

The Roles of Schools and Teachers in Building Students' Character in Digital Era: The Students' Perspective

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Abstract. Nowadays, almost every student has access to technology. It changes the character of educational practices applied at school, not only educating the real character of the students' but their virtual life as well. In this case, the role of teachers and schools is crucial in establishing students' attitudes as a back-up from their parents' role. However, the effectiveness of character education in the digital era in Indonesia has not been deeply studied. This study intends to investigate the role of teachers and schools toward the internalization of character education values in the digital era from the students' perspective. A regression analysis is performed to estimate and conclude their influence. This study found that the role of teachers and schools is playing a significant effect to internalize the value of character education to their students in the digital era.

Keywords: Role of teacher, the role of school, internalization of character education

Introduction

Digital era known as industrial revolution 4.0 is an era in which almost everything can be performed digitally. Technology and media have become people's lifestyle [1]. Most people have gadgets which help them to connect with the digital world. Currently, gadgets and their features can be accessed and owned by all ages. According to Pratchett [2] in England, 100% of children of 6-10 years old have played video games in their gadgets. This 2005 survey illustrated that gadget penetration has relatively been high on children since fifteen years ago. This phenomenon also happens in Indonesia. In Yogyakarta, one of big cities in Indonesia, 252 of 260 children aged 9-12 years old declared that they have been playing video games in their devices [3].

Digital technology has risks besides benefits. Suler [4] stated that when interacting in a virtual world, people tend to experience the disinhibition effect. It is an effect where people tend to loosen up, feel more freedom, and express themselves freely to the extent that they share very personal things about themselves to the public [4]. Without a strong good character, this disinhibition effect could be very toxic.

Character building education protection for kids and teenagers from embedded risks of using gadgets. Indonesian President Joko Widodo emphasis on education character by sparking a Character Strengthening Program [5]. This program highlights five main characters that cannot be separated, namely religiosity, nationalism, integrity, independence, cooperation.

To build student character, related to the use of gadgets in schools must be done very wisely for varied effects. It is almost impossible to control the use of gadgets for most students, so the use of gadget problems are handled by cases [6].

The role of schools and teachers related to the use of gadgets can be seen in two perspectives in perceiving character education. They are one and two life perspectives. One life perspective is a presumption that there is only one life in which real and virtual worlds are two parts that integrated one another, so the educator's main task is to scaffold the students to do their integrated life by offering them to use technology at schools. Two life perspectives are an assumption that says there are two kinds of life, life in a "real world" and life in a "virtual world". Life in real-world is performed at school in which school prohibits students use their gadgets because of its risk. Students live their virtual world outside the school in which they have freer access to use technology and their gadgets, so they need to find out a way to live in the digital era with all eases and risks themselves [6].

Ohler [6] says that schools usually face problems of students' attitudes in the digital era in two ways—handling case by case and restricting access to use gadgets for students. He then [6] offers the third approach where schools aggressively proactive to set a character-building education program that places digital activities as parts of learning, and it does not eliminate them from their individual lives. It is following the development of the digital era in which the



competence of using media and technology is a necessity as well as a common thing for native digital. However, the third has not revealed the results yet. Therefore, the researchers intend to investigate the relationship between role of teachers, role of schools, and internalization of character education value in the digital era from students' perspective.

Suler [4] stated there are eight characteristics of online interaction, named dissociative anonymity; invisibility; asynchronicity; solipsistic introjection; dissociative imagination; minimization of status and authority; individual differences and predisposition; and shifts among an intrapsychic constellation.

Character Education in Indonesia also needs more attention. In general, character consists of operative values that progress as the value becomes a virtue. According to Lickona [7] character conceived as three interrelated parts named moral knowing, moral feeling, and moral behaviour. Moral knowing is when someone knows which one is good and bad. The moral feeling is when someone not only knows but feels and desires something good or bad. Moral action is when someone does something good.

The facts above lead the writer to write about the role of teachers and school institutions related to the use of the device in which according to Ohler [6] consisting of two perspectives in seeing character education in a digital era; they are (1) Two lives perspective, is an assumption that there are two kinds of lives-life in a "real world" (usually performed at school, in which school forbids students to use their gadget) and "virtual world" (in which children have freer access to technology). (2) One life perspective is a presumption that one of the educators' duties is to assist their students to live in an integrated life by asking students to use technology at school effectively and efficiently, but also wisely and responsibly.

Ohler [6] offers the third approach in which schools aggressively and proactively apply a character education program that places digital activities as part of learning, and not eliminating the activities from the personal lives of their students. This is suitable for the development of the digital era in which the ability to use media and technology becomes a must as well as a common thing for digital natives.

Research on character education in the digital age has begun to be carried out with various models. Fitria and Juwita [8]examined character education in early childhood which was carried out using video blog/vlog media. Moreover, Berliani and Sudrajat state that character education can be integrated into learning that includes design, implementation, and assessment in learning. The school environment, the presence of teachers, and

adequate infrastructure are factors that influence the implementation of character education [9]

METHOD

The data in this research are obtained from students in two junior high schools (SMP) and two senior high schools (SMA) in Jember Regency.

The subjects of this research are answer closeended questionnaires. There are several criteria for the subjects involved in this study, which are (1) an active student at the designated school; (2) at least 12 years of age and 18 years of age at most. The sample size in this analysis is 212 students that include 89 males and 123 females.

This study performs three measures, which are one dependent variable and two independent variables. Internalization of character education value (Y), the dependent variable of this study. explains how students internalized the value of character education. This variable was measured by 25 items and used a 1-5 range score Likert scale on each item. The analysis uses the total sum score of each participant. Role of the teacher (X1), the first independent variable of this study, explains teachers' role in delivering the value of character education from the students' perspective. This variable measured by 15 items and using a 1-5 range score Likert scale on each item. The analysis uses the total sum score of each participant. Role of school (X2) is the second, the second independent variable of this study explains about school's role in delivering the value of character education from students' perspectives. This variable measured by 15 items and using a 1-5 range score Likert scale on each item. The analysis uses the total sum score of each participant.

All measurements above reported as a reliable measurement instrument. Cronbach Alpha test score based on all item on variable Y, X1, and X2 are 0.7808, 0.8853, and 0.8360 consecutively.

To analyze the data, this study performs multiple linear regression analyses to obtain the conclusion about the relations of teachers' role and schools' role towards students' internalization of character education value. The linear regression model in this study is:

$$Y = \beta_0 + \beta_1 \dot{X}_1 + \beta_2 \dot{X}_2 + \epsilon$$
 Eq.1

The Eq.1 is the linear regression model which shows the relationship between X (role of teacher/X1 and school/X2) and internalization of character education (Y),

 $\beta 0$ = intercept, $\beta 1$ = expected increase score in Y on single point additional score in the role of the teacher (X1)

 β 2 = expected increase score in Y on single point additional score in the role of school (X2)

 \mathcal{E} = error term, which is showing the imperfect of regression analysis predicting the reality outside the



independent variables in the model.

The statistical software package provides Fstatistic and R2 estimation to show how the linear regression model that has formed is good or not. P value of t statistic is used for testing the hypotheses in this study. To make the best linear and unbiased estimation in the regression analysis, this study performs the classical assumption linear regression model (CLRM) test. These series of tests involving residual normality assumption, constant error variance (homoscedastic), and no perfect correlation between the independent variable (multi-collinearity). The best model is obtained if the regression model has surpassed these tests.

RESULT & DISCUSSION

Table 1 provides a summary statistic of the data which contain numbers of observation, mean or average value, standard deviation, minimum and maximum score of each variable. Table 2 provides regression analysis estimation. It can be seen and interpreted as follows:

Intercept has a coefficient estimate ($\beta 0 = 29.379$) it means that the expected score of internalization of character education (Y), if there is no interruption (X1=X2=0), is 29.379.

X1 has coefficient estimate ($\beta 1 = 0.442$) it means that every additional 1 score of Role of the teacher (X1) will increase about 0.442 score in the internalization of character education value (Y) while the other variable is constant

X2 has a coefficient estimate ($\beta 2 = 0.472$) it means that every additional 1 score of Role of school (X2) will increase about 0.472 score in the internalization of character education value (Y) while the other variable is constant.

P value of F statistic in this regression model shown by table 2 is 0.000 means that the null hypothesis of F statistic is rejected, where the null hypothesis of this test is: X1 and X2 simultaneously have no significant relationship toward Y. Therefore, X1 and X2 simultaneously are good enough to predict the Y variable, so the model in this regression is good.

The R2 score in table 3 is 0.4353. It means that the model in this analysis can explain about 43.53% variability of the dependent variable and the rest (56.47%) are explained by other factors not included in the model. Closer score to 100% is a better explanation of the model.

This study performs p value of t statistic to obtain the conclusion of hypotheses testing. P value of X1 = 0.000 means that reject null hypothesis where the null hypothesis of X1 is $\beta1 = 0$, or there is no significant effect of the Role of the teacher (X1) to internalization of character education (Y). So, the conclusion of the test is there is a significant effect of the role of the teacher (X1) to Y. P value of X2 = 0.000 means that reject null hypothesis where the null hypothesis of X2 is $\beta2 = 0$, or there is no effect of the role of school (X2) to Y. So, the conclusion of the test is there is a significant effect of the role of school (X1) to Y.

Table 3 provides a classical linear regression model (CLRM) assumption test. This table contained Shapiro Wilk for normality residual testing, Breusch-Pagan / Cook-Weisberg (sig.) for homoscedasticity testing, and Variance Inflation Factor (VIF) score for multi-collinearity testing. For normality testing, p value (sig.) score of 0.21029 (p > 0.05) means the residuals in this regression model are normally distributed. For homoscedasticity testing, score of 0.8755 (p > 0.05)

Table 1. Summary Statistics

Variable	Obs	Mean	Std. Dev	Min	Max
Y	212	75.23585	7.209856	53	91
X ₁	212	51.49528	5.450769	33	60
X_2	212	48.83019	5.509959	30	60

Table 2. Multiple regression analysis output

Coefficient	Estimate	SE	P value from t test
Intercept (β ₀)	29.3796	3.653028	0.000*
$X_1(\beta_1)$	0.44231	0.114356	0.000*
$X_2(\beta_2)$	0.47264	0.113127	0.000*
P value (F-Statistics)	0.0000		
R ²	0.4353		

*using α =5%, p value below 5% or 0.05 indicates a significant effect of each independent variable to explain the dependent variable while the other variable are constant

Table 3. Classical Linear Regression Model (CLRM) Assumption Test

Table 5. Classi	able 5. Classical Effical Regression Woder (CERW) Assumption Test			
Variable	Shapiro Wilk (sig.)	Breusch-Pagan / Cook- Weisberg (sig.)	Multicollinearity (VIF)	
X1 X2	0.21029	0.8755	2.77 2.77	



means that error variances in this model are constant (homoscedastic). VIF score under 10 indicates that no multi-collinearity is detected in this model. In other words, each independent variable is completely independent.

Nowadays, the character of the students is manifesting, not only in the real world but also in the virtual world as technology develops. As mentioned by Suler [4], when interacting in the virtual world, adolescence tend to experience the disinhibition effect, which makes them able to interact without getting attached to their real-life identity. In this case, they need a good and strong character to avoid something negative.

The research result showed us that the teacher and school are perceived to have a big role in strengthening students' character in the digital era. This is in line with the research conducted by Fitria and Juwita [8], which stated that technology could be used to strengthen the student's character instead. This is in line with the theory that a teacher could integrate the use of technology in strengthening the students' character instead of avoiding it. The presence of a teacher is also an important aspect of the success of character education [9].

The teacher needs to be supported by the school, both in policy and the availability of the facilities. Following Berliani and Sudrajat's [9] finding, adequate infrastructure is also a very important aspect of ensuring the success of character education. The majority of the students have internalized the character formulated by Kementerian Pendidikan dan Kebudayaan [10].

CONCLUSION

The teachers have a significant role in internalizing character education value to their students. The positive relationship between the teacher's role and internalization of character education value was found. Increasing teachers' role will increase the internalization of character education value. The role of school also has a significant effect on internalizing character education value to its students. The positive

relationship was also shown in the result of this study. The more school involved in delivering the value of character education more internalized the value of it in students' mindsets.

REFERENCES

- [1] J. S. Brown, Learning in the digital age. Forum of the Future of Higher Education. 2001.
- [2] R. Pratchett, "Gamers in the UK: Digital play, digital lifestyles," London, 2005.
- [3] A. B. Adwitiya and S. Wimbarti, "Motivasi Bermain Game dan Mediasi Orangtua dengan Kecenderungan Adiksi Video Game pada Anak," vol. 3, no. 2, pp. 71–82, 2020, doi: https://doi.org/10.36341/psi.v3i2.1097.
- [4] J. Suler, "The online disinhibition effect," *Cyberpsychology Behav.*, vol. 7, no. 3, pp. 321–326, 2004, doi: 10.1089/1094931041291295.
- [5] Kementerian Pendidikan dan Kebudayaan, "Konsep dan Pedoman Penguatan Pendidikan Karakter," 2016.
- [6] J. Ohler, "Character Education for the Digital Age," *Teach. Screenagers*, vol. 68, no. 5, pp. 1–5, 2011.
- [7] L. Jerome and B. Kisby, *The rise of character education in Britain: heroes, dragons and the myths of character*. 2019.
- [8] Y. Fitria and J. Juwita, "Utilization of video blogs (vlogs) in character learning in early childhood," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 2, no. 2, p. 211, 2018, doi: 10.31004/obsesi.v2i2.87.
- [9] Y. M. Berliani and A. Sudrajat, "Implementasi Pendidikan Karakter di Sekolah Berbasis Pondok Pesantren," J. Pendidik. Karakter, vol. 8, no. 2, pp. 161– 171, 2018.
- [10] S. Hough, "Review of Love, sex and disability: The pleasures of care.," *International Journal of Disability, Development and Education.* 2012, doi: 10.1080/1034912X.2012.723952.