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THE ROLE OF INTERACTIVE MULTIMEDIA ON CHILDREN'S CHARACTER DEVELOPMENT AND RELIGIOSITY

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ABSTRACT

Background: One of the fields that take advantage of the positive impact of the development of information technology in education. The impact of the development of information technology on the field of education is one of them is indicated by the increasingly varied learning methods that are currently widely developed. One of the learning methods that are now starting to be widely developed is the multimedia-based interactive learning method.
Aim: This Penelitian aims to find out the role of interactive multimedia on the development of children's character and religiosity at GKPB MDC Lippo Cikarang Sunday School.
Method: This penelitian is causality research with quantitative method approaches. The population in the study was the parents of 33 samples of the Elim Tabernacle's Faith Victory Church. The sample used in this study was as many as 33 parents of students of Elim Tabernacle Church Victory of Faith as many as 33 samples.
Findings: Interactive multimedia has a significant effect directly on the development of character and religiosity in children of GKPB MDC Lippo Cikarang Sunday School.

KEYWORDS
interactive multimedia, character development, religiosity

INTRODUCTION

Improving the quality of education has become the responsibility of all parties involved in education. In accordance with the verse from Galatians 6:6 which says, "And well he, who receives the teaching in the Word, shares all that is in him with the one who gives it." Teachers are the spearhead in education, which is the person who plays the most role in creating quality human resources that can compete in the rapid development of technology (Rahayu & Kusuma, 2019). However, in classroom learning teachers often use print media that are already available, such as modules, textbooks, magazines, newspapers, and supported with simple tools that are still used such as whiteboards. While audio and visual media (Audio cassette, TV/Radio broadcast, overhead, transparency, video/film), and electronic media (Computer, internet) are still not intensively utilized (Lestari, 2015). However, unfortunately, there are still many teachers who do not have the skills to use technology to support the teaching and learning process so that student learning outcomes can improve (Aggraeni, 2019).

The use of appropriate learning media is one way that learning materials can be delivered effectively. Media everything that contains information between the source and the recipient according to (Smaldino, 2012). It has to do with the learning process, teachers as informers, and students as recipients. Media is used to convey messages through the means of teaching to learners so that the learning process runs effectively and learning goals can be achieved (Baharun, 2016).

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The development of knowledge is also found in Proverbs 1:5 which reads, "Let the wise hear and increase knowledge and good people who are wise to obtain consideration." This indicates that humans in developing all the science of mind that they have. Today the impact of the rapid development of computer science is an undeniable fact of the advancement of information technology in all fields (Aurora & Effendi, 2019). One of the fields that utilize the positive impact of the development of information technology in the field of education. The impact of the development of information technology on the field of education is one of them is indicated by the increasingly varied learning methods that are currently widely developed (Wulandari & Mudinillah, 2022). One of the learning methods that are now starting to be widely developed is the multimedia-based interactive learning method (Novaliendry, 2013).

Interactive multimedia is a phrase that describes a new wave of computer software primarily related to the information section (Sori, Siregar, & Komaro, 2015). This multimedia component is characterized by the presence of text, images, sound, animation, and video (Susilo, Degeng, & Susilaningsih, 2017). Some or all of its components are organized in several coherent programs. Interactive components refer to the process of empowering users to control the environment usually with a computer (Istiqlal, 2017). Surjono et al. (2019) Emphasized that through the principle of interactivity students will be able to learn more optimally this is because students can set the desired speed of learning display.

Forming a Christian character in a Christian family doesn't sound unusual because it's unlikely that Christian parents will form a character that doesn't match the parent's identity. Character is useful in all aspects of life because it makes people of integrity, influence, and an effective witness of Christ. But the reality is that so many Christian children have bad character, many Christians are imprisoned, even pastors' children are stumbling blocks everywhere (Hartono, 2018).

The creation of a religious atmosphere means creating an atmosphere or climate of religious life. In realizing and carrying out the values of the faith, it is necessary to create a religious atmosphere in schools and outside the school (Muhaimin, 2005). This is because the values of faith attached to students can sometimes be defeated by temptation, as well as the negative culture that develops around them. Therefore, it could be that students one day already competent in carrying out the values of the faith, at that time incompetent anymore. If the religious soul has thrived in learners, then the next task of educators is to make religious values the religious attitude of learners. Religious attitude is a situation that exists in a person that encourages him to behave in accordance with the level of obedience to religion. Thus, the formation of religious character is the result of efforts in educating and training earnestly against the various spiritual potentials contained in humans.

Developing character and religiosity is very important in the development of children. This is because it is important in preparing the younger generation at an early age with good character ownership and a good level of religiosity that will hopefully prevent children from juvenile delinquency which until now has been increasing. Kartono (2009) explained that juvenile delinquency is a symptom of social illness or psychological in children and adolescents caused by a form of social neglect, so they will develop a form of deviant behavior.

Research conducted by Hartono (2018) with the title "Shaping Christian Character In Children of Christian Families". The conclusions obtained in this study that forming a child's Christian character in a Christian family does not automatically occur because we are

Christians. It takes a lot of struggle, tears, prayers, and a price to pay. But as a responsible parent to God, however difficult it may be, this must still be done. So trust God and leave the children completely to God. At the same time, parents should continue to renew themselves in the Lord.

Based on the background that has been outlined, this study aims to find out the role of interactive multimedia on the development of character and religiosity of children at GKPB MDC Lippo Cikarang Sunday School.

Research Framework

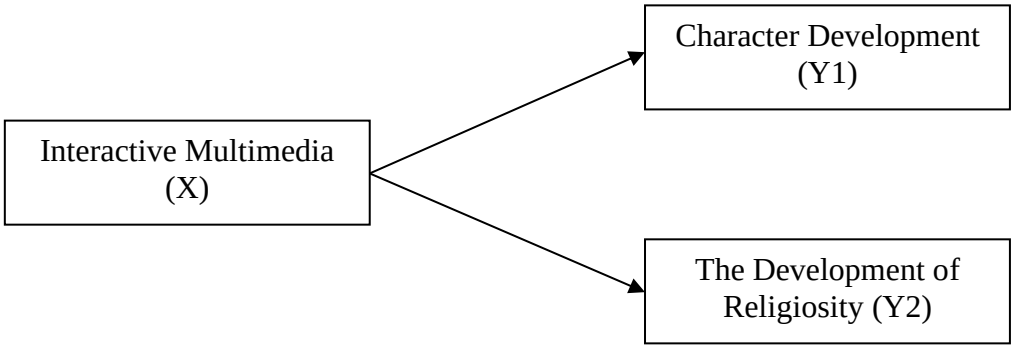


Figure 1. Research Framework

H_1: Interactive Multimedia plays a role in Character Development in GKPB MDC Lippo Cikarang Sunday School Children

H_2: Interactive Multimedia plays a role in the Development of Religiosity in Sunday School Children GKPB MDC Lippo Cikarang

METHOD

This type of research is causality research with quantitative method approaches. Causality research analyzed causal relationships between variables through hypothesis testing (Sugiyono, 2019).

Population and Sample

The population in the study was the parents of 33 samples of the Elim Tabernacle's Faith Victory Church. The sample used in this study was as many as 33 parents of students of Elim Tabernacle Church Victory of Faith as many as 33 samples.

Data Collection Techniques

In this study, to get the data needed, the authors used the data collection technique through the primary data source, which is the source of data obtained directly from the source, recorded for the first time, and directly related to the problem studied (Sugiyono, 2019). The primary data source used in the study was the method of spreading questionnaires, which is a way of collecting data by providing a set of questions for respondents to answer.

Types and Sources of Data

The type of data used is quantitative and the data source in this study is primary data. Primary data can be defined as data collected from original sources for a specific purpose (Kuncoro, 2013). In this study, primary data was obtained from the results of filling out questionnaires.

Data Analysis Techniques

Data analysis is the process of simplifying data into a form that is easier to read and implement. The analysis technique chosen to analyze the data and test hypotheses in this study is The Structural Equation Model (SEM). To answer the hypothesis used Partial Least Square (PLS). According to Ghozali (2012), the calculation was done using the Smart Partial Least Square (PLS) tool, because it is multi-lane and the model used is reflective. The calculation model is done using Smart PLS tools because this study has a multi-track relationship and is formative and reflective. In addition, sampling less than 100 respondents.

RESULTS AND DISCUSSION

In this study, researchers used PLS data analysis techniques using SmartPLS 3.0 Partial Least Square Software, after researchers examined the results of the questionnaires that had been spread there were the following results.

Outer Model Test

Convergent Validity

Test the measurement model through-loading factor is done to find out the validity of the indicator by looking at the convergent validity value of the indicators in the model. Each indicator in the model must meet convergent validity i.e. has a value of > 0.5. If each indicator already has a loading factor value of > 0.5, the evaluation step can be continued. Here are the convergent validity results of this study.

Table 1. Convergent Validity Test Round 1

	Original Sample Estimate	Mean of Subsamples	Standard Deviation	T-Statistic
Interactive Multimedia (X)				
X.1	0,935	0,927	0,038	24,854
X.2	0,918	0,913	0,052	17,583
X.3	0,921	0,904	0,058	15,998
X.4	0,903	0,889	0,057	15,743
X.5	0,754	0,776	0,091	8,271
Character Development (Y1)				
Y1.1	0,736	0,716	0,156	4,723
Y1.2	0,748	0,749	0,105	7,110
Y1.3	0,745	0,721	0,153	4,885
Y1.4	0,746	0,737	0,116	6,437
Y1.5	0,875	0,864	0,105	8,297

	Original Sample Estimate	Mean of Subsamples	Standard Deviation	T-Statistic
Y1.6	0,544	0,563	0,257	2,113
Y1.7	0,109	0,120	0,251	0,433
Y1.8	0,797	0,766	0,133	5,982
Y1.9	0,770	0,775	0,084	9,216
The Development of Religiosity (Y2)				
Y2.1	0,740	0,724	0,143	5,183
Y2.2	0,712	0,739	0,131	5,427
Y2.3	0,904	0,914	0,060	15,156
Y2.4	0,873	0,848	0,110	7,961
Y2.5	0,820	0,814	0,096	8,565

Source: Primary Data, Processed

Based on the results of the convergent validity test in table 1 above, it shows that there is 1 item that is declared invalid, namely item Y1.7 because it has a loading factor < 0.50. So it needs to be reduced and tested in the second round.

Table 2. Convergent Validity Test Round 2

	Original Sample Estimate	Mean of Subsamples	Standard Deviation	T-Statistic
Interactive Multimedia (X)				
X.1	0,935	0,931	0,033	28,595
X.2	0,918	0,916	0,053	17,296
X.3	0,921	0,913	0,051	18,092
X.4	0,903	0,892	0,055	16,545
X.5	0,754	0,774	0,087	8,687
Character Development (Y1)				
Y1.1	0,736	0,730	0,146	5,054
Y1.2	0,749	0,744	0,114	6,584
Y1.3	0,745	0,727	0,134	5,563
Y1.4	0,746	0,736	0,118	6,320
Y1.5	0,875	0,879	0,077	11,418
Y1.6	0,544	0,553	0,266	2,043
Y1.8	0,797	0,775	0,120	6,620
Y1.9	0,769	0,774	0,089	8,604
The Development of Religiosity (Y2)				
Y2.1	0,740	0,730	0,137	5,398
Y2.2	0,712	0,729	0,133	5,350
Y2.3	0,904	0,919	0,027	33,892

	Original Sample Estimate	Mean of Subsamples	Standard Deviation	T-Statistic
Y2.4	0,873	0,864	0,086	10,169
Y2.5	0,820	0,822	0,085	9,586

Source: Primary Data, Processed

Based on the results of the second round convergent validity test above shows that all indicator items are declared valid, because all have convergent validity values above 0.5, then all measurement items are declared valid as the contract measuring instrument.

Discriminant Validity

The discriminant validity test aims to test the validity of the indicator block. The discriminant validity test of the indicator can be seen in the cross-loadings between the indicator and its construct as seen in table 3. The indicator block is called valid if the value of each indicator in measuring its construct variable (Indicator block) is predominantly higher when compared to the value of each indicator in measuring other construct variables.

Tabel 3. Cross Loadings

	Interactive Multimedia (X)	Character Development (Y1)	The Development of Religiosity (Y2)
X.1	0,935	0,551	0,541
X.2	0,918	0,572	0,399
X.3	0,921	0,544	0,459
X.4	0,903	0,575	0,568
X.5	0,754	0,474	0,553
Y1.1	0,542	0,736	0,388
Y1.2	0,343	0,749	0,655
Y1.3	0,376	0,745	0,624
Y1.4	0,286	0,746	0,626
Y1.5	0,594	0,875	0,549
Y1.6	0,166	0,544	0,536
Y1.8	0,420	0,797	0,510
Y1.9	0,623	0,769	0,641
Y2.1	0,273	0,566	0,740
Y2.2	0,384	0,713	0,712
Y2.3	0,624	0,583	0,904
Y2.4	0,488	0,600	0,873
Y2.5	0,444	0,563	0,820

Source: Primary Data, Processed

The value of cross-loadings in table 3 obtained as a whole from the forming construct is expressed to have a good discriminant where the correlation value of the indicator to the

construct must be greater than the correlation value between the indicator and other constructs. Then, to test the discriminant of the constructed variable can be done with the AVE test. AVE aims to establish that construct variables have good discriminant validity values. The AVE value is declared satisfactory if the > 0.5. The results of the AVE test appear in Table 4 as follows.

Table 4. AVE value

	Average Variance Extracted (AVE)
Interactive Multimedia (X)	0,789
Character Development (Y1)	0,563
The Development of Religiosity (Y2)	0,661

Source: Primary Data, Processed

The AVE value for the indicator block that measures the construct can be expressed to have a good discriminant validity value because all have AVE values > 0.5.

Composite Reliability

Another test is the composite reliability of the indicator block that measures the construct (Ghozali, 2012). The provision if the composite reliability value > 0.60 is interpreted to be very satisfactory (Ghozali, 2012).

Table 5. Composite Reliability

	Composite Reliability
Interactive Multimedia (X)	0,949
Character Development (Y1)	0,910
The Development of Religiosity (Y2)	0,906

Source: Primary Data, Processed

Based on Table 5 it can be explained that from the provisions of composite reliability it can be stated that the structure that is studied meets the criteria of composite reliability so that each construct can be positioned as a research variable. This indicates that compositionally all variables have adequate internal consistency in measuring the latent / construct variables measured so that they can be used in subsequent analysis.

Cronbach Alpha

The reliability test with composite reliability above can be strengthened using Cronbach's alpha values. A variable can be declared reliable or meets Cronbach's alpha if it has a cronbach alpha value > 0.6. The following are the Alpha Cronbach values of each variable:

Table 6. Cronbach Alpha

	Cronbach Alpha
Interactive Multimedia (X)	0,932
Character Development (Y1)	0,892
The Development of Religiosity (Y2)	0,873

Based on the test results in the table above, it can be known that the Cronbach alpha value of each research variable is > 0.60. Thus these results can show that each of the study variables has met the requirements of the Cronbach alpha value, so it can be concluded that the entire variable has a high level of reliability.

Test Inner Model

Structural Equations

This test is used to evaluate the relationship between latent constructs as hypothesized in the study, based on PLS output, obtained the following image.

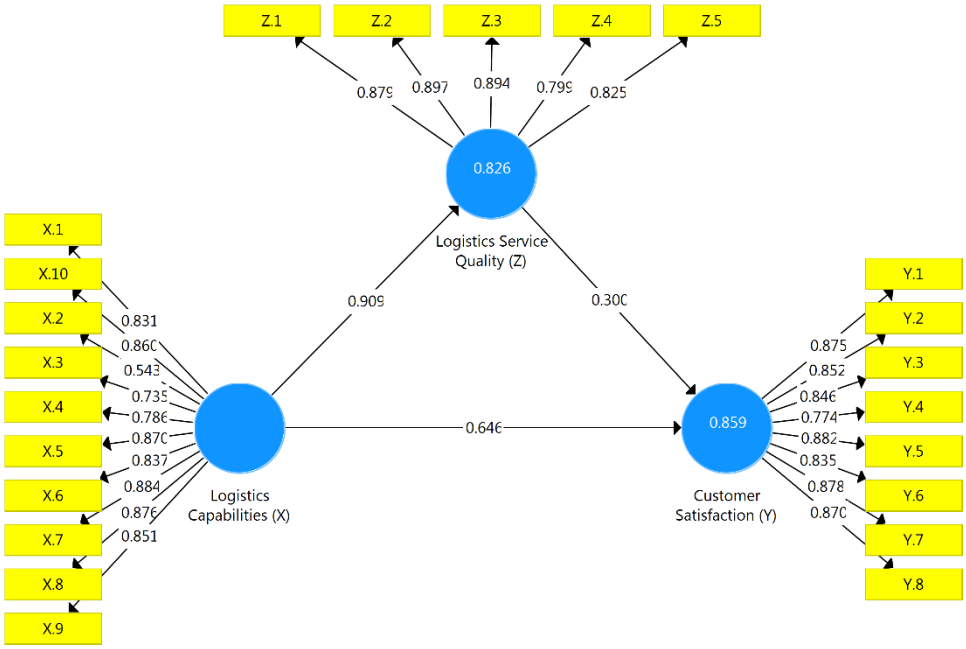


Figure 2. PLS Research Model
Source: Primary Data, Processed

The results of the inner weight value of Figure 4.1 above show that Character Development is influenced by Interactive Multimedia. While the Development of Religiosity is influenced by Interactive Multimedia and Character Development showed in the following equations.

Z = 0.909 X

Y = 0.646 X + 0.300 Z

R-Square

Assessing a model with PLS starts by looking at the R-square for each dependent latent variable. Changes in R-square values can be used to assess the effect of certain independent latent variables on whether latent variables have substantive influences (Ghozali, 2012). For

endogenous latent variables in structural models that have an R2 yield of 0.67 indicate that the model is "good", R2 of 0.33 indicates that the model is "modern", R2 by 0.19 indicates that the model is "weak". The output of PLS is described below:

Table 7. R-Square Value

	R-Square
Interactive Multimedia (X)	
Character Development (Y1)	0,376
The Development of Religiosity (Y2)	0,327

Source: Primary Data, Processed

For interactive multimedia free variable (X) that affects character development variable (Y1) in structural models has an R2 value of 0.376 indicating that the model is "moderate", while Interactive Multimedia (X) which affects the religiosity development variable (Y2) in the structural model has an R2 value of 0.327 which indicates that the model is "weak".

The suitability of the structural model can be seen from Q2, as follows:

Q2 = 1 – [(1 – R1)*(1 – R2)]
= 1 – [(1 – 0,376)*(1 – 0,327)]
= 1 – [(0,624)*(0,673)]
= 1 - [0,420]
= 0,580

Hypothesis Testing

To answer the research hypothesis can be seen t-statistics on table 8 the following:

Table 8. Hypothesis Testing Results

	Original Sample	**Sample Mean**	**Standard Deviation**	**T Statistics**
Interactive Multimedia (X)-> Character Development (Y1)	0,614	0,638	0,132	4,659
Interactive Multimedia (X)-> the Development of Religiosity (Y2)	0,572	0,591	0,125	4,562

Source: Primary Data, Processed

Based on the results of hypothesis testing in the table above, it can be explained that:

1) Interactive Multimedia has a significant influence on Character Development, because the statistical T value of 4,659 which means greater than 1.96, so the H1 hypothesis which reads "Interactive Multimedia plays a role in Character Development in Children's Sunday School GKPB MDC Lippo Cikarang", can be expressed acceptable; and

2) Interactive Multimedia has a significant influence on the Development of Religiosity, because the statistical T value of 4.562 which means greater than 1.96, so the H2 hypothesis which reads "Interactive Multimedia plays a role in the Development of Religiosity in GKPB MDC Lippo Cikarang Sunday School Children", can be stated accepted.

The Influence of Interactive Multimedia on Character Development

Based on the results of the study, interactive multimedia has a significant effect on character development, because the statistical T value of 4,659 means greater than 1.96, which means character development can be influenced by the presence of interactive multimedia. The direction of influence that occurs between interactive multimedia and character development is a positive known from the original sample estimate value of 0.614 which shows the presence of unidirectional influence so that it can be interpreted that the better the application of interactive multimedia in GKPB MDC Lippo Cikarang Sunday School Children, the more it will be able to produce better character development. This means that the hypothesis that reads "Interactive Multimedia plays a role in Character Development in GKPB MDC Lippo Cikarang Sunday School Children", is declared accepted.

The findings proved that interactive multimedia has a significant positive effect on character development by looking at these results, it can be a reference for GKPB MDC Lippo Cikarang Sunday School which wants to improve the character development of school children to be able to pay more attention and improve their application in terms of Interactive Multimedia. With the good character of the Sunday school students, able to live the word of God in 1 Corinthians 8:1, About the flesh of the idol offering we know: "we all have knowledge." Such knowledge makes people arrogant, but love builds. With a good character like love, individuals can develop into better people.

The Influence of Interactive Multimedia on the Development of Religiosity

Based on the results of the study, interactive multimedia has a significant effect on the development of religiosity, because the statistical T value of 4,562 means greater than 1.96. The influence of interactive multimedia and the development of religiosity is positive, this is evident from the original sample estimate value of 0.572 which means there is a unidirectional influence between interactive multimedia and the development of religiosity which can be interpreted that the better the application of interactive multimedia it will be increasing the development of religiosity of GKPB MDC Lippo Cikarang Sunday School Children. This means that the hypothesis that reads "Interactive Multimedia plays a role in the Development of Religiosity in GKPB MDC Lippo Cikarang Sunday School Children", was declared accepted.

The results of hypothesis testing proved that Interactive Multimedia had a significant positive effect on the Development of Religiosity. This shows that interactive multimedia has an important role in building the development of high religiosity. Therefore, the relics received during Sunday school study are in harmony with the word of the Lord in Romans 15:4, "For all that was written in the past, has been written to be a lesson for us, that we may firmly hold to the hope by the perseverance and consolation of the Scriptures." So if GKPB MDC Lippo Cikarang Sunday School wants to improve the development of school children's religiosity, it

is very important for the school to pay attention to the extent of the application of interactive multimedia during the learning process.

CONCLUSION

Based on the analysis and results of the research obtained, the conclusion in this study is that interactive multimedia has a significant effect directly on character development and religiosity in children of GKPB MDC Lippo Cikarang Sunday School.

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