Modeling analysis effect of online game to individual quality

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Abstract

This study took the title "Modeling Analysis Effect of Game Online to Individual quality. The purpose of this study were 1)to determine empirically correlational model that describes the influence of online game on the pattern and quality of life of individual, 2) to determine empirically online Games effect on individuals, and 3)determine empirically online Games effect on the individual. This study is a survey research. The data use disprimary data with the sample of junior high school students in Surakarta. Data collection instruments such as questionnaires that measured with a Likert scale. Questionnaires were sent to the students as respondents the number of respondents at least 100 respondents. Data analysis methods used include 1) analysis of test instruments that test the validity and reliability, 2) descriptive statistical analysis, 3)analytical modeling with SEM (Sequential Equation Model).SEM analysis of the model results lead to the conclusion that 1).Applications online game positively influence individual life styles. 2)Application of online game is not significant effect on the quality of the individual, 3)Applications online games directly has greater influence on the individual quality of life through the mediation patterns individa. The result of this study stated that online game can provide application effect on life style and quality individual.

Keywords: Key words: online, games, quality, individuals

1. Introduction

In the beginning, online games earlier known is "Network Game". In this case some of the Personal Computer connected to each other and can start playing the game as much as they want. In "Network Game", the game which is often playedis Counter Strike. "Game network" can make kids sand adults sitat home for hour son Game Center to get an inner satisfaction. Along with the development of game technology, the network game begin to be replaced by online game. At this time, online games can be turned into a social network for gamers who can be at some of the other popular sites.

The development of the online game is not without its negative impact. From the online games which has emerged asa life style is the excessive use of playing time. I think weall know that every thing excessive is not profitable. The development of the Online Game is very rapid and flourishing inseveral cities, both big cities and small, and even to some remote are as that make the gamers are easier to reach out to online game. A game began to be regarded as something that is addictive.The gamers are able to sit for long time for sakin g a pleasure without any disturbances of their concentration in the Game. Some cases listed, there are some gamers who addicted to and spend time wasted for the sake of the game,not bathing, not eating, not working and not carrying out their duties and obligations. That is in their brains are just playing, playing and playing and how to get a strategy to win.Therefore, some parents begin to fret if their children get to know games online, actually there are still positive impact of online game, such as how to teach strategies to children. Based on this background, the researchers took the title "Modeling Analysis Effect of Game Online to Individual quality”. Formulation problems in this research : 1)How did correlational model that describes the influence of online Game son the pattern and quality of life of Individual ? ,2)Does the Online Game influence the way people live ?, 3) Does Online Games affect the quality of the individual ?

Outcomes research in this research :This research will produce an output in the form of a journal. Which gives an idea of the effects of online games on the pattern of life and quality of individuals, especially among junior high school students in Surakarta Indonesia. The results of this study will be the input for people, especially
students to be able to take advantage of the game in a positive way and mitigate the negative effect of online games.

2. Literature review
As computer and Internet use become a staple of everyday life, the potential for overuse is introduced, which may lead to addiction. Research on Internet addiction has shown that users can become addicted to it. Addiction to the Internet shares some of the negative aspects of substance addiction and has been shown to lead to consequences such as failing school, family, and relationship problems. (Brian D. Ng, M.s. and Peter Wiemer-Hastings, ph.d., Cyberpsychology & behavior, Volume 8, Number 2, 2005, © Mary Ann Liebert, Inc.)

Research into online gaming has steadily increased over the last decade, although relatively little research has examined the relationship between online gaming addiction and personality factors. This study examined the relationship between a number of personality traits (sensation seeking, self-control, aggression, neuroticism, state anxiety, and trait anxiety) and online gaming addiction. Data were collected over a 1-month period using an opportunity sample of 123 university students at an East Midlands university in the United Kingdom. Gamers completed all the online questionnaires. Results of a multiple linear regression indicated that five traits (neuroticism, sensation seeking, trait anxiety, state anxiety, and aggression) displayed significant associations with online gaming addiction. The study suggests that certain personality traits may be important in the acquisition, development, and maintenance of online gaming addiction, although further research is needed to replicate the findings of the present study (Mehwash Mehrroof and Mark D. Griffiths. Cyberpsychology, Behavior, and Social Networking. June 2010, 13(3): 313-316. doi:10.1089/cyber.2009.0229.)

3. Theoretical
Online game is defined by Burhanin Tsharir(2005) is a computer game that can be played by multiple players via the Internet. Online games are usually provided as an additional service online by provider or they can be accessed directly from a company that specializes providing games. To play online games, there are two important tools that should be owned by the users a computer with adequate specifications and a connection to the Internet.

Online game is a game with the network, where there is an interaction between one person to another to achieve the goals, mission to achieve the highest score in the virtual world. Early game online played is Dungeons and Dragons. They are using a pen and apaper in the 1970s. Along with the development of the technology in 1997 appeared on a role playgame (RPG) that requires players to shape the character in the virtual world of adventure in the Ultima Online game, they are called Everquest and Asheron. Gamers are always identified with someone who plays a role game and war games, in the development gamers also defined as someone who plays video games. And can be said to be a gamer if someone took the time 12.6 hours per week and knew a lot about the game. (www. Wikipedia.com).

Gamers characteristics, ACNielsen reported that as many as 65 million people actively play the online game, as many as 15 million people aged over 45 and 64 percentor 2/3 are women. And the teens spendas much time as 55hours a week to have fun that 25 percent of them used to play video games (Young, 2005). More teens use the Internet in online game. Compared toot her activities, as much as 81% for online games. According to Charlton and Danforth (2007) Students more using the internet to play online games this time more than most any other use of the internet and the use of the internet for online game more. In addition to the online game more players between the ages of 18 to 50 years. Mean while, according to Brian and Hastings (2005), online game players sex are more men than women.

Judging by natural and formats. formation of online games can be a refuge from the real world provide pleasure in playing it so that can lead anyone to an addiction, (Schwausch and Chung, 2005). Meanwhile, according to Wanand Chiou(2006) Five themes or easons for using the Internet is an entertainment and pleasure, adaptation feeling that spare time and distract themselves fromoneliness and boredom, release stress, relax and relieve the feelings, the need for a personal relationship, looking for interesting things and and the final challenge is to escape from reality. Virtual identity in online games can not only affect there al identity but also can actasa replacement function that may not be ful filled in the role in the real world.
Addicted to online games is the inability to control his actions in playing online games that affect one's life and behavior. Gamers' behavior shows a pattern, the pattern of taking care of themselves, social interaction and academic behavior can be an indicator of the shape typology Gamers. Gamers play a pattern can be seen from the purpose of playing Gamers are to win all the games or to socialize with other players in a virtual world, time and money they provide to play online games. Gamers take care of themselves pattern can be seen from three aspects: clean the shelter is done by themselves or by others in their daily routine or not, their sleep pattern every day, they sleep regularly or not and how they eat in the daily is carried out regular or not. If the pattern scare of themselves is lower the more they are addicted to online games.

Gamers social interaction patterns can be seen from how their interactions with family and friends in their daily life. Moreover, judging from how interest they are in other activities high or not. If the social pattern interaction owned by Gamers is lower then their addiction to online game is higher. Academic behavior pattern is the last indicator to form a typology of Gamers. Academic behavior patterns seen from how they neglect academic activities and GPA at their disposal. Gamers’ behavior typologies are divided into two parts, namely how the style of playing they have not experienced level of addiction to online games to experience a high level of online game addiction. Moreover, it can be seen how well the individual characteristics of Gamers who are not addicted to online game. Conceptual model of the relationship between variables according to this study as follows:

Hypothesis ini this research:

H₁: It was all eged that the use of online games significantly influence individual patterns.

H₂: It was all eged that the use of online games significant influence to the quality of the individual.

4. Research methods; object and location.

Object of the study was the junior high school students in Surakarta Indonesia

4.1. Types of Data
   - Primary Data
   - Secondary Data

4.2. Data Collection Methods and Techniques.
   - Methods Questionnaires
   - Methods of Observation
   - Documentation Methods

4.3. Population and Sample
The population was the junior high school students in Surakarta and samples: junior high school students in Surakarta, a minimum number of 100 samples taken with a random sampling technique.

4.4. Types of operational variables.
To test the hypothesis proposed, The variables must be measured. In this research there are two variables, ie: exogenous variables and endogenous variables. Exogenous variables are factors that affect the life styles of individuals, namely the use of online games. Endogenous variable is the life style of the individual and individual qualities.

5. Results
The data used in this research is data that can describe the causality which can be hypothesized between the existing constructs. The primary data obtained by using instruments such as processed questionnaires for
research purposes. Data collection instruments used is a list of questionnaire using 5-point Likert scale range. Test used is as:

1) Instrument Test.
   • Test Instrument: Validity.

Validity test aims to determine whether the indicators as a constituent of the concept can measure what should be measured. In this study used a convergent validity can be assessed and measurement models developed, ie, by determining whether each indicator were estimated (valid) measure the dimensions and concepts are tested. According to Anderson and Gerbing in Ferdinand (2002: 187), that a dimension indicator shows significant convergent validity if the indicator has a critical ratio greater than twice its standard error. Or it can be said that this indicator is valid to measure what should be measured in the model presented, if CR> 2 . The value of the critical ratio (which is identical to the t-test in regression), can be obtained through the application of AMOS.

• Test Instrument: Reliability.

Reliability Test is the construct reliability is used to determine the extent to which the internal consistency of the indicators of a construct. Thus, the reliability indicates the degree to which each indicator is able to identify the phenomenon of a construct (latent factor). Construct reliability was assessed by calculating the reliability index of the instrument used (composite reliability) of SEM models are analyzed. Reliability indicators that rank two of the standardized loading of each indicator are analyzed. Limit values are used to assess an acceptable level of reliability is 0.70. According to Ferdinand (2002: 191), the rate of reliability <0.70 is not a measure that is "dead"; that is to say, if the research conducted exploratory nature, the value below 0.70 is acceptable along with the reasons empirical seen in the exploratory process. Ferdinand (2002: 193) gives guidelines for the interpretation of reliability that the reliability value from 0.5 to 0.7, it is quite reliable to justify a research

5.1. Descriptive Analysis

Data analysis with descriptive statistical analysis is Frequency Distribution. Descriptive statistics is used to determine the characteristics of respondents who gave answer to the questionnaires.

5.2. Analystis Model SEM.

Subsequent data analysis, using Structural Equation Modeling(SEM) with the consideration that the test structure causal relationship between variables simultaneously and efficiently (Hair, 1998:167) Causality relationship between variables in this study are as follows this consept.

5.3. Consectual of Model :

Application online game(X), consists of four indicators are: 1) Level ofMastery, 2) Support Internal individual, 3) Availability of Investment, 4) Support external individuals. Social(Y1), consists of five indicators, namely: 1) Interaction with family, 2) Interaction with friends, 3) Wide interest inactivities, 4) rude behavior, 5) Aggressive Behavior. Psychic(Y2), consists of five indicators,namely:1)Mind trouble concentrating, 2) Indifference 3) The attitude of not caring, 4) Attitude closed, 5) Difficulty expressing them selves. Physical(Y3), consists of five indicators, namely: 1) diet, sleep, 2) Health, 3) The pattern oftaking care of yourself, 4) independence, 5) is tired
of doing physical activity. Quality of Individuals(Y4), consists of three indicators, namely: 1) Conduct, 2) knowledge, 3) skill/skill

5.4. Compliance Test Model
- ChiSquare Statistics(X2) : The test is to determine differences in the population covariance matrix and the sample covariance matrix
- RMSEA(Root Mean Square Error of Approximation) : This index is used to compensate for the Chi-Square Goodness off it index Chi-Square Probability CMIN/DF
- GFI(Goodness-of-Fit) : GFI is a non-statistical measure that as a range of values between 0(poor fit) up to 1.0 (perfect fit).
- AGFI(Adjusted Goodness-of-Fit Index) : Fit indices can be adjusted to the degrees of freedom available to test whether a model is accepted (Arbuckle and Ferdinand, 2000:57).
- CMIN/DF : CMIN/DF is an indicator of receipt of acceptable fit between model and data. Desirable criteria ≤ 2.0 (Arbuckle in Ferdinand, 2002:58).
- TLI (Tucker Lewis Index) This index is an alternative incremental fit index which compares a tested model with a baseline model.
- CFI (Comparative Fit Index). This index is not influenced by the size of the amount because it is a very good sample to measure the level of acceptance of models (Hulland et al., Tanakin Ferdinand, 2002:60). The expected criteria is ≥ 0.95.

<table>
<thead>
<tr>
<th>Goodness of fit index</th>
<th>Cut-off-Value is expected small</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square Probability</td>
<td>≥ 0.05</td>
<td>Acceptor if the overall value of cut off value is filled</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>≤ 2.00</td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0.90</td>
<td></td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0.90</td>
<td></td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.95</td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>≥ 0.95</td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤ 0.08</td>
<td></td>
</tr>
</tbody>
</table>


6. Discussion.

The general picture of the respondents who describe the characteristics of the description of the respondents in this research is determined by the following criteria:

6.1. The Gender of Respondents

Judging from sex, 100 respondents obtained results with the data collection of questionnaire male is 42 students (or 42%) and women is 58 students (or 58%). It shows that the composition of respondents views of gender is balanced, it gives a meaning that the gender difference is not differentiate factor in the online game applications.

6.2. Application Web site school
Based on the completed questionnaire of respondents, obtained information that the school which became the location of respondents have a school web site (or 100%), it indicates that the characteristics of the school as a place of education of the respondents has implemented or are already literate internet technology, so it's familiar to the students about the online game. Students already know and understand about online games, this is the guarantee that the respondent can fill out the questionnaire well.

6.3. Supported Hotspot Area.

The results of the questionnaire showed that the role of schools in IT development can be demonstrated by providing the means or facilities eg Hotspot Area. Hotspot area is an area that is free internet access in the school environment. Data description shows that all respondents stated that the school where respondents learning have a hotspot area, or 100% respondents stated that the school has a hotspot area. This shows that the culture of the Internet has been developed and it is closed to the students' lives.

6.4. Internet Access.

Information technology, especially the Internet is not a foreign tool to the world of education. Technology devices are already well known by the teachers, professors and students. Therefore, there are many students who access the internet everyday. The results of this study indicate that as many as 84 students to access the internet at school or at 84% of the total respondents of this study. This suggests that 1) The school has a strong commitment to apply and develop information technology (IT), especially the Internet, 2) the role of the internet in schools cultivate environment so students can easily understand new information. Based on the above description of the respondents characteristic, it can be seen that the respondents are junior high school students who are familiar to the Internet and online games. With the characteristics of the respondents convince the researchers that the respondent can provide objective and correct data because the background is adequate to understand the internet and online game. The data obtained can describe the objective and reliable data.

6.5. Test Instrument Research.

Validity and reliability is a test that is used to test the reliability / accuracy and reliability / consistency of the instruments used, the questionnaire. This test precedes data analysis, after the data is passed the test instrument validity and reliability of the new data can be analyzed either by SEM analysis or econometric analysis such as linear regression.

6.6. Validity

Based on the results of data processing provide information that calculate correlation value indicates a greater number than the value of the correlation table 0.195. This comparison shows that the research instrument used is valid, this means that the instruments in the questionnaire can be used and be able to measure what variables to be studied by researchers.

6.7. Test of Reliability.

<table>
<thead>
<tr>
<th>Table 2. Test of Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Game Application (X1)</td>
</tr>
<tr>
<td>Social (Y1)</td>
</tr>
<tr>
<td>Psychological (Y2)</td>
</tr>
<tr>
<td>Physic(Y3)</td>
</tr>
<tr>
<td>Individu quality (Y4)</td>
</tr>
</tbody>
</table>

Source: Primary data is processed.

6.8. Analysis Model

The first data analysis is to answer the first problem in this research, how correlational model that describes the influence of Online Games on lifestyle and quality of the individual is. In answering these questions researchers use Model Conformance Test (Goodness of Fit Model). Based on the calculation in SEM analysis using AMOS
program, gives the presentation model of SEM in Figure 5.1 below, with the exogenous variables: application online game (X), and endogenous variables: social influence (Y1), the influence of psychic (Y2), a physical effect (Y3) and Quality of Individuals (Y4).

![Figure 1](image.png)

**Figure 1. The results of SEM analysis on Research Model.**

SEM models produce values suitability model (goodness of fit/GOF) are presented in Table 2. Further more, the values of this index compared with the critical value (cut-off value) is recommended for each index. A good model is expected to have the Goodness of Fit indices in accordance with the recommended cut-off. The results of the index values are presented in Table 3. below:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Result (goodness of fit)</th>
<th>Critical value (cut-off value)</th>
<th>Model Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>487.309</td>
<td>The smallest</td>
<td>Not fulfilled</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000</td>
<td>≥ 0.05</td>
<td>Not fulfilled</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.076</td>
<td>≤ 0.08</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>0.928</td>
<td>≥ 0.90</td>
<td>Good</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.911</td>
<td>≥ 0.90</td>
<td>Good</td>
</tr>
<tr>
<td>TLI</td>
<td>0.922</td>
<td>≥ 0.90</td>
<td>Good</td>
</tr>
<tr>
<td>CFI</td>
<td>0.937</td>
<td>≥ 0.90</td>
<td>Good</td>
</tr>
</tbody>
</table>

Source: Primary data is processed.

Based on the presentation in table 3 shows that the value of the index Goodness of Fit statistics produced has met the critical value (cut-off value) is recommended. Diminishing the value Chi_square count when compared with the value Chi_Square table ($\alpha = 5\%$; df$=74$) of 487.309 showed better results for models built SEM. Evaluation of structural equation model for the endogenous variables refer to the views Hair (2006) and Arbuckle and Wothke (1995) who state that the model is expressed either if one or two criteria Goodness of Fit statistics meet the cut-off required. Thus the model equations for the endogenous variables can be declared to have form eduni dimensional it as endogenous (exogenous unidimensionality) well. This equation models with endogenous variables of the pattern of life and quality of the individual can be accepted as an analytical tool to determine the symptoms as a result of exogenous variables that online game applications.

Ghozali (2006; 19) states that "in this study should seek chi-square value is not significant because it expects that the proposed model is suitable or fit to the observed data". The results of SEM models the probability value of $p = 0.00$ is smaller than 0.05, which indicates significant. Comparison of the probability value is followed by the meeting of the SEM index value indicates that there is no difference between models with observational data. Thus SEM models accepted as an analytical tool to predict the causal relationship between the study variables. Based on these test results can be analyzed with SEM model was done in two steps (two-step modeling approach) are:
6.9. Measurement Model.
Measurement models which analyze the effects of online game applications on the pattern of individual life (social, psychological, physical) and the quality of the individual by using indicators that make up the pieces of exogenous constructs (online game application) and two endogenous constructs (the pattern and quality of life of individuals) looks on the table below.

Tabel 4. Confirmatory test results Model

<table>
<thead>
<tr>
<th>Construct</th>
<th>item</th>
<th>Strd Regr Weight (Factor loading)</th>
<th>α 5%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game Application</td>
<td>X1</td>
<td>0.732</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>1.019</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>0.756</td>
<td>0.06</td>
<td>not sign</td>
</tr>
<tr>
<td></td>
<td>X4</td>
<td>1.000</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td>Life Pattern: Social (Y1)</td>
<td>Y11</td>
<td>1.000</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y12</td>
<td>1.193</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y13</td>
<td>0.634</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y14</td>
<td>0.434</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y15</td>
<td>0.496</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td>Life Pattern: Psychological (Y2)</td>
<td>Y21</td>
<td>1.000</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y22</td>
<td>1.545</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y23</td>
<td>1.626</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y24</td>
<td>1.190</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td>Life Pattern: Physical (Y3)</td>
<td>Y31</td>
<td>1.000</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y32</td>
<td>1.021</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y33</td>
<td>1.836</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y34</td>
<td>0.952</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td>Individual Quality (Y4)</td>
<td>Y41</td>
<td>0.435</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y42</td>
<td>0.657</td>
<td>0.00</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td>Y43</td>
<td>1.000</td>
<td>0.00</td>
<td>sign</td>
</tr>
</tbody>
</table>

Source: Primary data is processed

From table 4 it is seen that the test results Confirmatory factor find value factor loading is greater than 0.5 in all latent variables, this suggests that these indicators can explain unidimensional latent variable. Strength in latent form can be proved with probability < 0.05 means that a significant indicator as the dimension of the latent variables are formed. In the results of the confirmatory test the modelin table 4 above, there are several indicator(X3) are invalid, the Fit models in the drop indicator must meet the criteria in order to obtain and Goodness of Fit model. This can becaused by instrument of questions preparedin the questionnaire do not givea proper understanding of the variables studied, So that require ordering the questions in the questionnaire. The second stage to answer these condand third problem is the influence of online games to lifestyle and quality of the individual, the discussion is based on the structural equation model fit. However, before discussing about a structural equationes tablished, first performed an analysis of the factor loading of each variable, either endogenous latent variables or exogenous latent. Based on Table 4 above, the value of the factor loading for each indicator research is:

- Factor loadings explain the variable application online game. Based on the loading factor mentioned above can be seen that indicators of internal support individual has the highest value of the estimated coefficients, so that it can provide insight that online game application is due to the influence of individual internal form of motivation and interest to play the game.

- Factor loadings of the variables explain individual patterns consisting Social(Y1) as follows: Based on the loading factor mentioned above can be seen that social indicators in the form of interaction with friends is the highest social impact of online games for which application has the highest value of the estimated coefficients, so that it can provide insight that most online game applications influence the way people live in social life of individuals to interact with friends.

- Factor loadings explain variable patterns of individuals who comprise Psychological (Y2) as follows: Based on the loading factor mentioned above can be seen that the indicators in the form of psychic indifference is the highest psychological impact of online games because the application has a value of coefficient the highest
estimation so that it can provide insight that most online game applications influence the way people live in a psych in the form of an attitude that does not matter.

- Factor loadings explain variable patterns of individuals who comprise Physical (Y3) as follows: Based on the loading factor mentioned above can be seen that the physical indicators in the form of patterns of care of the self is the highest physical impact of online games for which application has the highest value of the estimated coefficients, so that it can provide the understanding that the application online games the most influence on the pattern of individual life in the physical care of the individual in the pattern of self.

- Factor loadings explain the variable quality of the individual. Based on the loading factor mentioned above can be seen that the indicator is the ability level of the highest impact of online games for which application has the highest value of the estimated coefficients, so that it can provide the understanding that the application of the most influential games of the level of skill or ability of individuals kill in doing something.

Based on the above equation it can be seen that the shape of the structural equation which describes the effect of exogenous to endogenous variables areas follows:

The pattern of life = f(online game applications)
Individual quality = f(application online games, lifestyle)

Furthermore, to calculate the structural equations that describe the effect of each variable can be explained in Table 4. below.

<table>
<thead>
<tr>
<th>No</th>
<th>Endogenous Variables</th>
<th>Exogenous Variables</th>
<th>Coeff Prob unstandized</th>
<th>α</th>
<th>Descript</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Individual pattern:</td>
<td>Game application</td>
<td>0.047 &lt; 0.05 S</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social (Y1)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual pattern:</td>
<td>Game application</td>
<td>0.022 &lt; 0.05 S</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychological (Y2)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual pattern:</td>
<td>Game application</td>
<td>0.396 &gt; 0.05 TS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical (Y3)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Individual Quality</td>
<td>Game application</td>
<td>0.393 &gt; 0.05 TS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Y4)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual pattern:</td>
<td></td>
<td>0.001 &lt; 0.05 S</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social (Y1)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual pattern:</td>
<td></td>
<td>0.477 &gt; 0.05 TS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychological (Y2)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual pattern:</td>
<td></td>
<td>0.000 &lt; 0.05 S</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical (Y3)</td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources : primary data processed.
Description: TS(not significant), S(Significant).

From table 5 above, it can be arranged from the structural equation model of the study as follows:

- The pattern of life(social) = 0.047 x application Game Online*
- The pattern of life(Psychic) =0.068 x application Game Online*
- The pattern of life(physical) =0.044x apps Games Online
- Individual Quality=-0.067+0.491Applications Games Sosial*-0,137PsychicPhysical+0.743*

Based on the equation above, the conclusion that can be derived from the results that are:

- Applications online games have a positive influence on the pattern of individual life which includes patterns of social life, psychological and physical
- Applications online game has a negative influence on quality of life of individuals, this means that the increased application of online games will decrease the quality of the individual
- The pattern of social life has a positive influence on the quality of life of individuals, this means that the pattern of increased social life will improve also the quality of the individual.
• The pattern of mental life has a negative effect on the quality of life of individuals, this means that the pattern of increased mental life will degrade the quality of the individual.

• The pattern of physical life has a positive influence on the quality of life of individuals, this means that the pattern of life increased physical and also improve the quality of the individual.

• The pattern of life physically have the greatest influence on the quality of individual.

6.10. Hypothesis Test

Hypothesis test research study conducted by comparing the value of CR or (t) is generated for each latent variable with value table \( \alpha / 2, \text{df} = 258 \) of 1.968. Or compare the significance probability value of \( t \) for each latent variable with a significance level \( \alpha \) of 0.05. If the values obtained \( CR > t \) table or probability value CR <0.05 indicates a significant effect of independent variables on the dependent variables tested. Here is a hypothesis to be tested in this study are:

H1: It was alleged that the use of online game applications Significant influence on the pattern of the individual

H2: It was alleged that the use of online game applications a significant effect on the quality of individual

• Test Hypothesis 1

Hypothesis one stated alleged that the use of online game applications significantly affect the life style of the individual. Results of test analysis for each variable such research in the following table here:

**Table 6. Hypothesis testing results first.**

<table>
<thead>
<tr>
<th>Casuality Relationship</th>
<th>Prob. CR</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>0.047</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Psychological</td>
<td>0.022</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Physical</td>
<td>0.396</td>
<td>&gt; 0.05</td>
</tr>
</tbody>
</table>

Source: Primary data processed 2013.

The table above shows the online game application variables significantly influence lifestyle CR is indicated with a probability value of 0.000 is smaller than the level of \( \alpha (0.05) \), the presence of these results, the first hypothesis is accepted.

• Test Hypothesis 2

Hypothesis is two stated application online game significantly affect the quality of the individual. Results of test analysis for each variable as in Table research is:

**Table 7. The results of the second hypothesis test.**

<table>
<thead>
<tr>
<th>Casuality Relationship</th>
<th>Prob. CR</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game Application</td>
<td>0.392</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Pattern: Social</td>
<td>0.001</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Pattern: Psychological</td>
<td>0.477</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Pattern: Physical</td>
<td>0.000</td>
<td>&lt; 0.05</td>
</tr>
</tbody>
</table>

Source: Primary data processed.

Table above shows the online game application variables are not significant effect on the quality of individual CR is indicated with a probability value of 0.000 is greater than the level of \( \alpha (0.05) \). Psychic life style variables are not significant effect on the quality of individual indicated with a probability value of 0.000 CR greater than the level of \( \alpha (0.05) \). Given these results. The second hypothesis is not accepted.

6.11. Direct Impact and not direct impact.
Causal relationship between the study variables either relationship variable exogenous, endogenous and mediating variables have a direct impact and indirect and total effects. Figure 7 below describes the existing and the influence between latent variables studied.

![Diagram showing causal relationship between variables](image)

**Picture 2.**
The relationship among variables
Specification:
- ------ = Not significant
- _____ = Significant effect

The comparison figures which show the influence of direct, indirect and total effect appears in the image above. In Figure 2 above shows the results of the direct influence of online game applications on individual quality is 0.067, while the effect of indirect application online game of 0.047 x 0.174 = 0.008, indicates that the direct effects greater than the indirect effect, means that the game application online gives a greater influence on the quality of the individual.

### 7. Conclusion

Based on the results of discussion above, then obtained some conclusions as follows:

- Application of online game has a positive influence on the pattern of life in the form of social behavior, behavioral psychological and physical behavior. This means that if the rise of online game applications (Online Game increased frequency of play), it will lead to an increase in negative life patterns in the individual.
- Application of online games has a positive effect but not significant to the quality of the individual. This means that if an application online games increased (increased frequency of online gaming), it will cause an increase in the quality of the individual in the form of behavior, knowledge and skills.
- The pattern of life of individuals in the form of social behavior, behavioral and psychological physical behavior affects the quality of the individual. This means that if an individual life style changes that will give the changes also to the quality of the individual in the form of behavior, knowledge and skills.
- The application of online games give effect to the pattern of life (social behavior, psychological and physical) of individuals and the impact on the quality of individual (behavior, knowledge, skills).

### 8. Implication

Descriptive analysis, showed in general that online game application is no new thing among students because of the support of the schools that provide internet infrastructure where students can access the internet easily without limits. Students have no trouble and access the internet and play with online games. Schools need to improve the quality and quantity of the Internet infrastructure.

Applications online game has a positive and significant effect on the pattern of social life. This means that if an application online games increased (frequency more and more students play online games), it will lead to an increase in social behavior in the form of interaction with family, friends, rude behavior, aggressive behavior, interests. Frequency applications online game turns to bring a negative influence on social behavior of students.

The application of online games need for better oversight of school because online games can give a negative impact.

These results indicate that online game applications has a negative and significant effect on the pattern of life in the form of a psychic. This means that if an application online games increased (frequency more and more students play online games), it will cause an increase in the form of psychological behavior that is difficult to concentrate the mind, indifference and closed stance. Applications online games increased it brings a negative influence on a psychic behavior. The application of online games need for better oversight of school because online games can give a negative impact.

These results indicate that online game applications has a positive influence and not yet significant effect on the physical form of life style. This means that if an application online games increased (frequency more and more
students play online games), it will cause an increase in physical behavior such as seating and sleeping patterns, health, pattern of taking care of yourself and get tired easily perform activities physical activity. Increased application online game turns to carry negative influence on the behavior of a physic. The application of online games need for better oversight of school because can give a negative impact.

Online game applications has a positive effect but not significant to the quality of the individual. This means that if an application online games increased (frequency more and more students play online games), it will cause an increase in the quality of the individual in the form of behavior, knowledge and skills. Applications online game turns out to influence the behavior, knowledge and skills. The application of online games must be managed properly because give also good impact.

Overall result of this study stated that online game applications give and effect to the pattern of life (social behavior, psychological and physical) of individuals and the impact on the quality of individuals (behaviors, knowledge, skills). The application of online games need to be directed at the quality of education that leads to the individual.

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