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# Smartphone Usage and the Effect on Sexual Behavior Deviations of Adolescent in Malang City

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### ABSTRACT

Smartphones have become integral part of most people lives, including teenagers. Nevertheless, like a double-edged sword, positive effect is also coupled with negative effect of smartphone. Therefore, this study aims to examine the effect ease to access to porn sites, control of parents and teachers, peer milieu and religious activity affects on sexual deviation behavior of adolescent. This study novelty is to deliver a comprehensive model the effect of ease to access to porn sites, control of parents and teachers, peer milieu and religious activity affects on sexual deviation behavior of adolescent. The uniqueness of this study is to enter parental and teacher control and religious activities as a tool to guide the Smartphone usage to give positive impact to adolescent. Research results show that ease to access porn site and lack of proper peer milieu can increase sexual deviation behavior of adolescent for the desire to try to do what is seen on porn sites or channeling their sexual desires by masturbating. In addition, control of parents and teachers and religious activities can control and reduce the level of sexual deviation behavior of adolescent.

### INTRODUCTION

Smartphones have become integral part of most people lives, including teenagers. Adolescent cannot live perfectly without Smartphone (Choi *et al.*, 2016). The positive effect is the smartphone encourage adolescent to learn more about information technology to improve the fabric of friendship, be a tool to discuss subjects with peers or teachers. Nevertheless, like a double-edged sword, positive effect is also coupled with negative effect such as adolescent forget to time and study, do not care about the environment and make the Smartphone to do negative things such as cheating, dating, or go to forbidden sites. One forbidden site that many teenagers enter is porn sites (Strassberg, 2015).

Pornography is a disease that existed since ancient times. Pornography is a disease that is difficult to be destroyed. The effects of pornography are also difficult to control. A lot of news delivered on how adolescent has deviant sexual behavior as a result of pornography (Fama and Safak, 2016). Lots of adolescent is now doing premarital sex, even some of girls are trapped into prostitution as a result of pornography. A result of prostitution was used to buy a Smartphone which is then used to view porn sites. This condition requires a serious attention of all elements, from, parents, teachers, community, religious leaders or the government.

The sophistication of Smartphone is getting easier for teenagers to get into a porn site (Cardamakis *et al.*, 1993). All sites can be entered easily just by using his finger. Moreover, coupled with facility of 3G and 4G today, then these conditions make more and more teenagers are free to enter any desired sites.

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This condition is exacerbated by a lack of control of parents and teachers on Smartphone usage. Lots of parents and teachers cannot understand the Smartphone well. Many parents and teachers even do not know how to operate a Smartphone and blind to information technology such as the internet, WIFI and so forth (Aydin *et al.*, 2011). Coupled with advanced facilities to lock the Smartphone, this makes increasingly difficult the adolescent Smartphone accessible to parents because they have protected with a password. Parents can only see their children playing Smartphone without being able to do much to control it.

The existence of Smartphone also makes it easier for adolescent to hang out with their friends. It's common that something negative is easier and faster to deploy than with something positive. Right and good environment bring teenagers to positive activities. Conversely, wrong environment would plunge adolescent to negative deeds. Adolescent need to be directed and controlled to use their Smartphone. One way to do is to instill religious values into them. Religion can be a brake for them to filter out which ones are good and which are bad. Religion will be able to prevent adolescent to commit acts prohibited and directs their behavior on positive actions.

There is a lot of research done by linking the Smartphone usage, tendency of teenagers to use the Smartphone to negative things and how parents and religion play a role as a control and a brake on teenage action. Miller (2015) showed that Smartphone make adolescent interested in performing negative actions. It's written by that facility increasingly sophisticated Smartphone coupled with 3G technology available today, makes adolescents more easily access a forbidden site.

The control exercised by parents and teachers are also less maximum. The inability of parents and teachers to understand well the existing Smartphone technology is currently a major barrier for them to control their Smartphone usage. In addition, facilities are increasingly sophisticated, Smartphone passwords make it difficult for parents to check their children Smartphone without knowing how the password to get into Smartphone. Therefore, religion is needed to guide the behavior of teenagers to the Smartphone in a positive direction (Wu *et al.*, 2014).

The above studies shows that ease to access to porn sites, control of parents and teachers, peer milieu and religious activity affects on sexual deviation behavior of adolescent. However, until now, there has been no comprehensive research addresses all of these variables in a study. Therefore, this study aims to examine the effect ease to access to porn sites, control of parents and teachers, peer milieu and religious activity affects on sexual deviation behavior of adolescent. This study novelty is to deliver a comprehensive model the effect of ease to access to porn sites, control of parents and teachers, peer milieu and religious activity affects on sexual deviation behavior of adolescent. The uniqueness of this study is to enter parental and teacher control and religious activities as a tool to guide the Smartphone usage to give positive impact to adolescent.

### ***Theoretical and Development Hypothesis:***

#### ***Smartphone:***

Smartphone is a mobile phone or cell phone with sophisticated operating systems which combine the features of a computer operating system with other useful features for mobile usage. Smartphones usually have size bags of clothes to incorporate mobile phone features such as the ability to receive and call. Smartphone also has the ability to send and receive messages. In addition, there is the capability of a Smartphone is to enter the computer. Most Smartphone have the ability to access the internet and can be fitted with a various application programs, good games, office applications, navigation and so on. (Nusca, 2009)

Frank Canova is the first people to incorporate features of a PDA (personal digital assistance) on mobile phone. IBM in 1992 also put other applications such as maps, reports and news. Simon Products made by IBM was the first Smartphone devices that are sold commercially (Sagar, 2012). Simon Smartphone has the ability to receive phone calls, SMS and also send faxes and e-mails. However, name of its own Smartphone to fame since the beginning of 1995.

The Smartphone usage is widely pioneered by Japanese company NTT DoCoMo. The company sells its Smartphone equipped with a data transmission speed of up to 9.6 kbit/s. The launch of Smartphone is able to achieve sales of 40 million by end of 2001. Until 2012, already more than one billion Smartphone sold worldwide.

Smartphone technology continues to grow rapidly. Nowadays Smartphone already have the same abilities as the computer. Data transmission technology is developing rapidly with launch of 4G which has a data transmission capabilities to 72 Mbps. The data transmission capability allows the Smartphone to use video streaming without any obstacles, make video calls or watching a movie on youtube.com smoothly. Of course it eases to access any site on Internet.

#### ***Teenagers and factors effecting sexual behavior:***

Teenagers are the human growth process towards maturity (Hurlock 1999). Meanwhile, according to WHO, teen age limit is 12 to 24 years. Adolescent is a period in which there is a development of dependence on parents

become increasingly more independent. Signs that most determine a child enter into adolescent is after the occurrence of puberty.

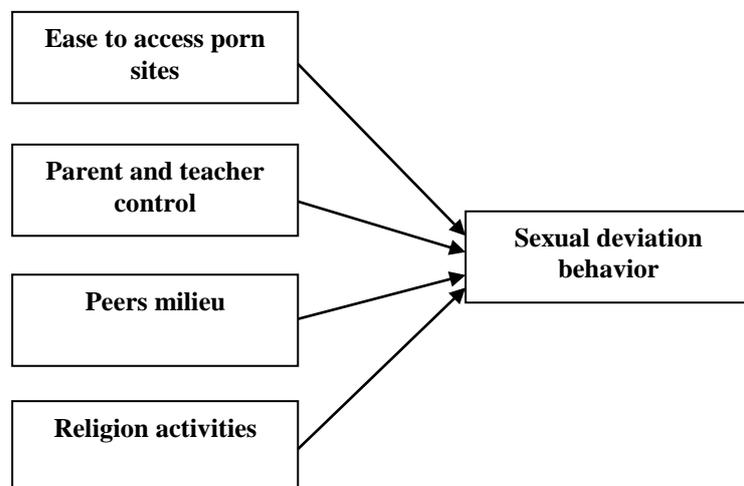
Adolescent is a period in which began to exhibit behavior driven by sexual desire to opposite sex (Sarwono, 2002: 140). This happens because the adolescent enters to the period of sexual development. Sex gland development gives sexual drive in adolescents. At this time the adolescent are starting to show their sexual activity. Sexual behavior is often shown by young people by various means. Masturbation is a way of doing stimulus pursuant to insert the genitals for purpose of achieving an orgasm. Adolescent sexual fantasy is an attempt to do the stimulation myself by imagining something exciting object. Reading books, viewing photos and movies porn is the way to satisfy the curiosity of sexual. Adolescent today fulfill their sexual curiosity in various ways, among which is to look at sex sites or hang out among friends. Peer milieu has very high effect because this friend bonding can replace family ties. Friends can become a source of affection, sympathy, understanding, and sharing experiences. Friends also are place for adolescent to achieve self-reliance and independence.

Activities of adolescent in seeking knowledge about sex can be carried on wrong path. Therefore, control of parents and teachers as well as religious activities that support is needed. Organizations play an important role in shaping the psyche and behavior of adolescent. Parents who able to provide an understanding of proper sexual behavior to adolescent tend to control their sexual behavior in accordance with understanding given by parents. This happens because the sex education can best be provided by parents how to live as husband and wife are united in matrimony (Sarwono 2011).

Religion is rules and obligations that must be done in relation to God, fellow human beings and universe. Rinker *et al.* (2016) describes the religious feelings as inner feelings in relation to God. Religious activities are activities undertaken in relation between man and God, man and other human beings and human beings with universe. The higher the value of religion owned by adolescents it will make adolescent behavior becomes increasingly directed. This will bring teenagers on sexual behavior in accordance with demands of religion and can avoid the behavior of sexual perversion.

#### **Research model and hypothesis development:**

Based on introduction and above theory, this research model can be presented in figure 1 below.



**Fig. 1:** The research model

Based on research model it can be arranged hypothesis as follows:

H1. Ease to access porn sites, control of parents and teachers, peer milieu and religious activities simultaneously affect on the sexual deviation behavior of adolescent

H2. Ease to access porn sites, control of parents and teachers, peer milieu and religious activities partially affect on the sexual deviation behavior of adolescent

#### **Research Methods:**

This is an explanatory research to explain relationship between the studied variables. Explanatory research is used because the purpose of this study to look at relationship between the independent variables and dependent variable. This study population is all adolescents in Malang City. Samples selection is determined using purposive random sampling method. The criteria used are the teenagers are studying, a good junior high school, high school or college.

Data were collected using a questionnaire, measured using a five-point Likert scale, ranging from 1 (strongly disagree) to agree to 5 (strongly disagree). Ease to access to porn sites and peer milieu are something secret for teenagers. Therefore, researchers used a questionnaire with score reversed. That is, in contrast to a question on control of teacher/parent and religious activity, score of ease to access porn sites and peer milieu were reversed, if the score 1 then changed to 5, and 2 converted to 4, and vice versa.

From 100 questionnaires distributed, all are returned to researcher. This occurs because researchers spread the questionnaire directly to adolescent. They immediately complete and return the questionnaire to researcher. From 100 questionnaires, there are 70 with complete answer, while the remaining 30 are incomplete. This occurs because the respondents immediately fill so there are some parts that passed. Qualified data further analyzed by SPSS version 22.

## RESULTS AND DISCUSSION

### Testing the research instrument:

This study will examine the effect of independent variables of ease to access to porn sites, control of parents and teachers, peer milieu and religious activity on sexual deviation behavior of adolescent. Prior to multiple regression analysis with SPSS version 22, it is first tested the research instruments to determine the validity and reliability of questionnaire used. From the test results is known that all the data is valid for all the significant value are smaller than the cutoff 0.05 (Sekaran, 2003). Reliability testing showed that Cronbach alpha has a value greater than 0.6. It meets the criteria for validity of data and can do multiple regression analysis (Nunally, 1978). Testing with multiple regression analysis must meet the classical assumptions. Below is a classic assumption test results.

### Classic assumption testing:

Multicolinierity test aims to test whether the regression model has a correlation between independent variables in regression equation. A good regression model should not has correlation between independent variables. By looking Variance Inflation Factor (VIF), if  $VIF > 10$  then it indicates multicolinierity and if  $VIF < 10$  then there is no multikolinieritas. Table 1 shows the test results.

**Table 1:** VIF test results

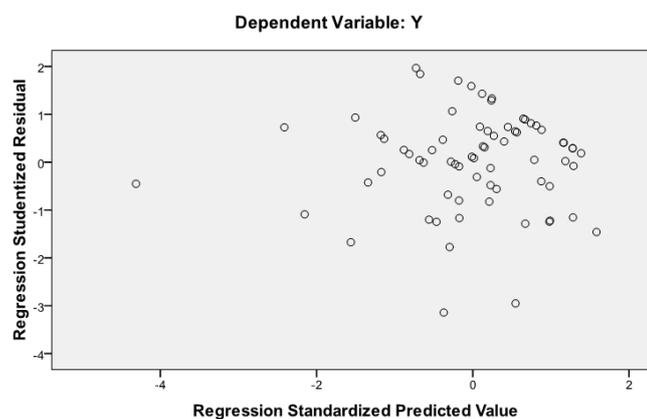
Variables	VIF value	Description
X1. Ease to access the porn sites	1.128	There is no multicollinearity
X2 Control of parent and teacher	1.263	There is no multicollinearity
X3. Peer milieu	1.168	There is no multicollinearity
X4. Religious activities	1.156	There is no multicollinearity

Sources: Primary data processed, 2016

Calculation results in table above shows that each of independent variables has VIF lower than 10. It means there is no multicollinearity problem (Sekaran, 2003).

Heteroskedasticity is a condition in which there are inequality variants from residuals of observations to other observations. If there is variance of observations to other observations, then it shows homoescdasticity. But if there is a different variant, it is called heteroscedasticity. The data does not have heteroscedasticity if the dots on graph show the heteroscedasticity pattern spread above and below 0. The analysis using SPSS 22 shows the results below.

### Scatterplot



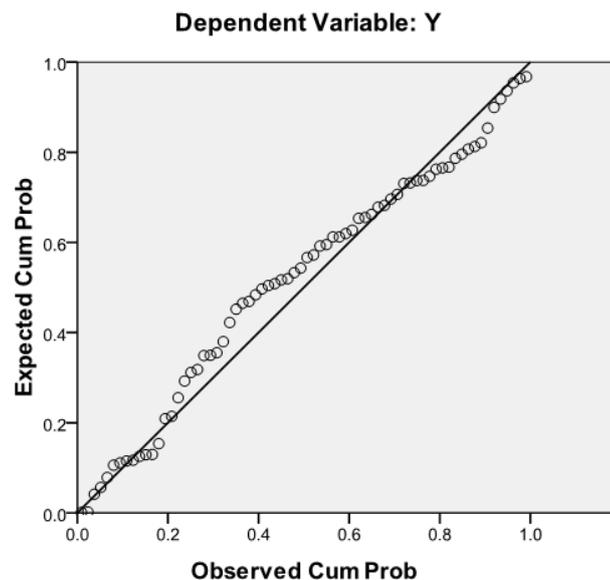
**Fig. 2:** Heteroscedasticity test result

Above graph shows that the points spread above and below zero and does not form a specific pattern. Therefore, it can be said that data does not heteroscedasticity so that further analysis can be done (Sekaran, 2003).

The purpose of normality test is to test whether a regression model has normal data distribution. A good regression model should has normal data distribution. If no data is located away from the distribution of data, data is said not normal), the explanation is as follows:

- If the data is spread around the diagonal line and follow the direction of diagonal line, regression model meet the assumption of normality.
- If the data is spread far from the diagonal line and did not follow directions or diagonal line, regression model did not meet the assumption of normality.

#### Normal P-P Plot of Regression Standardized Residual



**Fig. 3:** Normality Test

Figure 3 above shows that normality assumption has been met; distribution of data has a straight-line pattern around a diagonal line (Sekaran, 2003).

#### **Regression Analysis:**

Multiple regression analysis is used to analyze the effect of ease to access to porn sites, control of parents and teachers, peer milieu and religious activity on sexual deviation behavior of adolescent. The results of analysis are presented in following table.

**Table 2:** Results of Multiple Regression Analysis

Variables	Beta	T	p-value	Description
X1. Ease to access the porn sites	.137	1.456	.150	Positive but insignificant
X2. Control of parent and teacher	.252	2.532	.014	Positive and significant
X3. Peer milieu	.150	1.569	.121	Positive but insignificant
X4. Religious activities	.449	4.725	.000	Positive and significant
Constant = 1.591				
Coefficient Determinasi ( $R^2$ ) = 0,491 or 49,1%				
F-count = 15,692				
P-value =0.000				

Sources: Primary data processed, 2016

From the table above, it can be obtained the regression equation:

$$Y = 1.591 + 0.137 X1 + 0.252 X2 + 0.150 X3 + 0.449 X4$$

The above table describes the effect of Ease to access porn sites, control of parents and teachers, peer milieu and religious activities on sexual deviation behavior of adolescent. F value is 15.592 with a significance level of 0.000, and coefficient of determination ( $R^2$ ) of 0.491 or 49.1%. The results of this test explains that Ease to access porn sites, control of parents and teachers, peer milieu and and religious activities simultaneously have

significant effect on on sexual deviation behavior of adolescent at 15.69%, while the remaining 84.31% is affected by other variables not examined in this study.

### **Testing Hypotheses H1:**

Hypothesis H1 states that simultaneously Ease to access porn sites, control of parents and teachers, peer milieu and religious activities simultaneously have a significant effect on sexual deviation behavior of adolescent. F-test results on F value of 15.692 (p-value = 0.000) have shown that that simultaneously Ease to access porn sites, control of parents and teachers, peer milieu and religious activities simultaneously has a significant effect on sexual deviation behavior of adolescent. This means that hypothesis 1 is accepted.

### **Testing the hypothesis H2:**

Partial effect of Ease to access porn sites, control of parents and teachers, peer milieu and religious activities on sexual deviation behavior of adolescent is tested by t-test. T-test results for regression coefficients of control of parents and teachers and religious activities partially have significant effect on sexual deviation behavior of adolescent. Variable Ease to access porn sites(X1) with a regression coefficient of 0.137 has positive and insignificant effect on sexual deviation behavior of adolescent. It is evident from the p-value = 0.137 greater than  $\alpha = 0.05$ . Because reverse score, the interpretation of these results is sexual deviation behavior of adolescent can be explained or effected by Easy access to porn sites. This means that higher the ease to access to porn sites, higher the level of sexual deviation behavior of adolescent. These results are consistent with research conducted by (Choi, 2016) that ease to access porn sites affect to increase sexual deviation behavior of adolescent.

Control of parents and teachers (X2) with a regression coefficient of 0.252 has positive and significant effect on sexual deviation behavior of adolescent. It is evident from the p-value = 0.000, which is smaller than  $\alpha = 0.05$ . Because of reverse scoring, these results explain that deviation behavior of adolescent can be explained or affected by control of parents and teachers. This means that higher the control of parents and teachers can decrease the level of sexual deviation behavior of adolescent. These results are consistent with research conducted by (Wu *et al.*, 2014) that control of parents and teachers are getting better has a great effect to curb the sexual deviation behavior of adolescent.

Peer milieu (X3) with a regression coefficient of 0.150 has insignificant effect on sexual deviation behavior of adolescent. It is evident from the p-value = 0.121 greater than  $\alpha = 0.05$ . These results explain that sexual deviation behavior of adolescent can be explained or affected by social environment. Because it uses a reverse score the interpretation of these results is that sexual deviation behavior of adolescent can positively be explained or affected by Easy access to porn sites. This means that higher Easy access to porn sites can increase the level of sexual deviation behavior of adolescent. These results are consistent with research conducted by (Aydin *et al.*, 2011) that peer milieu has effect to increase sexual deviation behavior of adolescent.

Religious activities (X4) with a regression coefficient of 0.449 have significant effect on sexual deviation behavior of adolescent. It is evident from the p-value = 0.000, which is smaller than  $\alpha = 0.05$ . This results explain that sexual deviation behavior of adolescent can be explained or affected by religious activity. Because it uses a reverse score, the interpretation of these result is the sexual deviation behavior of adolescent negatively affected by religious activity. This means that higher the religious activities can decrease the level of sexual deviation behavior of adolescent. These results are consistent with research conducted by (Fatma and Safak, 2016) that higher religious activity has effect to curb the sexual deviation behavior of adolescent.

Based on above test results it can be seen that independent variable X2 and X4 have a significant effect to curb the sexual deviation behavior of adolescent. Therefore, it can be said that second hypothesis is accepted in part.

### **Conclusions and Recommendations:**

Sexual deviation behavior of adolescent is affected by ease to access to porn sites, control of parents and teachers, peer milieu and religious activity. The results showed that ease to access porn site and lack of proper peer milieu can increase sexual deviation behavior of adolescent for the desire to try to do what is seen on porn sites or channeling their sexual desires by masturbating.

Sexual deviation behavior of adolescent also affected the control of parents and teachers and religious activity. In contrast to the effect of ease to access porn site and lack of peer milieu, control of parents and teachers and religious activities can control and reduce the level of sexual deviation behavior of adolescent. Seeing these results, it is advisable for parents and teachers to increase their control to Smartphone usage by teenagers. In addition, religious activities should be improved to serve as a brake that suppresses adolescent Smartphone usage to get into porn sites so as to suppress the sexual deviation behavior of adolescent.

Further recommendations are for BKKBN (Institution for Population and National Family Planning) in general, and BKR (Adolescent Family Coaching) as an society institution at subdistrict level with the member of family with their adolescent. BKKBN has vision to become reliable institution and trusted to manifest the

balance population growth and high quality family. They should implement the care by concern to technology development that more advances. BKR should interfere with the skill about technology in order can to control information accessed by adolescent. Therefore, it should to decrease the negative effect of smartphone to avoid the adolescent from evil (raping, free sex, narcotic abuse or alcohol, drop out and others). Indonesian adolescent should become a way to create high quality adolescent to compete with other country.

Lastly, this study has some limitation that needs to be corrected in future research. First, sample size is not separated by level of education so that more specific results cannot be obtained for each level of education. Future research should be done by separating samples based on level of education. In addition, the independent variables were included in study only 4 that only explain effect on dependent variable of 15.69 per cent and the rest is explained by other variables outside the studied variables. Therefore, future studies should include other variables related to sexual deviation behavior of adolescent.

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