Relationship Between Self-Control and Youth Risk Behavior in Teenagers

Stella Wijaya¹*, Meiske Yunithree Suparman¹, Jessica Chandhika¹

¹Faculty of Psychology, Universitas Tarumanagara, West Jakarta City, Jakarta 11440, Indonesia
*Corresponding author. Email: meiskey@fpsi.un.tar.ac.id, Jessica@fpsi.un.tar.ac.id, stella.705160088@stu.un.tar.ac.id

ABSTRACT
The purpose of this study is to find out whether there is a correlation between self-control and youth risk behavior. The hypothesis proposed is that there is a negative and significant correlation between self-control and youth risk behavior. The subjects in this study were teenagers with age ranging from 15 years old – 18 years old with total number of 78 subjects. Data collection techniques used was purposive sampling techniques. Measuring instruments used in this study are: a) self-control scale and; b) youth risk behavior surveillance system scale. The analysis in this study uses Pearson Correlation analysis. Based on the results of the correlation test, the results obtained is r (78) = -0.335, p = 0.003 < 0.05. Then it can be concluded that there is a negative and significant correlation between self-control with youth risk behavior. Where the higher the self-control, the lower the youth risk. Conversely, the lower the self-control, the higher the youth risk behavior.

Keywords: Self-control, youth risk behavior, correlation

1. INTRODUCTION

Adolescence is a developmental transition that involves physical, cognitive, emotional, and social changes and has varied forms according to social, cultural, and economic conditions. Teenagers are individuals aged 11-19 or 11-20 years. Adolescence is considered as a risky period and according to psychologists the tendency to engage in risky behavior might be the result of the immaturity of adolescent brain. Erik Erikson as a developmental psychologist and psychoanalyst theorized regarding psychosocial development of human beings. One of the psychosocial development stages that will be experienced by humans is identity versus identity confusion which happens during adolescence and is the fifth stages of the psychosocial development. In this stage, teenagers are in the process of searching for identity. Erikson defines identity as a coherent self-conception of self, consisting of goals, values, and beliefs that form the basis of one's commitment [1]. At this stage, individuals are faced with the challenge of finding out who they are, how they will turn out, and which direction they want to go in their lives [2]. The expected outcome of this stage is that the individual is able to find his identity. A good identity is characterized by individuals having a belief in an ideology, an individual's ability to freely determine his actions, trust in peers or adults who provide advice on goals and aspirations and belief in choices about work in the future. Meanwhile, an identity crisis is characterized by a divided self-image, an inability to build intimacy, inability to have a sense of urgency in time, a lack of concentration on the tasks required and a rejection of family or community standards [3].

Centers for Disease Control and Prevention (CDC) in 1990 created the Youth Risk Behavior Surveillance System (YRBSS) which aims to monitor health behaviors that make a major contribution to the leading causes of death, disability, and social problems among adolescents and adults in America Union. According to the CDC, these behaviors often form during early childhood and adolescence.
Behaviors that is being concerned are: a) Behaviors that contribute to unintentional injuries and violence; b) Sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection; c) Alcohol and other drug use; d) Tobacco use; e) Unhealthy dietary behaviors and; f) Inadequate physical activity. In addition, YRBSS also monitors the prevalence of obesity and asthma as well as other health-related behaviors as well as sexual identity and sex of sexual contacts [4].

Averill defines self-control as the ability to control themselves in order to prevent or reduce the impact of impulse that is only for a moment, so that individuals are able to create better conditions [5]. Aristoteles stated that the most important thing in adolescence is forming the ability to make a choice. This ability is a sign of maturity. Aristotle believed in early adolescence, teenagers are unstable and unsatisfied due to the lack of self-control needed to be a mature individuals [6]. In addition, dramatic changes in brain structure involved in emotions, judgment, behavior regulation, and self-control occur between puberty and young adulthood. Risk taking behavior seems to be the result of the interaction of two brain networks, namely: a) a socio-emotional network that is sensitive to social and emotional stimuli, such as peer influence and; b) cognitive-control network that regulates responses to stimuli. Socio-emotional networks become more active during puberty while cognitive-control networks become mature gradually until early adulthood. These findings can help explain the tendency of adolescents to have emotional outbursts and risk behaviors and why risk taking often occurs in groups [1]. Travis Hirschi and Gottfredson stated that individuals with low self-control tend to be impulsive, risky and narrow-minded [7]. The hypothesis proposed in this study is that there is a negative and significant correlation between self-control and youth risk behavior.

2. METHODS
   A. Participants and Procedure

   The data used in this study is obtained from 78 subjects using two questionnaires that are shared online. Subjects in this study are teenagers with the age ranging from 15-18 years old and the data collection method used in this study is purposive sampling method. The online questionnaires were shared around early June to mid June. Subjects were asked to complete the two questionnaires consisting of Self-Control Scale and Youth Risk Behavior Surveillance System (YRBSS).

   B. Measurements

   Self-Control Scale consists of 23 items (10 positive items and 13 negative items) in the form of statements and is used to measure individuals’ self-control. This questionnaire is developed by Averill (1973) [5]. There are 3 dimensions in this questionnaire: a) Behavioral Control; b) Cognitive Control and; c) Decisional Control. Self-Control Scale is a scale consists of 6 answer choices from 1 (never) to 6 (always). The 13 negative items are scored by reversing the responses. “When I'm angry, I'm able to refrain from cussing” is an example of the items from Self-Control Scale. A higher score indicates a higher level of self-control and a lower score indicates a lower level of self-control.

   Youth Risk Behavior Surveillance System (YRBSS) consists of 63 questions with 3 answer choices (A,B,C). This questionnaire was created in 1990 by Centers for Disease Control and Prevention aim is to measure individuals’ health behaviors [4]. It is consisted of 6 dimensions which are: a) Behaviors that contribute to unintentional injuries and violence; b) Sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection; c) Alcohol and other drug use; d) Tobacco use; e) Unhealthy dietary behaviors and; f) Inadequate physical activity. Each answer choices has its own score. A equals to 0, B equals to 1 and C equals to 2. “Have you ever been forced to have sex?” is an example of the items from Youth Risk
Behavior Surveillance System (YRBSS). The higher the score the higher the individual's risk behavior and the lower the score the lower individual's risk behavior.

3. RESULTS

The subjects in this study will be described in 6 categories which are: a) Age; b) Gender; c) Ethnicity; d) Height; e) Weight and f) Body Mass Index (BMI). Subjects with the age of 15 years amounted to 11 people (14.1%), subjects aged 16 years were 11 people (14.1%), subjects aged 17 years were 18 people (23.1%) and subjects aged 18 years were 38 people (48.7%). In addition, the subjects are consisted of 15 male (19.2%) and 63 female (80.8%). Based on the ethnic category, 1 person (1.3%) is Acehnese, 3 people (3.8%) with Ainu ethnicity, 1 person (1.3%) is Balinese, 9 people (11.5%) is Batakinese, 4 people (5.1%) with Betawi ethnicity, 2 people (2.6%) with Bugis ethnicity, 23 people (29.5%) with Javanese ethnicity, 2 people (2.6%) is Manadonese, 1 person (1.3%) with Mestizo ethnicity, subjects with Minahasa ethnicity amounted to 1 person (1.3%), 2 people (2.6%) with Minang ethnicity, 4 people (5.1%) is Sundanese, 1 person (1.3%) with Tamil ethnicity and 24 people (30.8%) is Chinese.

Based on the height category, 1 person (1.3%) with the height of 148 cm, 5 people (6.4%) with the height of 150 cm, 3 people (3.8%) with the height of 151 cm, 1 person (1.3%) with the height of 152 cm, 3 people (3.8%) with the height of 153 cm, 2 people (2.6%) with the height of 154 cm, 2 people (2.6%) with the height 155 cm, 1 person (1.3%) with the height of 156 cm, 7 people (9.0%) with the height of 157 cm, 5 people (6.4%) with the height of 158 cm, 1 person (1.3%) with the height of 159 cm, 9 people (11.5%) with the height of 160 cm, 3 people (3.8%) with the height of 161 cm, 1 person (1.3%) with the height of 162 cm, 3 people (3.8%) with the height of 163 cm, 2 people (2.6%) with the height of 164 cm, 8 people (10.3%) with the height of 165 cm, 2 people (2.6%) with the height of 166 cm, 2 people (2.6%) with the height of 167 cm, 3 people (3.8%) with the height of 168 cm, 5 people (6.4%) with the height of 170 cm, 2 people (2.6%) with the height of 171 cm, 1 person (1.3%) with the height of 172 cm, 1 person (1.3%) with the height of 173 cm, 2 people (2.6%) with the height of 174 cm, 1 person (1.3%) with the height of 176 cm, 1 person (1.3%) with the height of 180 cm and 1 person (1.3%) with the height of 187 cm.

Based on the weight category, 1 person (1.3%) weighed 39 kg, 2 people (2.6%) weighed 40 kg, 2 people (2.6%) weighed 42 kg, 3 people (3.8%) weighed 44 kg, 3 people (3.8%) weighed 45 kg, 1 person (1.3%) weighed 46 kg, 5 people (6.4%) weighed 47 kg, 3 people (3.8%) weighed 48 kg, 7 people (9.0%) weighed 49 kg, 9 people (11.5%) weighed 50 kg, 2 people (2.6%) weighed 51 kg, 2 people (2.6%) weighed 52 kg, 6 people (7.7%) weighed 53 kg, 1 person (1.3%) weighed 54 kg, 1 person (1.3%) weighed 55 kg, 1 person (1.3%) weighed 56 kg, 2 people (2.6%) weighed 57 kg, 1 person (1.3%) weighed 58 kg, 3 people (3.8%) weighed 59 kg, 4 people (5.1%) weighed 60 kg, 2 people (2.6%) weighed 62 kg, 4 people (5.1%) weighed 63 kg, 1 person (1.3%) weighed 65 kg, 2 people (2.6%) weighed 67 kg, 1 person (1.3%) weighed 68 kg, 1 person (1.3%) weighed 70 kg, 2 people (2.6%) weighed 71 kg, 3 people (3.8%) weighed 75 kg, 1 person (1.3%) weighed 77 kg, 1 person (1.3%) weighed 78 kg and 1 person (1.3%) weighed 80 kg.

There are 5 category to classify subjects based on their Body Mass Index (BMI) which are: a) Severely underweight; b) Underweight; c) Normal; d) Overweight and; e) Severely overweight. There are 3 people (3.8%) classified as severely underweight, 16 people (20.5%) is underweight, 51 people (65.4%) is normal, 4 people (5.1%) is overweight and 4 people (5.1%) classified as severely overweight.

Table 1: Participant Characteristics

| Characteristics | Frequency | Percentage |
|-----------------|-----------|------------|
| Age             |           |            |

638
To decide the correlation test method to be used later, the data normality test must first be performed. Data normality test will show whether the data distribution is normal or not. Normality test is carried out using Kolmogorov-Smirnov analysis and is considered normal if the significance score is above 0.05. The result of the data normality test shows that the significance score of Self-Control Scale is $p = 0.513 > 0.05$ and the significance score of Youth Risk Behavior Surveillance System (YRBSS) is $p = 0.101 > 0.05$ which means the data distribution of both questionnaires are normal.

Table 2: Data Normality Test

| Questionnaire                        | Sig.       | Distribution |
|--------------------------------------|------------|--------------|
| Self-Control Scale                   | 0.513 > 0.05 | Normal       |
| YRBSS                                | 0.101 > 0.05 | Normal       |

Linearity test is performed to determine whether the two variables form a straight line relationship or not. The two variables are considered linear if the significance score is above 0.05. The result of the linearity test shows that the significance score is $F = 1.086, p = 0.397 > 0.05$ which indicates that the two variables form a straight line or linear.

Table 3: Linearity Test

| Youth Risk Behavior Surveillance System (YRBSS) | Self-Control Scale | Statement |
|-------------------------------------------------|--------------------|-----------|
| F                                                | 1.086              | Linear    |
| P                                                | 0.397              |           |

Correlation analysis used in this study is Pearson Correlation analysis. There is a significant correlation between self-control and youth risk behavior if the significance score is below 0.05. The result of the correlation analysis shows that $r(78) = -0.335, p = 0.003 < 0.05$. This indicates that there is a negative and significant correlation between self-control and youth risk behavior.

| Gender   | Male | Female |
|----------|------|--------|
|          | 15   | 63     |
|          | 19.2 | 80.8   |

| Ethnicity | Aceh  | Ainu   | Bali   | Batak  | Betawi | Bugis  | Jawa   | Manado | Mestizo | Minahasa | Minang  | Sunda  | Tamil  | Tionghoa |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|----------|----------|---------|--------|--------|----------|
|           | 1     | 3      | 1      | 9      | 4      | 2      | 23     | 2      | 1        | 1        | 2       | 4      | 1      | 24       |
|           | 1.3   | 3.8    | 1.3    | 11.5   | 5.1    | 2.6    | 29.5   | 2.6    | 1.3      | 1.3      | 2.6     | 5.1    | 1.3    | 30.8     |

| Height Range | 145 cm – 150 cm | 151 cm – 155 cm | 156 cm – 160 cm | 161 cm – 165 cm | 166 cm – 170 cm | 171 cm – 175 cm | 176 cm – 180 cm | 181 cm – 185 cm | 186 cm – 190 cm |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|              | 6               | 11              | 23              | 17              | 12              | 6               | 2               | 0               | 1               |
|              | 7.7             | 14.1            | 29.5            | 21.8            | 15.4            | 7.7             | 2.6             | 0               | 1.3             |

| Weight Range | 36 kg – 40 kg | 41 kg – 45 kg | 46 kg – 50 kg | 51 kg – 55 kg | 56 kg – 60 kg | 61 kg – 65 kg | 66 kg – 70 kg | 71 kg – 75 kg | 76 kg – 80 kg |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              | 3            | 8            | 25           | 12           | 11           | 7            | 4             | 5             | 3             |
|              | 3.8          | 10.3         | 32.1         | 15.4         | 14.1         | 9.0          | 5.1           | 6.4           | 3.8           |

| Body Mass Index (BMI) | Severely overweight | Underweight | Normal | Overweight |
|-----------------------|---------------------|-------------|--------|------------|
|                       | 3                   | 16          | 51     | 4          |
|                       | 3.8                 | 20.5        | 65.4   | 5.1        |

To decide the correlation test method to be used later, the data normality test must first be performed. Data normality test will show whether the data distribution is normal or not. Normality test is carried out using Kolmogorov-Smirnov analysis and is considered normal if the significance score is above 0.05. The result of the data normality test shows that the significance score of Self-Control Scale is $p = 0.513 > 0.05$ and the significance score of Youth Risk Behavior Surveillance System (YRBSS) is $p = 0.101 > 0.05$ which means the data distribution of both questionnaires are normal.

Linearity test is performed to determine whether the two variables form a straight line relationship or not. The two variables are considered linear if the significance score is above 0.05. The result of the linearity test shows that the significance score is $F = 1.086, p = 0.397 > 0.05$ which indicates that the two variables form a straight line or linear.

Correlation analysis used in this study is Pearson Correlation analysis. There is a significant correlation between self-control and youth risk behavior if the significance score is below 0.05. The result of the correlation analysis shows that $r(78) = -0.335, p = 0.003 < 0.05$. This indicates that there is a negative and significant correlation between self-control and youth risk behavior.
behavior. This means that the higher the self-control the lower the risk behavior and the lower the self-control the higher the risk behavior.

Table 4: Correlation Analysis

| Variables          | Self-Control | Youth Risk Behavior |
|--------------------|--------------|---------------------|
|                    | Pearson Correlation |                  |
| Self-Control       | 1            | -0.335 (**)         |
| Sig. (2-tailed)    | 0.003        |                     |
| N                  | 78           | 78                  |
| Youth Risk Behavior| -.0335 (**)  | 1                   |
| Sig. (2-tailed)    | 0.003        |                     |
| N                  | 78           | 78                  |

4. DISCUSSION
Based on the data obtained, subjects with very low self-control are 0 people (0%), subjects with low self-control are 6 people (7.7%), subjects with moderate self-control are 16 people (20.5%), subjects with high self-control are as many as 44 people (56.4%) and subjects with very high self-control are as many as 12 people (15.4%). In addition, subjects with very low youth risk behaviors are 74 people (94.9%), subjects with low youth risk behaviors are 4 people (5.1%) and there are no subjects with moderate, high or very high youth risk behaviors. This may be caused by several questions that are asked in the Youth Risk Behavior Surveillance System (YRBSS) are not often done by teenagers and not easy to find or get.

Based on the theory regarding the factors that influence youth risk behavior, it is stated that gender plays a role in risk behavior [8]. The result of homogeneity test shows that there is a significant difference of youth risk behavior in male and female. This means that the result of the homogeneity test is in line with the theory stated. It is also stated in the factors that influence self-control, that age plays a role in self-control [9]. The result of homogeneity test shows that there is no significant difference of self-control in terms of age. This means that the result of the homogeneity test is not in line with the theory stated.

As for the limitations in this study, due to SARS-CoV-2 that is spreading in Indonesia which requires everyone to do a self-quarantine at their respective homes, this affects this study in which the number of participants in this study is limited. In addition, two of the six dimensions of youth risk behavior (unhealthy dietary behavior and inadequate physical activity) have the internal consistency reliability coefficient value below 0.6. This can also be caused by the limited number of participants in this study.

5. CONCLUSION AND SUGGESTIONS
5.1. CONCLUSION
The result of this study shows that there is a negative and significant correlation between self-control and youth risk behavior. This means that the higher the self-control the lower the youth risk behavior and the lower the self-control the higher the youth risk behavior. The hypothesis proposed in this study is accepted.

5.2. SUGGESTIONS
A. Theoretical Suggestions
The next researcher is expected to conduct this research with a greater number of participants than the number of participants in this study so that the data obtained is more stable. It is also hoped that next researchers will get more diverse subjects so that the scope of further research is not only for certain groups.

B. Practical Suggestions
For teenagers, to consider increasing the self-control so that it is less likely to engage in youth risk behaviors. For authorized institutions, may consider conducting several trainings to improve self-control or trainings to reduce the number of youth risk behaviors in teenagers for example providing education regarding the dangerous of engaging with risk behavior.

REFERENCES
[1] Papalia, D.E., & Martorell, G. (2014). experience human development (13th ed.). New York, NY. McGraw-Hill.
[2] Santrock, J.W. (2016). Adolescence (16th ed.). New York, NY. Mc-Graw-Hill.
[3] Feist, J., Feist, G.J., & Roberts, T. (2013). *Theories of personalities* (8th ed.). New York, NY: McGraw-Hill.

[4] Centers for Disease Control and Prevention, Division of Adolescent and School Health, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. (2018). Youth Risk Behavior Surveillance System (YRBSS). Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

[5] Pratama, S.D.G. (2018). Perilaku konsumtif dan kontrol diri belanja online pada mahasiswa. Skripsi.

[6] Santrock, J. W. (2005). *Perkembangan remaja*. Jakarta: Erlangga.

[7] Aroma, I.S., & Suminar, D.R. (2012). Hubungan antara tingkat kontrol diri dengan kecenderungan perilaku kenakalan remaja. *Jurnal Psikologi Pendidikan dan Perkembangan*, 1(2).

[8] Lestary, H., & Sugiharti. (2011). Perilaku berisiko remaja di Indonesia menurut survey kesehatan reproduksi remaja Indonesia (SKRRI) tahun 2007. *Jurnal Kesehatan Reproduksi*, 1(3), 136-144.

[9] Marsela, R.D., & Supriatna, M. (2019). Kontrol diri: Definisi dan faktor. *Journal of Innovative Counseling: Theory, Practice & Research*, 3(2).