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# Risk Taking behaviour Adolescents

*by* Sri Astutik Andayani

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## **Abstract**

**Background:** The phenomenon of risky sexual behavior is found in adolescents in Islamic boarding schools. This study aimed to analyze the factors that influence risky sexual behavior on a biopsychosocial basis. **Method:** This study is an analytic survey with a cross-sectional time approach. Data were analyzed by Structural Equation Modeling-Partial Least Square (SEM-PLS) test. **Results:** The results showed that the independent variables contributed 43.8% to risky sexual behavior and the model had a good fit. There is a significant relationship of biological maturation, self perceptions, perception of social and spiritual, perceptions sexual on risky sexual behavior. **Conclusion:** The results of this study revealed that the model of risky sexual behavior viewed from risk-taking behavior and biopsychosocial theory can be used as a theoretical basis for carrying out activities related to health promotive and preventive actions for adolescents, which focus on individual, family and peer group factors.

**Keywords:** Adolescents, risky sexual behavior, risk taking behavior

## **Introduction**

Risky sexual behavior in adolescents occurs in several cities in Indonesia, including in students in Islamic boarding schools. An Islamic boarding school in Makassar showed that 45.6% of their students have had risky sexual behavior <sup>1</sup>. Risky sexual behavior will increase the chance for someone who does it to be exposed to or transmit sexually transmitted diseases (HIV/AIDS, gonorrhea, syphilis and genital herpes) and pregnancy. Based on a needs assessment report <sup>2</sup>, regarding Adolescent Sexual and Reproductive Health, it showed that 80.7% of students both in Islamic boarding schools and schools with Islamic backgrounds outside the Islamic boarding school (Madrasah Aliyah) have had various sexual activities.

A number of studies which analyze from a multisystemic perspective using ecological theory, showed that the relationship between systems is transactional and interactional—with each system having a direct and indirect influence on risky sexual behavior <sup>3</sup>. Based on the analysis of the model, the approach used tends to be from a singular perspective or unidimensional in nature, while studies

from multiple perspectives have not been widely carried out on the model. Furthermore, it also seems to have never been done in groups of adolescents in Islamic boarding schools, so researchers were interested in conducting further research to develop this model to explain risky sexual behavior in adolescents in Islamic boarding schools who have different characteristics compared to adolescents in general who are not in Islamic boarding schools. This study aimed to examine a biopsychosocial-based risky sexual behavior model that shows the relationship between biological maturation, self perceptions, perceptions of social environment, perceptions spiritual and sexual perceptions of risky sexual behavior.

## **METHOD**

### **Research Design and Sampling**

This study used a cross-sectional observational analytical design, explaining the relationship between variables through hypothesis testing. The samples of this study were adolescents from Islamic Boarding Schools in Probolinggo. A total of 346 adolescents were selected by multistage random sampling. **The Inclusion criteria were all students of Class X, XI, XII aged 16-19 years, unmarried and willing to be involved as subjects in this study as evidenced by the filling of informed consent. Exclusion criteria were adolescents who had physical limitations in the form of sensory disorders and adolescents who were absent or sick at the time of the study.** Selected adolescent respondents were then given an explanation of the study conducted. For those who were willing to take part in the study, researchers then proceeded to meet their parents/guardians to give an explanation of the study and informed consent. Informed consent was given to adolescent respondents after parents/guardians consented to their children to take part in the study. This research has received ethical clearance approval number NJ.T06/LP3M/SK/005/01/2021. This research was conducted in 2021. Research instruments used by researchers consisted of biological maturation, self perceptions, perceptions of social, perceptions of spiritual and perceptual factors that influence adolescent sexual behavior. The

instruments used have been tested for validity and reliability with a product-moment correlation coefficient of 0.3 and a Cronbach alpha value of 0.920. This research uses PLS – SEM with the software used is SmartPLS3.

### **Data analysis**

The data analysis technique used in this study was the inferential technique which was used to test the empirical model and the hypotheses proposed by researchers. Inferential analysis was done using Structural Equation Modeling (SEM) based on variance called Partial Least Square (PLS). Structural Partial least Square is an alternative approach that shifts from covariance-based SEM to variance-based SEM. PLS is intended for causal predictive analysis in situations of high complexity and low theoretical support. The use of PLS in this study was to help researchers to get the value of latent variables for prediction purposes. The steps taken in PLS include designing a measurement model (outer model), designing a structural model (inner model), constructing a path diagram, converting a path diagram to a system of equations, estimating path coefficients, loading and weights, evaluating goodness of fit and testing hypotheses.

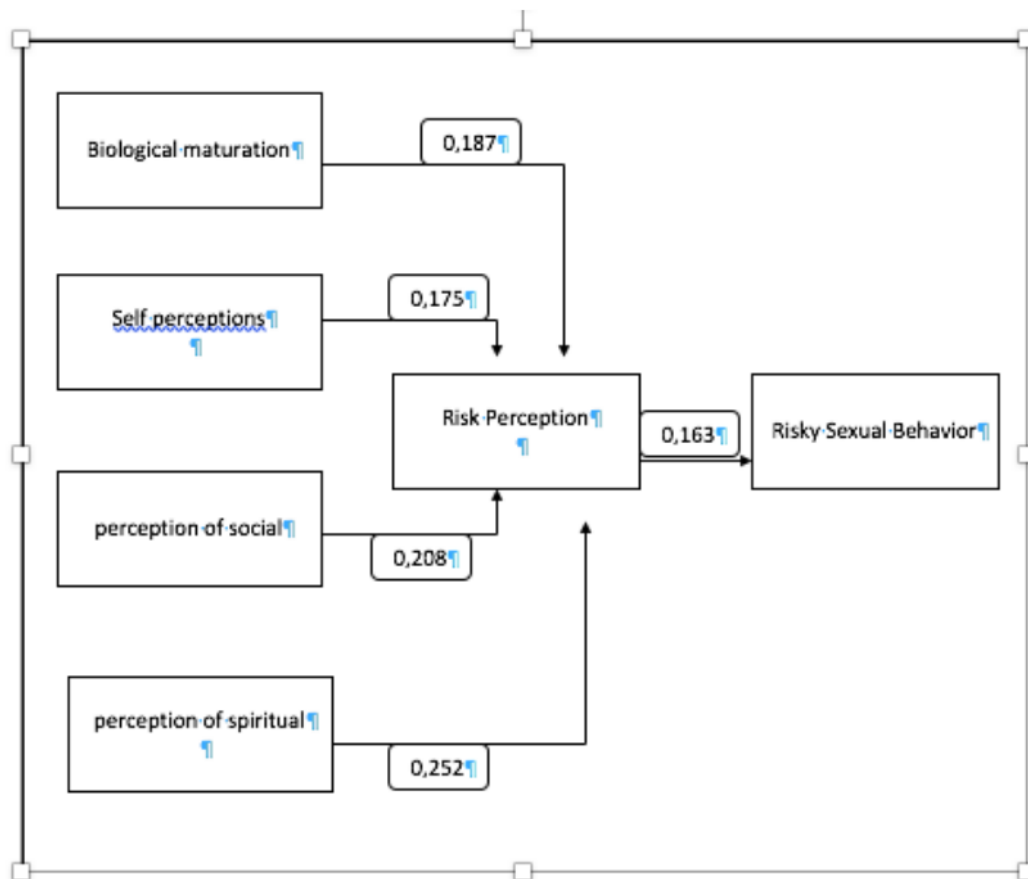
### **RESULTS**

The average age of adolescent respondents in this study was 16 years (age range of 16-19 years), 135 or 39% of respondents have lived in Islamic boarding schools for 3 years, 200 or 58% of respondents were from senior high school institutions (Table 1). Figure 1 shows that almost 43.8% (R Square) of the variation of risky sexual behavior is explained by biological maturation, self perceptions, perceptions of social environment, perceptions of spiritual and perceptual factors. There is a significant relationship between biological maturations ( $r = 0.187$ ), self perceptions ( $r = 0.175$ ), perceptions of social ( $r = 0.208$ ), perceptions of spiritual ( $r = 0.252$ ) and perceptual ( $r = 0.163$ ) factors

with risky sexual behavior. All variables produced Predictive Relevance ( $Q^2$ ) values greater than 0 (zero) which indicate that the model is said to be good enough.

Table 1. Characteristics of respondents' demographic data

No	Characteristics	Indicator	Frequency	
			$\Sigma$	%
1.	Age	16 years old	103	30
		17 years old	93	27
		18 years old	102	29
		19 years old	48	14
2.	Length of stay in Islamic boarding school	1 year	24	7
		2 years	104	30
		3 years	135	39
		4 years	45	13
		5 years	26	8
		6 years	12	3
3.	School Origin	SMA (Senior High School)	200	58
		SMK (Vocational High School)	32	9
		MAN (State Madrasah Aliyah)	101	29
		MA (Madrasah Aliyah)	13	4



**Figure 1.** Relationship between biological maturation, self perceptions, perception of social environment and spiritual, perceptions sexual and risky sexual behavior using structural equation modelling.

### Discussion

This study is the first study to discuss adolescents' sexual behavior in Islamic boarding schools using a risk-taking behavior theory and biopsychosocial approach. The results of this study reveal that biological maturations, self perceptions, perceptions of social, perceptions of spiritual and perceptual factors empirically proven to be able to map the multidimensional behavior of adolescent risky sexual behavior.

Biological maturations, either directly or indirectly, significantly influence risky sexual behavior. The results of this study are in line with previous study by Downing, which showed that biological factors play a role in risky sexual behaviour<sup>4</sup>. Puberty which is characterized by biological changes such as increased levels of sex hormones plays a role in brain development and in adolescent risk-taking sex hormones contribute to the reorganization of dopaminergic neurons in the motivational system, which can then lead to increased risk-taking and sensation seeking<sup>5 6 7 8 9</sup>. self perceptions in this study indicate that there is an influence on risky sex. The study conducted by Reuben et al, 2016 proved that self-efficacy is a psychological factor that greatly influences the emergence of risky sexual behavior<sup>10</sup>. Another indicator of psychological factors, namely self-esteem, from several studies results—shows that there is a relationship between self-esteem and risky sexual behavior. This statement is supported Kathleen et al, 2004 that adolescents who have low self-esteem reported starting sex earlier and having a risky partner<sup>11</sup>.

The perceptions of social and spiritual in this study also indicate that there is an influence on risky sexual behavior. This is in line with the study conducted by Masni, 2018, Settheekul et al., 2019 which showed that parent-adolescent communication, parental monitoring, perceived peer norms and types of school are significant predictors of adolescent sexual behaviour; this study shows that spiritual factors are the most influential factors on risky sexual behaviour. The study conducted by Fajar, 2015 regarding the relationship of religiosity with adolescent sexual behavior showed that adolescents with high religiosity had fewer risk factors for sexual behavior than adolescents with low religiosity<sup>12</sup>. This is relevant to the function of religion as an educational function, transformative function, peace function, creative function, savior function, sense fostering solidarity function, social control function and sublimation function.



Limitations in this study the possibility of confounding factors that can not be controlled by the researcher is the honesty of respondents in answering questions, this study is still limited to only female adolescents. For further research is expected to expand the target range not only in adolescent girls, in order to obtain a model of adolescent risky sexual behavior in different settings of adolescent life.

### **Conclusion**

This study reveals that a risk-taking behavior theory and a biopsychosocial approach can be used to predict risky sexual behavior and used as a theoretical basis for carrying out activities related to health promotive and preventive actions for adolescents, which focus on individual, family and peer group factors.

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# Risk Taking behaviour Adolescents

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