM 7	-0,071	0,843	-0,299
LM 8	0,738	0,738	-0216
LM 9	0,714	0,714	-0,288
LM 10	0,747	0,747	-0,203
PSU 1	-0,009	-0,131	0,745
PSU 2	0,020	-0,280	0,756
PSU 3	0,073	-0,227	0,724
PSU 4	-0,029	-0,219	0,709
PSU 5	0,068	-0,225	0,732
PSU 6	0,102	-0,205	0,740
PSU 7	0,012	-0,248	0,733
PSU 8	-0,016	-0,172	0,793
PSU 9	0,057	-0,247	0,719
PSU 10	0,024	-0,276	0,820

Source: Results processed by Smart-PLS 4 (2024)

The Cross Loading findings for each indicator are displayed in Table 3; all variables have values greater than 0.7. In order for the indicators for each variable to be certified valid discriminantly-that is, to measure the variable validly-certain indicator items have to be removed.

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

Table 4. Average Variance Extracted (AVE) and Reliability Test Result

	AVE	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
PSU	0,559	0,913	0,917	0,927
LM	0,590	0,923	0,937	0,935

Source: Results processed by Smart-PLS 4 (2024)

Every variable in Table 4 has an Average Variance Extracted (AVE) value greater than 0.5 (Hair & Marko, 2014) The indicators in this study have a low average error rate since it can be inferred that all of the indicators have satisfied the convergent test conditions. demonstrates that all constructions have composite reliability values > 0.7 and Cronbach's alpha values > 0.7. It can be inferred that the variables in the questionnaire or the construct's indicators have been deemed dependable.

Result of Measurement Model Structural (Inner Model)

Table 5. R- Square Test Result

	R-Square	R-Square Adjusted
LO	0,004	-0,003
LM	0,096	0,093

Source: Results processed by Smart-PLS 4 (2024)

Table 5 shows that the R-Square value of learning outcomes is 0.004. This means that the value is in the weak category. While the R-Square value of learning motivation is 0.096. This means that the value is in the weak category. It can be concluded that the model used in this study has a weak prediction in the structural model.

Table 6 Q-Square Test Result

	Q2 Predict
LO	-0,005
LM	0,007

Source: Results processed by Smart-PLS 4 (2024)

Table 6 shows that the Cross-Validated Redundancy (Q2) value of learning outcomes is -0.005, which means it has a weak level of predictive relevance. While the Cross-Validated Redundancy (Q2) value of learning motivation is 0.007, which means it has a weak level of predictive relevance. So, it can be concluded that the model used in this study has a relatively weak level of predictive relevance.

Table 7. F-Square Test Result

	F-Square Test Result
LM > LO	0,002
PSU > LO	0,001
PSU > LM	0,106

Source: Results processed by Smart-PLS 4 (2024)

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

With a value of 0.002, Table 7's variable "Learning motivation to learning outcomes" indicates that learning motivation has a minimal impact on learning outcomes. With a value of 0.001, the variable Problematic Smartphone Use to Learning Outcomes indicates a minimal contribution from Problematic Smartphone Use to Learning Outcomes. With a value of 0.106, the variable Problematic Smartphone Use to Learning Motivation indicates a moderate contribution from Problematic Smartphone Use to Learning Motivation.

Hypothesis Test

Table 8 .Hypothesis Test Result

	T Statics (O/STDEV)	P-Value	Information
LM > LO	0,005	0,351	Failed to reject H0
PSU > LO	0,008	0,615	Failed to reject H0
PSU > LM	0,057	0,000	Reject H0

Source: Results processed by Smart-PLS 4 (2024)

a. H1 = PSU has no significant effect on learning outcomes.
   The effect of PSU (X) on learning outcomes (Z) has a p-value of 0.615. In this study, a significance level of <0.05 was used. Because the p-value is not > 0.05, it is not significant. So it can be said that the hypothesis is rejected.
b. H2 = PSU has a significant effect on learning motivation
   The influence of PSU (X) on learning motivation (Z) has a p-value of 0.000. In this study, a significance level of <0.05 was used. Because the p-value is <0.05, it is said to be significant. So it can be said that the hypothesis is accepted.
c. H3 = Learning motivation has no significant effect on learning outcomes.
   The effect of PSU (X) on learning outcomes (Z) has a p-value of 0.351. In this study, a significance level of <0.05 was used. Because the p-value is not > 0.05, it is not significant. So it can be said that the hypothesis is rejected.

Discussion

The Influence of Problematic Smartphone Use on Learning Outcome

Based on the results of the hypothesis test carried out, it shows that Problematic Smartphone Use has no effect on learning outcomes. These results are similar to research by (Wiryawan, 2021) which states that there is no relationship between smartphone use and high school students' learning outcomes. These results state that the use of chat and social media features by high school students has no effect on their learning outcomes.

The results of this study show that there is no relationship between learning outcomes and students who experience problematic smartphone use. This is contrary to the theory which states that there is a negative relationship between smartphone use and learning outcomes which is associated with decreased student attention in the learning process or the amount of time dedicated to studying is reduced, resulting in decreased learning outcomes. This theory is supported by research (Jacob & Andrew, 2015) which states that smartphones have a significant relationship with GPA scores. These results indicate that smartphone users who use smartphones excessively every day tend to have lower GPA scores.

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

However, students who experience high PSU with poor learning outcomes tend to have scores that are quite large below the KKM score. Meanwhile, students who experience high PSU but with good learning outcomes tend to have learning outcomes that are not too high above the KKM value. On the other hand, the group of students who belong to low level PSU and have good learning outcomes tend to have higher scores above the KKM.

PSU is only one of many other factors that can influence a student's academic achievement. Every student has a different level of intelligence. A student may have a higher level of intelligence than his peers depending on how each individual develops it. This research has not analyzed the level of intelligence of each student, perhaps this can be analyzed in further research. Currently, there are many ways that can be done to help students deal with poor performance at school, one of which is through the process of additional tutoring (Syamsu, 2012)

The Influence of Problematic Smartphone Use on Learning Motivation

Based on the results of hypothesis testing that has been carried out, it shows that PSU has an effect on learning outcomes. The impact of smartphone use on learning outcomes and learning motivation, taking into account extroverted personality factors. The results show that smartphone addiction is negatively related to learning motivation, and extroversion personality factors moderate this relationship (Wang, 2021). In another study involving students and examining the relationship between smartphone addiction, stress, academic performance, and life satisfaction. Although the main focus of this research is not learning motivation, research findings show that smartphone addiction is negatively related to academic performance, which can affect learning motivation ((Hawi & Samaha, 2016). Research (Jocelyne & Doris, 2017) involved students in Oman and examined the impact of smartphone addiction on learning outcomes. Although not specifically exploring the relationship with learning motivation, a decrease in learning outcomes caused by smartphone addiction can affect students' learning motivation.

The Influence of Learning Motivation on Learning Outcome

Based on the results of hypothesis testing that has been carried out, it shows that learning motivation has no effect on learning outcomes. The results of this research are inversely proportional to previous research which stated that learning motivation has a significant effect on learning outcomes (Rasto & Rike, 2019); ((Cleopatra, 2015). However, there is research that finds something similar that learning motivation has no influence on learning outcomes (Khosiyah, 2022). Some say that learning outcomes are not only influenced by motivational factors. Learning outcomes can be influenced by other factors such as: curriculum, facilities, teachers, etc. (Chatarina, 2020). Researchers suspect that in the context of this research the learning outcomes of Al-Islam Krian High School students are not influenced by learning motivation. However, there are other factors that can influence the learning outcomes of Al-Islam Krian High School students which were not found in this research.

The Influence of Problematic Smartphone Use on Learning Outcome with Learning Motivation as a Mediator

The fourth hypothesis is to analyze the mediating role of learning motivation on the relationship between Problematic Smartphone Use and learning outcomes. The results of this study indicate that learning motivation is not able to act as a mediator in the influence of PSU and learning outcomes. This occurs because the relationship is not significant between PSU and learning motivation on learning outcomes. This finding is different from other research which states that learning motivation acts as a mediating variable from PSU on learning outcomes (Melina, 2024).

Copyright © 2024, The Authors

Journal of Management, Entrepreneurship and Tourism
https://skillerindonesia.id/index.php/jmet
Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

This research states that problematic smartphone use has a negative impact on learning motivation, which in turn has an impact on learning outcomes. Excessive dependence on smartphones can interfere with focus, study time, and motivation to achieve good learning results.

Conclusion

A study carried out on SMA al-Islam Krian students in grades X and XI revealed a strong correlation between learning motivation and problematic smartphone use. This implies that students' motivation to learn decreases with the amount of problematic smartphone use. Smartphone addiction is only one of many other factors that can affect a student's learning achievement. Each student has a different level of intelligence. A student can have a higher level of intelligence than their peers depending on how they develop it. This study has not analyzed the level of intelligence of each student, perhaps this can be analyzed in further research. Currently, there are many ways to help students deal with poor performance at school, one of which is through additional tutoring.

Recommendation

Drawing from the aforementioned research findings, the author makes the following recommendations: It is hoped that additional research will be able to modify the new model in order to identify factors other than problematic smartphone use that influence learning outcomes. Additionally, it is hoped that additional research will be able to modify the new model in order to identify learning motivation factors other than those that can influence learning outcomes. Finally, additional research will be able to modify the new model in order to identify factors other than learning motivation that can mediate problems with smartphone use and learning outcomes.

Acknowledgment

The researcher expresses gratitude to everybody involved, particularly the respondent who volunteered to dedicate their time to answering a series of questions posed by the researcher. Additionally, I am grateful to SMA Al-Islam Krian for enabling me to carry out research and for her assistance in finishing this work.

References

Alosaimi, Alyahya, Alshahwan, Mahyijari, A., & Shaik. (2019). Smartphone addiction among university students in Riyadh, Saudi Arabia. *Saudi Medical Jurnal* , 675-683.

Alvaro, & Taylor. (2015). The longitudinal relation between academic support and Latino adolescents' academic motivation. *Hispanic Journal of Behavioral Sciences* , 319-341.

Amy, T., & Sundre, D. (2009). Motivation Matters: Using the Student Opinion Scale to Make Valid Inferences About Student Performance. *The Journal of general education* , 129-151.

Archambault, Eccles, & Vida. (2010). Ability self-concepts and subjective value in literacy: Joint trajectories from Grades 1 through 12. *Journal of Educational Psychology* , 804-816.

Bae. (2015). The Relationship Between perceived parenting style, learning motivation, friendship satisfaction , and the addictive use of smartphones with elementary school student of south korea . *School Psychology International* .

Bian, M., & Leung, L. (2014). Linking Loneliness, Shyness, Smartphone Addiction Symptoms, and Patterns of Smartphone Use To Social Capital. *Social Science Computer Review* , 1-19.

Copyright © 2024, The Authors

Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

Billieux, Maurage, Lopez-Fernandez, & Griffiths. (2015). Can disordered mobile phone use be considered a behavioral addiction? An update on current evidence and a comprehensive model for future research. *Current Addiction Reports* , 156-162.

Bukhori. (2019). The Effect of Smartphone Addiction, Achievement Motivation, and Textbook Reading Intensity on Students' Academic Achievemen. *13* (9).

Bukhori, B., Said, H., Wijaya, T., & Nor, F. (2019). The effect of smartphone addiction, achievement motivation, and. *International Journal of Interactive Mobile Technologies , 13* (9), 66-80.

Busch, & McCarthy. (2021). Antecedents and Consequences of Problematic Smartphone Use: A Systematic Literature Review of an Emerging Research Area. *Computers in Human Behavior* .

Choi, Lee, & Ha. (2012). The influence of smartphone addiction on mental health, campus life and personal relations - focusing on K university students. *ournal of the Korean Data and Information Science Society , 23* (5).

Elizabeth. (2019). What We Know About Expectancy-Value Theory, And How It Helps To Design A Sustained Motivating Learning Environment. *System* .

Ezoe, Toda, & Yoshimura. (2009). Relationships of personality and lifestyle with mobile phone dependence among female nursing students. *Social Behavior and Personality , 37* (2), 231-238.

Firat, & Yan. (2013). Multitasking or continuous partial attention: A critical bottleneck for digital natives. *Turkish Online Journal of Distance Education* .

Foen, S., & Hassan, N. (2017). The Relationship Between Smartphone Use and Academic Performance : A Case of Students in Malaysian Tertiary Institution. *Malaysian Online Journal of Educational Technology* , 58-70.

Hachey, Wladis, & Conway. (2012). Is the second time the charm? Investigating trends in online re-enrollment, retention and success. *Journal of Educators Online* .

Hair, & Marko. (2014). Partial Least Squares Structutal Equation Modeling (PLS-SEM). *European Business Review , 26* (2), 106-121.

Hawi, & Samaha. (2016). To excel or not to excel: Strong evidence on the adverse effect of smartphone addiction on academic performance. *Computers & Education* , 81-89.

Horwood, & Anglim. (2018). Personality and problematic smartphone use: A facet-level analysis using the five factor model and HEXACO frameworks. *Computers in Human Behavior* , 349-359.

Horwoord, & Anglim. (2018). Personality and Problematic Smartphone Use: A facet-level analysis using the Five Factor Model and HEXACO frameworks. *Computers in Human Behavior* , 349-359.

Jingyu, G., Li, L., Mingkun, O., Jia, N., & Pengcheng, W. (2021). The influence of perceived parental phubbing on adolescents' problematic smartphone use: a two-wave multiple mediation model. *Addictive Behaviors* .

Junco, Cotten, & Bowman. (2012). The Relationship Between Multitasking and Academic Performance. *Computers & Education* , 505-514.

Köpetz, Lejuez, Wiers, & Kruglanski. (2013). Motivation and self-regulation in addiction. *Perspectives on Psychological Science* , 3-24.

kwon, M., Yang, S., Cho, H., & Kim, J.-D. (2013). The Smartphone Addiction Scale: Development and Validation of a Short Version for Adolescents. (M. C. Medicine, Penyunt.) *8* (12).

Copyright © 2024, The Authors

Lee, K., Chang, Lin, & Cheng, H. (2014). The Dark Side of Smartphone Usage Psychological Traits, Compulsive Behavior and Technostress. *Human Bahavior* , 373-383.

Li, J., Zhan, D., Zhou, & Gao. (2021). Loneliness and adolescent mobile phone addiction during the covid-19 pandemic: The role of escape motivation and self-control. *Addictive Behaviors , 118* (2).

Norbury, A., Khurt, N., Winston, Roiser, & Husain. (2015). Dopamine Regulates Approach-Avoidance in Human Sensation-Seeking. *International Journal of Neuropsychopharmacology , 18* (10), 12982-12986.

Panova, & Carbonell. (2018). Is Smartphone Addiction Really an Addiction? *Journal of Behavioral Addictions , 7* (2), 252-259.

Park, & Lee. (2012). Social implications of smartphone use: Korean college students' smartphone use and psychological well-being. *Cyberpsychology,Behavior,and Social Networking* .

Park, N., & Hyunjoo, L. (2012). Social Implication Of Smartphone Use: Korean College Student's Smartphone Use and Psychological Well-Being. *Cyberpsychology, Behavior, and Social Networking , 15* (9), 491-497.

Ryan, & Deci. (2020). *Contemporary Educational Psychology , 61*.

Ryan, & Deci. (2012). *Self-Determination Theory. Handbook of Theories of Social Psycholog*

Ryding, & Kuss. (2020). Passive objective measures in the assessment of problematic smartphone use: a systematic review. *Addict Behav Rep* .

Sardiman. (2008). *Interaksi dan Motivasi Belajar Mengajar.* Jakarta: PT. Raja Grafindo Persada.

Singh, K. (2011). Study of Achievement Motivation in Relation to Academic Achievement of Students. *International Journal of Educational Planning & Administration,* , 161-171.

Slameto. (2013). *Belajar dan Faktor-faktor yang Mempengaruhinya.* J

Sudjana. (2006). *Penilaian Hasil Proses Belajar Mengajar*. Bandung: Remaja Rosdakarya.

Tessier, J. (2013). Student impressions of academic cellphone use in the classroom. *Journal of College Science Teaching , 43* (1), 25-29.

Uno. (2008). *Teori Motivasi dan Pengukurannya Analisis diBidang Pendidikan.* Jakarta: Bumi Aksara.

Vallerand, Pelletier, Blais, Briere, Senecal, & Vallieres. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement* , 1003-1017.

Vitak, Crouse, & LaRose. (2011). Personal Internet use at work: Understanding cyberslacking. *Computers in Human Behavior* , 1751-1759.

Wang, P. (2021). The influence of perceived parental phubbing on adolescents' problematic smartphone use: a two-wave multiple mediation model. *Addict. Behav* .

Wigfield, A., & Eccles, J. (2000). Expectancy–Value Theory of Achievement Motivation. *Contemporary Educational Psychology* , 68-81.

Wigfield, A., & Eccles, J. (2014). Expetancy Value Theory. *Contemporary Educational Psychology* , 68-81.

Wu, H., Guo, Y., Yang, Y., & Le, Z. (2021). A Meta-analysis of the Longitudinal Relationship Between Academic Self-Concept and Academic Achievement. *Educational Psychology Review* , 1749-1778.

Yalcin. (2020). Effect of Smartphone Addiction on Loneliness Levels and Academic Achievement of Z Generartion. *International Journal of Psychology and Educational Studies* , 208-214.

Copyright © 2024, The Authors

Vol. 2, No. 2:July 2024
E-ISSN: 3024-9899
pp 284-295
Email:jmet@skillerindonesia.com

Zhou, D. (2022). Relationships among problematic smartphone use, mathematics anxiety, learning interest, and achievement: A multiple mediation model. *Computers In Human Behavior* .

Copyright © 2024, The Authors