

# Comparing the Effects of TPB-Based Lecture Method and Discussion Method on Knowledge and Attitude toward Pornography

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**Abstract** The purpose of this study was to determine the effectiveness of the TPB (Theory of Planned Behavior) based lecture method and the discussion method in improving the knowledge and negative attitudes of elementary school students regarding pornography. This study was a comparative quantitative with a quasi experimental design. This study carried out in Sondakan State Elementary School (SSES) which is located on Sondakan, Surakarta City, Indonesia. The subjects of this study were sixth grade students of SSES (n = 56). The students were divided into two classes. Experiment Class 1 with 26 students, and Experiment Class 2 with 30 students. Based on the data analysis and discussion, the following conclusions can be drawn; (1) TPB-based lecture is more effective than discussion method in increasing knowledge related to pornography of sixth grade students (2) TPB-based lecture is more effective than discussion method in increasing negative attitudes related to pornography of sixth grade students. Theoretical and practical implications of this study are; (1) TPB-based lecture method can provide alternative solution in increasing sixth grade students' understanding of the dangers of pornography. (2) TPB-based lecture method is more recommended than discussion method for children and early adolescents.

**Keywords:** attitude, education, elementary school, discussion method, knowledge, pornography, planned behaviour

## I. INTRODUCTION

Early adolescence is the time of puberty, which is the maturity of the structure of the body (pre puberty). This phase occurs in the last one to two years of childhood. Prepubertal is continued with puberty phase and post-puberty phase. Pre-puberty is experienced for approximately three years until the reproductive organs are fully mature (Hurlock 1980).

The process is accompanied by the emergence of several problems for adolescents such as promiscuity. Starting from the uncontrolled interacting with opposite sex, to the accessing pornographic content.

Accessing pornography by adolescents is not a new case around the world including Indonesia. This problem has a very significant impact on the moral and mental decline of adolescents. However, this phenomenon is seen as casuistic cases that do not need to be discussed further (Syuderajat 2017). The number of internet users in Indonesia is always increase including early adolescents. This allows increasing of Indonesian early adolescents to access pornographic contents.

A survey conducted by the National Commission for Child Protection (KPAI) of Indonesia in 2010 revealed that 97% of adolescents had watched pornography contents, 93% claimed to have kissed, 62.7% had intercourse and 21% of adolescents had an abortion (Suyatno 2011). From the data, it can be seen that almost all adolescents in Indonesia have watched pornographic content. This incident often escapes the attention of parents so adolescents are easily indoctrinated by their delusions about sex.

The spread of pornography is not only on the internet media but also through television and printed media. They show striking body parts to make the audience (including early adolescents) interested. This was taken seriously in research on pornography in advertisements. The form of advertisements published in printed media and television is unclear between pornography or art (Syuderajat 2017).

Studies related to the prevention of pornography addiction are still very limited (Madigan et al. 2018). There are also several literature review in the form of an action to cure pornography addiction (Rodda et al. 2018). Based on the description of previous studies, many studies are still needed in relation to the prevention of pornography addiction moreover in elementary schoolers.

Discussion method and Lecture method which are very popular among elementary school teachers, deserve to be examined for their role in prevention. The Theory of Planned behavior or TPB (Ajzen 1985), also important for further study. Based on this background, the objectives of this study were (1) Reveal the effectiveness of TPB-based lecture method in improving the knowledge and attitudes of students regarding pornography; (2) Reveal the effectiveness of the discussion method in increasing the knowledge and attitudes of students regarding pornography.

The authors propose two hypotheses, namely:

Hypothesis 1

H<sub>0</sub> : TPB-based lecture method is not more effective in improving knowledge related to pornography compared to the discussion method in sixth grade students.

H1 : TPB-based lecture method is more effective in improving knowledge related to pornography compared to the discussion method in sixth grade students.

#### Hypothesis 2

H0 : TPB-based lecture method is not more effective in improving negative attitude toward pornography compared to the discussion method in sixth grade students.

H1 : TPB-based lecture method is more effective in improving negative attitude toward pornography compared to the discussion method in sixth grade students.

## II. METHOD

### A. Type And Design

This study was a comparative quantitative with a quasi experimental design. The variables that the authors compared were TPB-based lecture method in Experiment Class 1 and the discussion method in Experimental Class 2.

Table I: Study Design

Initial Condition	Group	Taking	Treatment	Final Condition
Pre-Test	Experiment Class 1	I	TPB-based Lecture method	Post - Test
Pre-Test	Experiment Class 2	I	Discussion Method	Post - Test

### B. Place and Time of Study

This study carried out in Sondakan State Elementary School (SSES) which is located on Sondakan, Surakarta City, Indonesia. This study carried out in an odd semester span of the 2019/2020 school year.

### C. Subject

The subjects of this study were sixth grade students of SSES ( $n = 56$ ). The students were divided into two classes. Experiment Class 1 with 26 students, and Experiment Class 2 with 30 students.

### D. Data Collection and Instruments

The authors developed two instruments for collected the data. The first instrument to measured knowledge related to pornography. The scope of information (knowledge about pornography) based on the learning material was presented. The second instrument to measured attitude toward pornography.

### E. Data Validation

A measuring instrument can be claimed to be valid if the instrument measures what should be measured (Indriantoro and Supomo 2002). For this reason, the authors did validity and reliability tests to maximized quality and minimized errors in measurement.

### F. Item Validity

To ensure validity, the authors utilized Product Moment Correlation Formula (Pearson 1948). The items was claimed to be valid if the value of  $r_{count} \geq r_{table}$  with  $\alpha = 0.05$ . Conversely, if the value of  $r_{count} < r_{table}$  then the item was declared invalid. In searched  $r_{table}$ , applied  $df = n - 2$ .

### G. Item Reliability

To measured reliability, the authors utilized Alpha Cronbach technique by Kuder & Richardson (1937). The items was claimed to be reliable if the value of  $r_{count} \geq r_{table}$  with  $\alpha = 0.05$ . Conversely, if  $r_{count} < r_{table}$ , then the item was not reliable. In searching  $r_{table}$ , applied  $df = n - 2$ .

### H. Level of Difficulty

Difficulty analysis of each item was carried out to determine the level of difficulty of each item. To measure the level of difficulty, the authors utilized formula by Solichin (2017).

### I. Analyze Data

The analysis was carried out in a descriptive statistical analysis. Using the parametric statistical method that previously performed the prerequisite tests as follows:

### J. Normality test

The authors used normality test with Lilliefors test (Lilliefors 1967). Samples come from normally distributed populations if  $H_0$  is accepted. Conversely, the sample comes from an abnormally distributed population if  $H_1$  is accepted.

### K. Homogeneity Test

Homogeneity test of this variant serves to determine whether or not the uniformity of each class sample taken. In this study, the homogeneity test used was the F-test by Levene (1960). If the value of  $F_{count} < F_{table}$  then the data is homogeneous, while if the value of  $F_{count} > F_{table}$  then the data is not homogeneous.

### L. Hypothesis Test

Hypothesis testing used was the independent sample t-test. It was to find out the differences in the average of the two independent data groups. To answer the formulations of hypotheses 1 and 2, a comparative t-test of two independent samples was conducted. According to Pearson (1948), to calculate the value of t, the variant polled t formula is used because the number of samples is not the same ( $n_1 \neq n_2$ ).

## III. RESULT

### A. Instrument Trial Data Analysis

#### i. Item Validity Test

The results of calculating of validity test were as follows:

Table II: Validity Test Results of Knowledge And Attitude Items

Item No	$R_h$ knowledge	$R_h$ attitude	$r_{table}$	Result
1	0.643	0.423	0.3550	Valid
2	0.436	0.467	0.3550	Valid
3	0.510	0.543	0.3550	Valid
4	0.401	0.562	0.3550	Valid
5	0.383	0.649	0.3550	Valid
6	0.800	0.397	0.3550	Valid
7	0.489	0.611	0.3550	Valid
8	0.711	0.519	0.3550	Valid
9	0.759	0.410	0.3550	Valid
10	0.402	0.597	0.3550	Valid

Item validity test was performed to determine the validity of items that have been given. All items were declared valid according to the criteria, if  $r_{count} \geq r_{table}$ . The knowledge and attitude test were carried out using a written test consisting of 10 items about knowledge and 10 items about attitude. Based on Table 2, the value of  $r_{count}$  of items were greater than  $r_{table}$  (0.3550). The test instrument were valid and can be used.

### ii. Item Reliability Test

After processed the reliability test of knowledge items, was obtained  $r_{count}$  of 0.8125. The value of  $r_{table}$  for  $n = 31$  with  $df = n-2$  used  $\alpha = 5\%$  was 0.367. Then the instrument was reliable because  $r_{count}$  (0.8125)  $>$   $r_{table}$  (0.367). Meanwhile, after processed the reliability test of attitude items, was obtained  $r_{count}$  of 0.7029. The value of  $r_{table}$  for  $n = 31$  with  $df = n-2$  used  $\alpha = 5\%$  was 0.367. Then the instrument was reliable because  $r_{count}$  (0.7029)  $>$   $r_{table}$  (0.367).

### iii. Level Difficulty

The level of difficulty of knowledge items.

Table Iii: Level Of Difficulty In Knowledge Items

Item No	Difficulty Index Value	Interpretation
1	0.74	Easy
2	0.81	Easy
3	0.68	Moderate
4	0.77	Easy
5	0.81	Easy
6	0.68	Moderate
7	0.71	Moderate
8	0.68	Moderate
9	0.48	Moderate
10	0.55	Moderate

Based on Table 3, it can be seen that items number 3, 6, 7, 8, 9, 10 were moderate, while items number 1, 2, 4, 5 were easy.

### Level of Difficulty in Attitude Items

Table Iv: Level of Difficulty In Attitude Items

Item No	Difficulty Index Value	Interpretation
1	0.69	Moderate
2	0.66	Moderate
3	0.66	Moderate
4	0.74	Easy
5	0.69	Moderate
6	0.72	Easy
7	0.65	Moderate
8	0.67	Moderate
9	0.77	Easy
10	0.76	Easy

Based on Table 3, it can be seen that items number 1, 2, 3, 5, 7, 8 were moderate, while items number 4, 6, 9, 10 were easy.

### B. Pretest Data Analysis

The analysis was carried out in a descriptive statistical analysis, using the parametric statistical method that previously performed the prerequisite tests as follows:

#### i. Normality Test

The normality test used was the Lilliefors test (Lilliefors 1967). The result of Lilliefors test as follow:

Table V: Pre-Test Normality Test Result

Source	Group	$L_{count}$	$L_{table}$	Result
Knowledge	Experiment Class 1	0.1457	0.173	Normal
	Experiment Class 2	0.1491	0.161	Normal
Attitude	Experiment Class 1	0.0780	0.173	Normal
	Experiment Class 2	0.1663	0.161	Normal

Based on Table 5, it can be stated that the Experiment Class 1 and Experiment Class 2 were normally distributed.

#### ii. Variance Homogeneity Test

Variance homogeneity test was to determine whether or not the uniformity of each class sample taken. In this study, the homogeneity test used the F test by (Levene 1960). The data is declared homogeneous if  $F_{count} \leq F_{table}$ .

With  $\alpha 5\%$  (0.05), was obtained  $F(25.29) = 1.93$ . The result of F test of knowledge pretest was  $F_{count}(1.729) \leq F_{table}(1.93)$ . Then the knowledge of Experiment Class 1 and Experiment Class 2 was homogeneous. Meanwhile, the result of F test of attitude pretest was  $F_{count}(1.057) \leq F_{table}(1.93)$ .

Then the the attitude of Experiment Class 1 and Experiment Class 2 was homogeneous as well.

### C. Posttest Data Analysis

#### i. Normality Test

The normality test used is the Lilliefors test. The result of Lilliefors test as follow:

Table Vi: Post-Test Normality Test Result

Source	Group	$L_{count}$	$L_{table}$	Result
Knowledge	Experiment Class 1	0.14527	0.173	Normal
	Experiment Class 2	0.150065	0.161	Normal
Attitude	Experiment Class 1	0.169282	0.173	Normal
	Experiment Class 2	0.124403	0.161	Normal

Based on Table 6, it can seen that the Experiment Class 1 and Experiment Class 2 were normally distributed.

#### ii. Variance Homogeneity Test

With  $\alpha$  5% (0.05), was obtained  $F_{(25,29)} = 1.93$ . The result of F test of knowledge pretest was  $F_{count} (0.97) \leq F_{table} (1.93)$ . Then the knowledge of Experiment Class 1 and Experiment Class 2 was homogeneous. Meanwhile, the result of F test of attitude pretest was  $F_{count} (1.218) \leq F_{table} (1.93)$ . Then the the attitude of Experiment Class 1 and Experiment Class 2 was homogeneous as well.

### D. Hypothesis Test

After completed the data analysis prerequisite test, then the hypothesis test was performed with the t-test.

#### • Hypothesis 1

Based on the t-test, it was obtained  $t_{count} = 4.613$ . At the 5% significance level,  $dk = 54$ , received  $t_{table} = 2.005$ . That means  $t_{count} > t_{table} (4.613 > 2.005)$ . It can be concluded that  $H_0$  was rejected and  $H_1$  was accepted. TPB-based lecture method is more effective in improving knowledge related to pornography compared to the discussion method in sixth grade students.

#### • Hypothesis 2

Based on the t-test, it was obtained  $t_{count} = 5.948$ . At the 5% significance level,  $dk = 54$ , received  $t_{table} = 2.005$ . That means  $t_{count} > t_{table} (5.948 > 2.005)$ . It can be concluded that  $H_0$  was rejected and  $H_1$  was accepted. TPB-based lecture method is more effective in improving negative attitudes related to pornography compared to the discussion method in sixth grade students.

## IV. DISCUSSION

This study was a comparative quantitative with a quasi experimental design. The variables that authors compared were TPB-based lecture method and discussion method. The

authors found out which was more effective in improving knowledge and negative attitude of sixth grade students on pornographic material.

The results showed that there were differences in the improve in knowledge and negative attitudes using the TPB-based lecture method about pornography. This finding in line with study by Guspita (2017) which showed that there were changes in knowledge and attitudes of adolescents about HIV using lecture method. In addition, study by Helmi et al. (2015) found that lecture method was effective to improving knowledge of healthy sexual behavior in adults.

TPB-based lecture method consist of several learning steps that can affect knowledge and attitudes. This method also may change the thinking patterns of students in responding to a problem based on the advantages and disadvantages.

Furthermore, the tests conducted in Experiment Class 2 showed that there was an increase in knowledge and negative attitudes using the discussion method. This finding in line with study by Ardila et al. (2014) which found that group discussion method was effective on increasing late adolescent's (18-20 yo) knowledge and attitudes about premarital sex behavior. Meanwhile, study by Helmi et al. (2015) found that discussion method was effective to improving knowledge of healthy sexual behavior in adult.

Thus increasing students' knowledge and attitudes with the discussion method may influenced by the depth of discussion during the learning process. In addition, group discussion may raise an interactive condition which motivate students to process the information (knowledge).

The last one, the result showed that the TPB-based lecture method proved to be more effective in increasing the knowledge and attitudes of students compared to the discussion method. This finding is in line with study by Helmi et al. (2015) even the subject were different (childrens and adults). However, this finding is in contrary with study by Ardila et al. (2014) with subject adolescents. Discussion indicated more favourable by late adolescents because more argumentative and cover their critical thinking.

## V. CONCLUSION

Based on the results of data analysis and discussion described, the following conclusions can be drawn; (1) TPB-based lecture is more effective than discussion method in increasing knowledge related to pornography of sixth grade students (2) TPB-based lecture is more effective than discussion method in increasing negative attitude related to pornography of sixth grade students.

Theoretical and practical implications of this study are; (1) TPB-based lecture method can provide alternative solutions in increasing sixth grade students' understanding of the dangers of pornography. (2) TPB-based lecture method is

more recommended than discussion method for children and early adolescents.

The last one, this study has limitations, including: (1) The study was conducted at the teaching and learning time so the authors have limited time in describing the material. (2) The material in this study is limited to the material of pornography, so it is not certain that the study provides the same results when applied to other material.

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#### REFERENCES

- [1] Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In *Action Control*. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- [2] Ardila, A., Ridha, A., & Jauhari, A. H. (2014). Efektifitas Metode Diskusi Kelompok dan Metode Ceramah Terhadap Peningkatan Pengetahuan dan Sikap Remaja Tentang Perilaku Seks Pranikah (Study Kasus Remaja Kelas X IPA di SMA Negeri 01 Bengkayang). *Jurnal Mahasiswa Dan Peneliti Kesehatan*, 1(2), 76–91.
- [3] Guspita, H. (2017). Efektivitas Promosi Kesehatan menggunakan Metode Ceramah tentang HIV/AIDS terhadap Pengetahuan dan Sikap Remaja di SMK Tritech Informatika dan SMK Namira Tech Nusantara Medan tahun 2016. *Ilman*, 5(1), 33–40.
- [4] Habiby, W. N. (2017). *Statistika Pendidikan* (1st ed.; Muhroji & G. Wiyono, eds.). Surakarta: Muhammadiyah University Press.
- [5] Helmi, A. F., Paramastri, I., & Mada, U. G. (2015). Efektivitas Pendidikan Seksual Dini Dalam Meningkatkan Pengetahuan Perilaku Seksual Sehat. *Jurnal Psikologi (Yogyakarta)*, 25(2), 25–34. <https://doi.org/10.22146/jpsi.7502>
- [6] Hurlock, E. B. (1980). *Psikologi perkembangan suatu pendekatan sepanjang masa Edisi Kelima*. Terjemahan Istiwidayanti & Soedjarwo.
- [7] Indriantoro, N., & Supomo, B. (2002). *Metodologi Penelitian Bisnis*. Yogyakarta: BPFE.
- [8] Kuder, G. F., & Richardson, M. W. (1937). The theory of the estimation of test reliability. *Psychometrika*, 2, 151–160. <https://doi.org/10.1007/BF02288391>
- [9] Levene, H. (1960). “Robust Tests for Equality of Variances,” in I. Olkin, ed., *Contributions to Probability and Statistics: Essays in Honor of Harold Hotelling*. In Stanford University Press (1st ed.). California: Menlo Park.
- [10] Lilliefors, H. W. (1967). On the Kolmogorov-Smirnov Test for Normality with Mean and Variance Unknown. *Journal American Statistical Association*, 62(318), 399–402. <https://doi.org/10.1080/01621459.1967.10482916>
- [11] Madigan, S., Villani, V., Azzopardi, C., Laut, D., Smith, T., Temple, J. R., ... Dimitropoulos, G. (2018). The Prevalence of Unwanted Online Sexual Exposure and Solicitation Among Youth: A Meta-Analysis. *Journal of Adolescent Health*. <https://doi.org/10.1016/j.jadohealth.2018.03.012>
- [12] Mitchell, K. J., Finkelhor, D., & Wolak, J. (2003). The exposure of youth to unwanted sexual material on the internet: A national survey of risk, impact, and prevention. *Youth and Society*, 34(3), 330–358. <https://doi.org/10.1177/0044118X02250123>
- [13] Pearson, K. (1948). *Early Statistical Papers*. Cambridge, England: University Press.
- [14] Rodda, S. N., Booth, N., Vacaru, M., Knaebe, B., & Hodgins, D. C. (2018). Behaviour change strategies for internet, pornography and gaming addiction: A taxonomy and content analysis of professional and consumer websites. *Computers in Human Behavior*, 84(July), 467–476. <https://doi.org/10.1016/j.chb.2018.03.021>
- [15] Solichin, M. (2017). Analisis daya beda soal. taraf kesukaran, butir tes, validitas butir tes, interpretasi hasil tes validitas ramalan dalam evaluasi pendidikan. *Journal Unipdu*, 2, 192–213. Retrieved from [journal.unipdu.ac.id/index.php/dirasat/article/download/879/637%0A%0A](http://journal.unipdu.ac.id/index.php/dirasat/article/download/879/637%0A%0A)
- [16] Suyatno, T. (2011). Pengaruh Pornografi terhadap Perilaku Belajar Siswa (Studi Kasus : Sekolah Menengah X). *Jurnal Pendidikan Dompet Dhuafa*, 1(1), 1–12.
- [17] Syuderajat, F. (2017). Pornografi dalam Iklan: Analisis Isi Iklan dalam Majalah dan Tabloid Remaja di Indonesia. *PRofesi Humas : Jurnal Ilmiah Ilmu Hubungan Masyarakat*, 1(1), 35–39. <https://doi.org/10.24198/prh.v1i1.9484>
- [18] Williams, K. S. (2005). Facilitating safer choices: Use of warnings to dissuade viewing of pornography on the internet. *Child Abuse Review*, 14(6), 415–429. <https://doi.org/10.1002/car.920>
- [19] Ybarra, M. L., Finkelhor, D., Mitchell, K. J., & Wolak, J. (2009). Associations between blocking, monitoring, and filtering software on the home computer and youth-reported unwanted exposure to sexual material online. *Child Abuse and Neglect*, 33(12), 857–869. <https://doi.org/10.1016/j.chiabu.2008.09.015>