# EXAMINE THE EFFECT OF SMARTPHONE USE ON SOCIAL BEHAVIOUR AND EMOTIONAL INTELLIGENCE, AMONG ISLAMIC COLLEGE LECTURER IN LUMAJANG DISTRICT

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**Abstract**: Excessive smartphone use in lecturer fourth semester in the 2025 academic year can cause cognitive, social, and emotional disorders. This article aims to examine the effect of smartphone use on social behaviour and emotional intelligence, among lecturer at three Islamic college lecturer in Lumajang district. This research is a quantitative study with an explanatory approach, focusing on a population of 95 lecturer fourth semester in the 2025 academic year. The sample collection technique used in this study is saturated sampling. Data collection in this study utilises an instrument in the form of a questionnaire, employing a Likert scale. The stages of SmartPLS analysis include creating an Outer Model (validity and reliability of the instrument), followed by an Inner Model analysis (validity and reliability of the structural model) by calculating the PLS algorithm and analysing the R-Square value, and ending with Hypothesis Testing using bootstrapping to see the significance of the relationship between variables. Smartphone use (X) has a 50.1% impact on lecturer social behaviour (Y). Smartphone use has a 53.8% impact on emotional intelligence.

Keywords: smartphone use, social behaviour, emotional intelligence, lecturer.

Abstrak: Penggunaan smartphone pada mahasiswa semester empat tahun akademik 2025 yang berlebihan dapat menyebabkan gangguan kognitif, sosial, dan emosional. Artikel ini bertujuan untuk menguji pengaruh penggunaan smartphone terhadap perilaku social dengan kecerdasan emosional sebagai variabel intervening di tiga perguruan tinggi Islam swasta di Kabupaten Lumjang. Penelitian ini adalah penelitian kuantitatif dengan pendekatan eksplanatori populasi yang berjumlah 95 dosen, teknik pengumpulan sampel yang digunakan dalam penelitian ini adalah sampling jenuh. Pengumpulan data dalam penelitian ini menggunakan instrument berupa kuesioner dengan menggunakan skala likert. Tahapan analisis SmartPLS meliputi pembuatan Outer Model (validitas dan reliabilitas instrumen), dilanjutkan dengan analisis Inner Model (validitas dan reliabilitas model struktural) dengan menghitung algoritma PLS dan menganalisis nilai R-Square, dan diakhiri dengan Pengujian Hipotesis menggunakan bootstrapping untuk melihat signifikansi hubungan antar

variabel. Penggunaan smartphone (X) berpengaruh terhadap perilaku sosial mahasiswa (Y) sebesar 50.1% Penggunaan smartphone berpengaruh terhadap kecerdasan emosional mahasiswa sebesar 53.8%

Kata kunci: penggunaan smartphone, perilaku social, kecerdasan emosional, dosen

#### INTRODUCTION

Although smartphones offer various benefits, such as ease of learning through educational apps and extensive access to information.<sup>1</sup> Excessive smartphone use can lead to cognitive, social, and emotional impairments.<sup>2</sup> Several studies have shown that student who use smartphones excessively tend to experience a decrease in interest in learning and less engagement in direct social interactions.<sup>3</sup>

Furthermore, other research has found that student who use smartphones excessively are more likely to experience delayed language development and emotional disorders, such as an inability to regulate themselves, which impacts student's social behaviour.<sup>4</sup> Student who lack social skills tend to exhibit aggressive behaviour and have difficulty resolving conflicts healthily.<sup>5</sup>

Student with good social skills are better able to adapt to new environments and build relationships with peers and adults. Student who understand social norms

<sup>&</sup>lt;sup>1</sup> Muthmainnah et al., "Psychometric Evaluation of the Indonesian Nomophobia Questionnaire among College Students: Measurement Invariance across Gender and Levels of Problematic Smartphone Use," *Acta Psychologica* 258, no. May (2025): 105120, https://doi.org/10.1016/j.actpsy.2025.105120.

<sup>&</sup>lt;sup>2</sup> Vatsala Thapliyal, Jairam Kushwaha, and Ghanshyam Singh Thakur, "Effect of Ten-Week Yoga Intervention on Problematic Smartphone Usage in University Students: A Randomized Controlled Trial," *Journal of Ayurveda and Integrative Medicine* 16, no. 5 (2025): 101–19, https://doi.org/10.1016/j.jaim.2025.101199.

<sup>&</sup>lt;sup>3</sup> Sheng Sun, Xinran Wang, and Dongdong Wang, 'Smartphone Usage Patterns and Social Capital among University Students: The Moderating Effect of Sociability', *Student and Youth Services Review*, 155.June (2023), 107276 <a href="https://doi.org/10.1016/j.childyouth.2023.107276">https://doi.org/10.1016/j.childyouth.2023.107276</a>.

<sup>&</sup>lt;sup>4</sup> Mike M. Schmitgen et al., "Effects of Smartphone Restriction on Cue-Related Neural Activity," *Computers in Human Behavior* 167, no. July 2024 (2025), https://doi.org/10.1016/j.chb.2025.108610.

<sup>&</sup>lt;sup>5</sup> Yanxiang Yang and Joerg Koenigstorfer, "The Curvilinear Effects of Relative Positions in Smartphone App Leaderboards on Physical Activity," *Computers in Human Behavior* 165, no. November 2024 (2025): 108532, https://doi.org/10.1016/j.chb.2024.108532.

<sup>&</sup>lt;sup>6</sup> Jiamin Ge et al., "The Relationship between Anxiety and Smartphone Addiction in the Context of Covid-19: The Mediating Effect of Attentional Control and Executive Dysfunction," *Heliyon* 9, no. 2 (2023): e13273, https://doi.org/10.1016/j.heliyon.2023.e13273.

and behave accordingly tend to have more stable social relationships, both with peers and parents.<sup>7</sup>

In addition to impacting social behaviour, smartphone use can also impact student's emotional intelligence.<sup>8</sup> Emotional intelligence is crucial for child development, enabling student to manage their emotions and stress effectively.<sup>9</sup> Student with strong emotional intelligence are better able to recognise and manage their own emotions, making it easier for them to cope with stress and pressure in everyday life.<sup>10</sup>

Studies show that student with high emotional intelligence are more successful in academic settings because they can manage their emotions when facing learning challenges.<sup>11</sup> Student with strong emotional intelligence are more likely to understand and respond positively to the emotions of others.<sup>12</sup>

Research on social behaviour and emotional intelligence is significantly relevant to the situation at Miftahul Ulum Islamic Institute, Syarifudin University and Miftahul Midad College of Education are located in Lumajang Regency. The focus on these aspects aligns with the institute's vision of developing lecturer with noble character, competence, and readiness to face future challenges.

Research on these aspects is highly relevant to understanding and improving the quality of lecturer social interactions and emotional abilities, which in turn can support their academic achievement and overall well-being.

<sup>&</sup>lt;sup>7</sup> Soraya Khanahmadi and others, 'Effect of a Sensory Diet Smartphone Application on the Symptoms of Student with Attention Deficit Hyperactivity Disorder (ADHD): A Feasibility Study', *Heliyon*, 9.8 (2023), e19086 <a href="https://doi.org/10.1016/j.heliyon.2023.e19086">https://doi.org/10.1016/j.heliyon.2023.e19086</a>>.

<sup>&</sup>lt;sup>8</sup> Zhiqing Zhou et al., "Mediating Effects of Academic Self-Efficacy and Smartphone Addiction on the Relationship between Professional Attitude and Academic Burnout in Nursing Students: A Cross-Sectional Study," *Nurse Education Today* 116, no. February (2022): 105471, https://doi.org/10.1016/j.nedt.2022.105471.

<sup>&</sup>lt;sup>9</sup> Xinmei Zhao et al., "Long-Term Protective Effects of Physical Activity and Self-Control on Problematic Smartphone Use in Adolescents: A Longitudinal Mediation Analysis," *Mental Health and Physical Activity* 26, no. June 2023 (2024): 100585, https://doi.org/10.1016/j.mhpa.2024.100585.

<sup>&</sup>lt;sup>10</sup> Oluwafemi J. Sunday, Olusola O. Adesope, and Patricia L. Maarhuis, "The Effects of Smartphone Addiction on Learning: A Meta-Analysis," *Computers in Human Behavior Reports* 4, no. June (2021): 100114, https://doi.org/10.1016/j.chbr.2021.100114.

<sup>&</sup>lt;sup>11</sup> Sunday, Adesope, and Maarhuis.

<sup>&</sup>lt;sup>12</sup> Hye Sun Lee, Mikyung Choi, and Eun Yeong Na, "Reciprocal Longitudinal Effects among Korean Young Adolescent' Negative Peer Relationships, Social Withdrawal, and Smartphone Dependence," *Heliyon* 10, no. 3 (2024): e25188, https://doi.org/10.1016/j.heliyon.2024.e25188.

#### RESEARCH METHOD

This study employed a quantitative approach with an explanatory design, <sup>13</sup> examining the influence of the independent variable (smartphone use) on the dependent variable (social behaviour) and the intervening variable (emotional intelligence).

The population of this study was fifth-grade lecturer at Miftahul Ulum Islamic Institute, Syarifudin University and Miftahul Midad College of Education are located in Lumajang Regency. The sample in this study consisted of 95 lecturer in the 2025 academic year. The sampling technique used was saturated sampling.<sup>14</sup>

Data collection in this study employed a questionnaire instrument using a Likert scale with positive to negative gradations,<sup>15</sup> ranging from 1 to 5, with answer options including strongly agree, agree, somewhat agree, disagree, and strongly disagree.<sup>16</sup> The Google Form questionnaire was then distributed through various social media platforms, such as WhatsApp and Facebook.

The first stage of the Smart-PLS analysis method is an outer model analysis by examining the calculated output, including:<sup>17</sup> a) Convergent validity, which is the factor loading value on the latent variable with its indicators with a value > 0.7; b) Discriminant validity, which compares the value of the intended construct with the value of the other construct; c) Composite reliability, which is greater than the value of the other construct; d) Average Variance Extracted (AVE), which is the average variance of at least 0.5; e) Cronbach's alpha, which is 0.6.<sup>18</sup>

<sup>&</sup>lt;sup>13</sup> Firdaus Caniago, "Research Methodology: Types in The New Perspective," *Manazhim: Journal of Management and Educational Sciences* 3, no. 3 (2021): 1–16, http://repo.uinsatu.ac.id/18458/1/Dwi Astuti Wahyu Nurhayati\_Research Method.pdf.

<sup>&</sup>lt;sup>14</sup> Edward Barroga and Glafera Janet, "Conducting and Writing Quantitative and Qualitative Research," *Journal of Korean Medical Science* 38, no. 37 (2023): 1–16, https://doi.org/10.3346/jkms.2023.38.e291.

<sup>&</sup>lt;sup>15</sup> Aisha Siddiqua, "Critique of Research Methodologies and Methods in Educational," *World Journal of Education* 13, no. 4 (2019): 16, https://doi.org/10.5430/wje.v13n4p16.

<sup>&</sup>lt;sup>16</sup> Simone Tosoni and Emanuela Zuccalà, "The Research: Methods and Methodology," *Palgrave Studies in the History of Subcultures and Popular Music* 7, no. 3 (2020): 13–40, https://doi.org/10.1007/978-3-030-39811-8\_2.

<sup>&</sup>lt;sup>17</sup> Ruixuan Ji, Xiaoyao Yue, and Xu Zheng, "Using PLS-SEM to Examine the Structure of First-Year University Students," *Higher Education Studies* 11, no. 4 (2021): 7, https://doi.org/10.5539/hes.v11n4p7.

<sup>&</sup>lt;sup>18</sup> Asyraf Afthanorhan, Zainudin Awang, and Nazim Aimran, "Five Common Mistakes for Using Partial Least Squares Path Modeling (PLS-PM) in Management Research," *Contemporary Management Research* 16, no. 4 (2020): 255–78, https://doi.org/10.7903/CMR.20247.

Second, an inner model analysis,<sup>19</sup> which examines the calculated output, includes: a) The R-square output value with the R-square value threshold criteria is classified into three categories: 0.67 as substantial, 0.33 as moderate, and 0.19 as weak. b) Effect size (F-square) is interpreted as an F-square value of 0.02 indicating a small effect; 0.15 as moderate; and 0.35 as a significant effect at the structural level.<sup>20</sup>

#### **RESULTS AND DISCUSSION**

# A. Descriptive Analysis of Research Variables

# 1. Smartphone Usage Variable

Based on the analysis using smart PLS, the average value of the smartphone usage variable was 3.28. This result indicates that respondents agreed that smartphone usage indicators are formed sequentially as follows: (1) increasing knowledge with a mean value of 3.98, (2) increasing creativity with a mean value of 3.73, (3) disrupting concentration with a mean value of 2.76, and (4) influencing student's behavior with a mean value of 2.65. The results of the description of smartphone use indicate that the indicator of increasing knowledge is the primary indicator capable of measuring smartphone use, with the highest mean value of 3.98. This is attributed to the behaviour of smartphone use that enables lecturer to understand lesson material more easily through videos and educational applications.

# 2. Student social behaviour variables.

Based on the descriptive analysis of SMART PLS, the average value of the social behaviour variable was 3.59. This result indicates that respondents agreed that student social behavior variables are formed sequentially by: (1) liking to share with a mean value of 4.11, (2) generosity with a mean value of 4.04, (3) sympathy with a mean value of 3.95, (4) social support with a mean value of 3.94, (5) familiar behavior with a mean value of 3.89, (6) empathy with a mean value of 3.85, (7) caring with a mean value of

<sup>&</sup>lt;sup>19</sup> Jun Hwa Cheah et al., "Multigroup Analysis Using Smartpls: Step-by-Step Guidelines for Business Research," *Asian Journal of Business* Research 10, no. 3 (2020): I–XIX, https://doi.org/10.14707/ajbr.200087.

<sup>&</sup>lt;sup>20</sup> Christian M. Ringle et al., "A Perspective on Using Partial Least Squares Structural Equation Modelling in Data Articles," *Data in Brief Elsevier* 48, no. 2 (2023): 21–32, https://doi.org/10.1016/j.dib.2023.109074.

3.78, (8) cooperation with a mean value of 3.77, (9) imitation with a mean value of 2.27, (10) competition with a mean value of 2.20. The results of the description of social behaviour show that the indicator of liking to share is the primary indicator that measures social behaviour, with the highest mean value of 4.11, which is evident in the behaviour of lecturer who are willing to lend something to friends who need it.

## 3. Emotional Intelligence Variable.

Based on the SMART-PLS descriptive analysis, the average value of the emotional intelligence variable was 3.86. This result indicates that respondents agreed that lecturer emotional intelligence variables are formed sequentially by: (1) building relationships with a mean score of 4.18, (2) motivating themselves with a mean score of 4.03, (3) recognizing one's own emotions with a mean score of 3.29, (4) recognizing others' emotions with a mean score of 3.87, and (5) managing emotions with a mean score of 3.95. The results of the emotional intelligence description indicate that building relationships is the primary indicator capable of measuring emotional intelligence, with the highest mean score of 4.25, as indicated by lecturer behaviour of feeling comfortable talking and interacting with their friends.

# B. SMART-PLS Analysis- Outer Model Analysis

# 1. Evaluation of Individual Item Reliability

Evaluation of the measurement model for the individual item reliability values of the variables smartphone use (X), social behaviour (Y), and emotional intelligence (Z), with the following analysis output:

Z Description **Indicator** X Y Cut Off X1.1 0.653 > 0.6Valid X1.2 0.747 > 0,6 Valid X2.1 Valid 0.752 > 0,6 X2.2 0.557 > 0.6 Valid X3.1 0.659 Valid > 0,6 X3.2 Valid 0.895 > 0.6 X4.1 0.858 > 0.6 Valid X4.2 0.722 > 0,6 Valid

Table 1. Outer Loading Results

Y1.1	0.635		> 0,6	Valid
Y1.2	0.828		> 0,6	Valid
Y10.1	0.750		> 0,6	Valid
Y10.2	0.749		> 0,6	Valid
Y2.1	0.882		> 0,6	Valid
Y2.2	0.939		> 0,6	Valid
Y3.1	0.813		> 0,6	Valid
Y3.2	0.637		> 0,6	Valid
Y4.1	0.714		> 0,6	Valid
Y4.2	0.730		> 0,6	Valid
Y5.1	0.655		> 0,6	Valid
Y5.2	0.767		> 0,6	Valid
Y6.1	0.701		> 0,6	Valid
Y6.2	0.605		> 0,6	Valid
Y7.1	0.994		> 0,6	Valid
Y7.2	0.784		> 0,6	Valid
Y8.1	0.828		> 0,6	Valid
Y8.2	0.937		> 0,6	Valid
Y9.1	0.990		> 0,6	Valid
Y9.2	0.891		> 0,6	Valid
Z1.1		0.708	> 0,6	Valid
Z1.2		0.713	> 0,6	Valid
Z2.1		0.821	> 0,6	Valid
Z2.2		0.960	> 0,6	Valid
Z3.1		0.878	> 0,6	Valid
Z3.2		0.701	> 0,6	Valid
Z4.1		0.670	> 0,6	Valid
Z4.2		0.606	> 0,6	Valid
Z5.1		0.659	> 0,6	Valid
Z5.2		0.776	> 0,6	Valid
	0 D 1D			

Source: Processed Primary Data, 2025

The results of the SMART PLS analysis using the Calculate PLS Algorithm for the variables smartphone usage (X), social behaviour (Y), and emotional intelligence (Z) indicate that all statements are valid and can be used in further analysis because all statements have outer loadings greater than 0.6.

# 2. Internal consistency or construct reliability

Internal consistency reliability is indicated by Cronbach's Alpha and Composite Reliability (CR) values. The interpretation of Composite Reliability

(CR) is the same as Cronbach's Alpha. A threshold value greater than 0.7 is acceptable, and a value greater than 0.8 is reliable and very satisfactory.

Table 2: Cronbach's Alpha & Composite Reliability Test Results

Construct	Cronbach's Alpha	<b>Composite Reliability</b>	Description
X	0.856	0.877	valid
Y	0.822	0.862	valid
Z	0.965	0.932	valid

Source: Processed Primary Data, 2025

Results of the SMART PLS analysis using the Calculate PLS Algorithm Output Cronbach's Alpha and Composite Reliability of the variables smartphone usage (X), social behavior (Y), and emotional intelligence (Z) are all reliable. They can be used in further analysis because all variables have Cronbach's Alpha values greater than 0.7 and Composite Reliability values greater than 0.8.

#### 4. Average Variance Extracted (AVE) Value

Fornell and Larcker, as cited in Ghozali, recommend a minimum AVE value of greater than 0.4, indicating good convergent validity. This means that the latent variable can explain, on average, more than half of the variance in its indicators. The AVE value illustrates the magnitude of variance or diversity in the manifest variables that the latent construct can possess. The first three measurements are categorised as convergent validity. Convergent validity measures the magnitude of the correlation between the construct and the latent variable.

Table 3. Average Variance Extracted Test Results

Variable	Average Variance Extracted (AVE)		
X	0.687		
Y	0.967		
Z	0.409		

Source: Processed Primary Data, 2025

#### C. Inner Model Evaluation

To address the research hypothesis regarding the effect of smartphone usage (X) on social behaviour (Y) and emotional intelligence (Z), the inner

model test results first ensured that the coefficient of determination (R<sup>2</sup>), predictive relevance (Q<sup>2</sup>), and overall goodness of fit were high and satisfactory. Therefore, it can be concluded that the proposed model is valid and a suitable fit for the overall model.

## 1. Evaluating the R-Square Value

The R2 results in the structural model indicate that the model is good, moderate, and weak. The R2 values for the latent dependent variables are organisational citizenship behaviour and subjective well-being. Evaluation of the structural model is conducted by examining the R<sup>2</sup> values for the dependent variables. The results of the SMART PLS analysis using the Calculate PLS Algorithm R-Square value are described in the following table.

Table 4: Determination of R-Square for Dependent Variables

	R Square	R Square Adjusted
Y (Social Behaviour)	0.251	0.242
Z (Emotional Intelligence)	0.290	0.281

Source: Processed Primary Data, 2025

The calculation results in Table 4 show a coefficient value for social behaviour of 0.251, indicating that the independent variables of smartphone use influence social behaviour by 25.1%. Meanwhile, the coefficient value for emotional intelligence is 0.290, indicating that the independent variables of smartphone use account for 29.0% of the influence on emotional intelligence. Thus, it means that the proposed model is valid or fits.

# 2. Evaluating Goodness of Fit

The goodness of fit test, or model suitability, is performed by validating the overall structural model using the Goodness of Fit (GOF) index. The GOF index is a single measure for validating the combined performance of the measurement model and the structural model.

Table 5. Goodness of Fit Test Results

	Saturated Model	<b>Estimated Model</b>	
SRMR	0.322	0.155	
d_ULS	11.023	17.749	
d_G	3.731	3.936	
Chi-Square	1278.973	1327.138	

NFI			0.732	0.347
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Source: Processed Primary Data (2025)

Based on Table 4.9, the standardized root mean square residual (SRMR) output is 0.322 and/or the normal fit index (NFI) output is 0.732, with the following interpretations: > 0.1 (small Gof), > 0.25 (moderate Gof), and > 0.36 (large Gof). The GOF index test result is 0.732, which is greater than 0.36, indicating that the research model has a significant GOF value or is a perfect fit.

# 3. Test Research Hypothesis

Once the data meet the requirements for the measurement and structural models, the hypothesis can be tested using the significance of (1) the path coefficient, (2) the t-statistic, and (3) the R-squared value. The path coefficient is used to assess the structural model by examining the significance of the relationship between constructs, which describes the strength of the relationship between them. The sign or direction of the path coefficient must align with the hypothesised theory. Its significance can be seen in the t-test or the critical ratio (CR) obtained from the bootstrapping resampling method.

The following presents the results of the hypothesis testing based on the SEM PLS model that has been formed between the variables of smartphone use (X), social behaviour (Y), and emotional intelligence (Z):

Table 6. Hypothesis Test Results: Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
X ->	0.501	0.583	0.085	5.914	0.000
Y					
X ->	0.538	0.568	0.130	4.135	0.000
Z					

Source: Processed Primary Data, 2025

Based on the Path Coefficients values in Table 4.10, several decisions can be made regarding the three hypotheses outlined in Chapter Two, as follows:

Hypothesis 1 examines the effect of smartphone use (X) on student's social behaviour (Y) at Nurul Islam Elementary School, Jember City. The test results yielded a p-value of 0.000 < 0.005, indicating that the following conclusion can be drawn: Ha is accepted, suggesting that smartphone use (X) influences student's social behaviour (Y) at Nurul Islam Elementary School, Jember City.

The original sample interpretation, with a positive value of 0.501, indicates that smartphone use (X) influences student's social behaviour (Y) at Nurul Islam Elementary School, Jember City, by 50.1%. Smartphone use also increases student's social behaviour.

Hypothesis 2 examines the effect of smartphone use (X) on student's emotional intelligence (Z) at Nurul Islam Elementary School, Jember City. The test results yielded a p-value of 0.000 < 0.005, indicating that the following conclusion can be drawn: Ha is accepted, suggesting that smartphone use (X) influences student's emotional intelligence (Z) at Nurul Islam Elementary School, Jember City.

The original sample interpretation, with a positive value of 0.538, indicates that smartphone use (X) influences student's emotional intelligence (Y) at Nurul Islam Elementary School, Jember City, by 53.8%. This means that the higher the smartphone use, the higher the student's emotional intelligence.

# **DISCUSSION**

#### A. The Influence of Smartphone Use on Student's Social Behaviour

The results show that smartphone use indicators are formed sequentially by: (1) increasing knowledge, (2) increasing creativity, (3) disrupting concentration, and (4) influencing student's behaviour. The description of smartphone use reveals that the indicator of increasing knowledge is the primary measure of smartphone use, with the highest mean value of 3.98, suggesting that smartphone use behaviour can facilitate lecturer understanding of lesson material more easily through videos and educational applications.

The findings of the research analysis reinforce the theory and indicators presented by Noe,<sup>21</sup> who explains that the indicator of smartphone use is increasing knowledge because it makes it easier and faster for lecturer to obtain information in all necessary fields. Furthermore, smartphone use also helps hone creativity through a variety of creative and challenging games. These games foster the high level of creativity found in gadgets.

Meanwhile, lecturer social behaviour is shaped sequentially by: (1) sharing, (2) generosity, (3) sympathy, (4) social support, (5) friendly behaviour, (6) empathy, (7) caring, (8) cooperation, (9) imitation, (10) competition. The results of the description of social behaviour indicate that the indicator of liking to share is the primary indicator capable of measuring social behaviour, with the highest mean value of 4.11, as indicated by lecturer behaviour of not hesitating to lend something to friends in need.

From a theoretical perspective, these findings support Hurlock's in Ningrum, theory of social development, which posits that student's social behaviour is shaped by the outcomes of their interactions with their social environment, both physically and psychologically.<sup>22</sup> When student interact more frequently with digital devices than with other people directly, their social development can be disrupted. Therefore, the role of supervision from parents and teachers is crucial in ensuring that smartphone use remains in a positive and directed context.

The analysis results show that smartphone use (X) influences student's social behaviour (Y) at Nurul Islam Elementary School in Jember City by 50.1%. This means that higher smartphone use is associated with increased social behaviour. This means that smartphone use can help lecturer understand course material more easily through videos and educational applications, which in turn impacts social behaviour, as demonstrated by lecturer willingness to lend items to friends in need.

<sup>&</sup>lt;sup>21</sup> Beryl Noë et al., "Identifying Indicators of Smartphone Addiction Through User-App Interaction," *Computers in Human Behavior* 99, no. April (2019): 56–65, https://doi.org/10.1016/j.chb.2019.04.023.

<sup>&</sup>lt;sup>22</sup> Lestyana Ningrum et al., "Association of SDG Indicators of the Social Development Pillar in Indonesia Using the Apriori Algorithm," *Procedia Computer Science* 245, no. C (2024): 450–59, https://doi.org/10.1016/j.procs.2024.10.271.

These results align with research by Yue,<sup>23</sup> which found a strong and significant correlation between gadget use and the social behaviour of lecturer at SMP Negeri 7 Muaro Jambi. High levels of gadget use are often accompanied by high levels of social behaviour, even in contexts that can be both positive and negative.

However, unsupervised smartphone use by parents or teachers can disrupt learning concentration, as gadgets now have numerous features and applications, such as games, cameras, videos, and more. These features can disrupt the learning process both at school and outside of school. Another impact is influencing student's behaviour, potentially leading them to become quickly satisfied with the knowledge they gain, thus assuming that what they learn from the internet is comprehensive.

The research findings also support the findings of Lee,<sup>24</sup> they also concluded that the impact of smartphone use on the social behaviour of elementary school lecturer includes both positive aspects, such as ease of communication, and negative aspects, including the habit of swearing or viewing age-inappropriate content.

# B. The Effect of Smartphone Use on Student's Emotional Intelligence

The research results show that emotional intelligence variables are formed sequentially by: (1) building relationships, (2) motivating oneself, (3) recognising one's own emotions, (4) recognising the emotions of others, and (5) managing emotions. The results of the description of emotional intelligence indicate that building relationships is the primary indicator capable of measuring emotional intelligence, with the highest mean score of 4.25, as indicated by lecturer behaviour of feeling comfortable talking and interacting with their friends.

The test results indicate that smartphone use has a 53.8% effect on student's emotional intelligence at the Nurul Islam Elementary School in Jember City. This means that the higher the smartphone use, the higher the child's

<sup>&</sup>lt;sup>23</sup> Yuan Yue, Zhou Aibao, and Tang TingHao, "The Interconnections among the Intensity of Social Network Use, Anxiety, Smartphone Addiction and the Parent-Child Relationship of Adolescents: A Moderated Mediation Effect," *Acta Psychologica* 231, no. September (2022): 103796, https://doi.org/10.1016/j.actpsy.2022.103796.

<sup>&</sup>lt;sup>24</sup> Lee, Choi, and Na, "Reciprocal Longitudinal Effects among Korean Young Adolescent' Negative Peer Relationships, Social Withdrawal, and Smartphone Dependence."

emotional intelligence. This means that smartphone use can help lecturer understand course material more easily through videos and educational apps, thereby impacting student's emotional intelligence in building relationships, as demonstrated by lecturer increased comfort speaking and interacting with their classmates.

This research corroborates the findings of Mendez<sup>25</sup>, which demonstrated an influence between smartphone use and adolescent emotional intelligence. Although conducted on a different age group (adolescents), the results confirm that excessive digital interaction can impact emotional stability and how individuals express their feelings.

From a theoretical perspective, these results Jeong,<sup>26</sup> both internal and external factors influence that emotional intelligence. Smartphone use is an external factor that, if not properly monitored, can weaken a child's ability to regulate emotions, especially if the content consumed is age-appropriate or does not provide positive stimuli for the development of empathy and self-control.

These findings clarify that digital technology, such as smartphones, has significant potential to influence student's social and emotional aspects. While smartphones can be an effective learning and communication tool, they can also disrupt a child's personality development if used excessively without supervision.

## **CONCLUSION**

Smartphone use (X) influences student's social behaviour (Y) at at Miftahul Ulum Islamic Institute, Syarifudin University and Miftahul Midad College of Education are located in Lumajang Regency by 50.1%. This means that the higher the smartphone usage, the more positive the student's social behaviour. This means that smartphone use can help lecturer understand subject matter more easily through videos and educational applications, which in turn impacts social behaviour, as

<sup>25</sup> M. León Méndez et al., "Effects of Internet and Smartphone Addiction on Cognitive Control in Adolescents and Young Adults: A Systematic Review of FMRI Studies," *Neuroscience and Biobehavioral Reviews* 159, no. August 2023 (2024), https://doi.org/10.1016/j.neubiorev.2024.105572.

<sup>&</sup>lt;sup>26</sup> Eunha Jeong, "The Moderated Mediating Effect of BMI in the Relationship between Smartphone Dependency, Self-Esteem, and Academic Helplessness among Korean Middle School Students: A Secondary Data Analysis," *Acta Psychologica* 257, no. May (2025): 25–30, https://doi.org/10.1016/j.actpsy.2025.105082.

demonstrated by lecturer willingness to lend items to friends in need. This finding is reinforced by Hurlock's theory, which posits that student's social behaviour is shaped by their interactions with their environment. It is also supported by previous research, such as that by Mella Fitri Hanita and Orchita Enggarnis.

Smartphone use has a significant influence on student's emotional intelligence at at Miftahul Ulum Islamic Institute, Syarifudin University and Miftahul Midad College of Education are located in Lumajang Regency, accounting for 53.8%. This means that the higher the smartphone usage, the higher the student's emotional intelligence. This means that smartphone use can help lecturer understand subject matter more easily through videos and educational applications, which in turn impacts student's emotional intelligence in building relationships, as demonstrated by lecturer increased comfort talking and interacting with their classmates. These results align with Goleman's theory of emotional intelligence and are supported by Darul Efendi's research, which found that smartphone use has an impact on adolescents' emotional intelligence. In general, this study confirms that smartphone use plays a significant role in shaping student's social behaviour and emotional intelligence. This influence can be positive if used wisely and under the supervision of parents or teachers, but it can also be negative if left unchecked.

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