

VIRGINITY VALUE IN LATE ADOLESCENTS: CAN RELIGIOSITY BE A PREDICTOR?

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VIRGINITY VALUE PADA REMAJA AKHIR: APAKAH RELIGIOSITAS MEMILIKI PENGARUH?

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Abstrak

Tren terkini terhadap remaja di Indonesia menunjukkan peningkatan prevalensi remaja yang melakukan seks pranikah, sehingga juga menunjukkan bahwa *virginity value* (nilai keperawanan/keperjakaan) tidak dianut oleh semua remaja di Indonesia. Selain *virginity value*, perilaku seks pranikah juga berkaitan dengan religiositas. Penelitian ini menguji religiositas sebagai prediktor terhadap *virginity value* dengan menggunakan data dari 656 pelajar remaja akhir di Indonesia. Model regresi ordinal digunakan untuk menguji hubungan prediksi tersebut. Hasil studi menunjukkan bahwa religiositas merupakan prediktor positif yang signifikan terhadap *virginity value*. Hasil penelitian juga menunjukkan bahwa semua dimensi religiositas memiliki korelasi positif dengan *virginity value*. Temuan ini mengindikasikan pentingnya mempertimbangkan aspek religiositas dalam penyusunan program pendidikan dan intervensi terkait kesehatan seksual remaja di Indonesia.

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Abstract

Recent trends among adolescents in Indonesia indicate an increasing prevalence of premarital sexual behavior, suggesting that virginity value is not upheld by all Indonesian adolescents. In addition to virginity value, premarital sexual behavior is also associated with religiosity. This study examined religiosity as a predictor of virginity value using data from 656 late adolescent students in Indonesia. An ordinal regression model was employed to test the predictive relationship. The findings revealed that religiosity was a significant positive predictor of virginity value. The results also showed that all dimensions of religiosity were positively correlated with virginity value. These findings highlight the importance of considering religiosity in the development of educational programs and interventions related to adolescent sexual health in Indonesia.

Keywords: *adolescents, religiosity, sexual health, virginity value*

Impacts and Implications in the Indigenous Context

The research empirically confirms religiosity as a significant predictor of virginity value among late adolescents, highlighting that religion serves as an impactful social factor. Furthermore, the findings underscore the importance of culturally grounded sexual health education that aligns with the social and religious realities of Indonesian adolescents. These findings can inform an effective social approach for parents, educators, and policymakers, this means to continue teaching and reinforcing religious values. By instilling these principles, they can provide adolescents with a moral and ethical framework that promotes virginity value. This strategy leverages the deeply religious culture of Indonesia to protect and guide adolescents toward positive value.

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INTRODUCTION

Indonesian Demographic and Health Survey (IDHS) in 2017 showed that at least .9% ($N = 6,750$) female adolescents and 3.6% ($N = 7,713$) male adolescents aged 15–19 years old have had premarital sex (National Population and Family Planning Board [BKKBN] et al., 2018). This behavior has serious negative consequences, including premarital pregnancies. According to the same survey, 16.4% ($N = 74$) of female adolescents and 7.4% ($N = 279$) of male adolescents reported premarital pregnancies. The problem is widespread, with a report from the Guttmacher Institute, indicating that unintended pregnancies accounted for 40% of all pregnancies in Indonesia between 2015 and 2019 (United Nations Population Fund [UNFPA], 2022).

Adolescence is a complex developmental stage where individuals navigate significant biological and psychological changes. According to Sullivan's Interpersonal Theory, late adolescence—usually during secondary school ages 15–18—is marked by a heightened interest in intimacy and lust (Feist & Feist, 2008). This refers to the psychosexual developmental stage when late adolescents are in genital phase, that is, they experience stronger sexual urges than before to be channeled into sexual activities (Hanifah et al., 2022), which can be a challenge in Indonesia's conservative social and religious context where premarital sex is not accepted.

While adolescents at this stage are developing adult-like reasoning, their cognitive skills are still immature. They tend to be more egocentric which makes their thoughts less realistic and their emotions may become unbalanced (Marbun & Stevanus, 2019). This immaturity, combined with a tendency to rely on emotion-driven networks rather than cognitive-control networks, can lead to risky decision making (Papalia et al., 2009). This developmental dynamic makes adolescents vulnerable and highlights the importance of factors that can guide their behavior. Without a strong understanding of interpersonal relationships and sex, as taught by religion, this dynamic can lead to premarital sex (Marbun & Stevanus, 2019).

The negative impacts of premarital sex are substantial. A significant number of adolescents resort to abortion; for instance, 20% ($N = 6,750$) of female and 15.1% ($N = 7,713$) of male adolescents admitted to knowing someone who had an abortion due to a premarital pregnancy (National Population and Family Planning Board [BKKBN] et al., 2018). Furthermore, premarital pregnancy often leads to adolescents dropping out of school, as seen in Batam where 451 students left school for this reason between 2019 and 2021 (Setiawan, 2021). These statistics underscore the urgent need to understand the factors that predict adolescents' sexual behavior.

One such guiding factor for premarital sex is virginity value, defined as an individual's belief about the importance of remaining a virgin until marriage (Ambaw et al., 2010). Virginity refers to a condition where an individual is not yet involved in sexual activity involving full penetration by the penis of the vagina (Ambaw et al., 2010). A strong virginity value is a known deterrent to premarital sexual behavior, namely, the higher an individual's virginity value, the lower the premarital sexual behavior (Slamet, 2016; Wanodya & Dwiyantri, 2020). In the context of Indonesia, where social and religious norms strongly discourage premarital sex, understanding what predicts this value is crucial.

Previous studies also have consistently demonstrated a clear link between religiosity and premarital sexual behavior (Anggara et al., 2015; Maulina & Purwati, 2020; Susanti, 2019; Wulandari & Rahmawati, 2017). For instance, highly religious individuals are more likely to exercise self-control (Wulandari & Rahmawati, 2017) and demonstrate obedience to religious teachings (Susanti, 2019). These practices, in turn, help form personal values and moral standards that guide their behavior (Maulina & Purwati, 2020). Together, these findings suggest that religiosity acts as a protective factor by shaping different aspects of an individual's ethical and behavioral framework.

Religiosity is an individual's inner attitude before God, that is personal and lived in the form of behavior, belief, obedience and knowledge of their religion (Wulandari & Rahmawati, 2017). Furthermore, religiosity can be seen from four dimensions, including (Saroglou, 2011): (1) Believing which displays cognitive aspects that believe in the existence of transcendent God and its connection to the meaning of life. This aspect is characterized by belief in ideas, norms and symbols; (2) Bonding which displays the affective aspect or emotional bond that is felt through religious activities. This aspect is characterized by the quality of emotions that humans experience with God (such as awe) which increases the individual's desire to behave religiously; (3) Behaving which displays behavior in accordance with moral standards from a religious perspective; and (4) Belonging which displays social aspects related to individual involvement in religious communities of believers. This aspect refers to a community that provides a space to share beliefs, emotions, and morality which then forms cohesiveness within the community. This community space also serves for people to reflect on their behavior and reality of their lives against a shared set of beliefs.

However, in the context of adolescents, there is still a lack of empirical evidence to confirm religiosity as a predictor of virginity value. This study aims to fill a gap in the existing literature by empirically testing the predictive role of religiosity on virginity value among Indonesian late adolescents. While late adolescents are in the synthetic-conventional faith stage, where they begin to build and commit to their belief system, and establish a more personal relationship with God (Fowler's stages of faith), they still heavily rely on the standards of their community regarding moral

authority (Papalia et al., 2009). This suggests that their faith is deeply intertwined with their social environment. Therefore, this research also explores how religiosity, encompassing belief, emotional bonding, behavior, and social belonging (Saroglou, 2011), might shape an adolescent's virginity value. The findings are expected to contribute to the existing body of literature and help inform more effective public policies and educational strategies that integrate religiosity as a key factor in preventing premarital pregnancies, an aspect not yet emphasized in current interventions (Setiawan, 2021).

METHODS

Participants

The participants in this research were late adolescents in Indonesia aged 15–18 years, as defined by Sullivan's Interpersonal Theory (Feist & Feist, 2008). The study utilized a two-stage non-probability sampling design. In the first stage, purposive and convenience sampling (Gravetter & Forzano, 2011) were used to select the participating institutions based on their geographical location and religious profile. To ensure representation across Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi)—Indonesia's most populous metropolitan area—schools were identified via the Dapodik database and contacted systematically. Specifically, a mix of national and private schools was targeted to ensure a religiously diverse sample, reflecting the Indonesian educational landscape where non-Islam students often attend private institutions. The final sample consisted of the first school in each of the five regions ($n = 1$) to grant institutional consent: a national senior high school in Jakarta, a private senior high school in Bogor, a national senior high school in Depok, a private vocational school in Tangerang, and a national senior high school in Bekasi. In the second stage, a cluster sampling technique (Gravetter & Forzano, 2011) was applied within these five schools, collecting data from full classroom groups to reach an aggregate sample of 656 respondents.

Although obtaining parental consent for each student was challenging, the researchers were able to collect data from minors (under 17 years old) after securing ethical approval from an institutional review board (IRB). Permission to conduct the study was also obtained from school principals. Additionally, informed consent was obtained from all students who participated in the study.

Data were collected among 656 survey respondents, with women representing the majority. The participants had a narrow age range, so the distribution of participants is quite even age-wise, except for 7.01% of the respondents who were aged 18 years. All six of the official religions

recognized in Indonesia were represented in the sample, with the largest distribution respectively being Islam, Christianity, Catholicism, Buddhism, Confucianism and Hinduism. Further details of the participant demographics can be seen in Table 1 below.

Table 1.
Participant Demographic Data

Characteristics	Total (n)	Percentage (%)
Sex		
Male	304	46.34%
Female	352	53.65%
Age		
15	182	27.74%
16	261	39.79%
17	167	25.46%
18	47	7.01%
Religion		
Islam	376	57.32%
Christianity	192	29.27%
Catholicism	55	8.38%
Buddhism	30	4.57%
Confucianism	2	0.31%
Hinduism	1	0.15%

Design

This study is a quantitative research study using an ordinal regression model. Ordinal regression is suitable for testing the predictive relationship between religiosity and virginity value that possess an ordinal dimension. This model is specifically designed to examine predictive variables within an ordinal framework (Williams & Quiroz, 2020). Thus, ordinal regression is appropriate for Likert-type data.

Procedure

The research procedure began with securing ethical approval from an Institutional Review Board (IRB) to safely conduct research involving minors. Then, the instruments were prepared: the Four Basic Dimension of Religiousness Scale (4BDRS) was used in its existing Indonesian version, while the Virginity Value Scale underwent a forward-backward translation. A preliminary pilot study was conducted among 115 respondents to verify scale validity and reliability, after which all finalized items, demographic questions, and informed consent protocols were compiled into a digital Google Form. Using the Dapodik database, a religiously diverse selection of national and private high schools across the Jabodetabek region was identified. Formal administrative permission was secured from the principals of five consenting schools, who acted as institutional guardians. The main data collection

was executed via cluster sampling within each school. Students were briefed on data confidentiality, provided active informed consent, and completed the online survey to yield a final aggregate sample of 656 respondents. Finally, data were analyzed using JASP 17.0 and IBM SPSS Statistics 23.

Instruments

The research instrument consisted of two scales which were administered in a Google form. The first scale is the Four Basic Dimension of Religiousness Scale (4BDRS) compiled by Saroglou (2011) and adapted into Indonesian by Aditya et al. (2021) to measure religiosity. The 4BDRS instrument measures four dimensions: (1) Believing which indicates whether late adolescents believe in the existence of God, (2) Bonding indicates their emotional connection with God, expressed through religious activities and rituals, (3) Behaving which indicates whether they behave in accordance with their religious perspective, and (4) Belonging which indicates their involvement in their religious communities (Aditya et al., 2021).

This scale consists of twelve items with responses on a seven-point Likert scale (1 = “Strongly Disagree”; 7 = “Strongly Agree”). The items are divided into four dimensions, each consisting of three items. To represent the level of religiosity, the items were aggregated into a composite mean score for each participant. Following the logic of Likert-type scales, this average was interpreted as an ordinal-level measurement, where a higher numerical value indicates a higher relative position (rank) on the religiosity continuum. Additionally, the average score for each dimension was calculated to represent the individual’s level within that specific domain.

4BDRS has gone through factorial and univariate tests that verify the validity ($CFI > .95$, $RMSEA \leq .06$) and reliability ($.78 < \alpha < .88$) in measuring religiosity in Indonesia (Aditya et al., 2021). The try-out results also showed that all items were classified as good (item-rest correlation = $.350 - .812$), reliable ($.584 \leq \alpha \leq .894$), and valid ($p \leq .05$).

The second instrument is the Virginité Value Scale (Ambaw et al., 2010), which measures individual attitudes toward virginité. This scale consists of five items with responses on a five-point Likert scale (1 = “Disagree”; 5 = “Agree”). Previous study in Indonesia has demonstrated its reliability ($\alpha = .836$; Patmawati, 2013). To operationalize the variable for analysis, the five ordinal items were aggregated into a composite average. This average serves as an ordinal-level measurement; a higher mean score signifies a higher rank in the endorsement of virginité value, placing participants on a hierarchy of value adherence

In the process of adapting the scale, a forward-backward translation procedure was conducted. Forward translation was carried out by both the researcher and a translator. From the translation

results, a synthesized version was obtained and checked by the supervisor to produce a pre-final version of the items. Subsequently, backward translation was carried out by another translator to compare the translated version with the original items. No semantic discrepancies were identified in any of the items. Thus, the adapted items were designated as the final version. The results of the pilot study among 115 respondents showed that all items demonstrated good item-rest correlations (.583–.730), high reliability ($\alpha = .840$), and significant validity ($p < .05$).

Analysis Strategies

The statistical analysis for this study was performed using JASP 17.0 and IBM SPSS Statistics 23. JASP was chosen for its user-friendly interface and efficiency, while SPSS was utilized to conduct the ordinal regression analysis, a feature not yet available in JASP. This dual software approach ensured all necessary analyses could be completed.

Descriptive tests were carried out using JASP to visualize the distribution of participants of the religiosity and virginity value variables. The normality test was also carried out to see whether the data obtained was normally distributed, which was also an assumption test for correlation tests (Gravetter & Wallnau, 2013).

A correlation test was performed using JASP to determine the relationship between religiosity and virginity value, which will also include dimensions of religiosity. Subsequently, an ordinal regression test was carried out with SPSS to determine whether religiosity is a significant predictor of virginity value. From the ordinal regression model, the results to be analyzed are model fitting information, goodness-of-fit, test of parallel lines, pseudo *R*-squared, parameter estimates, and cumulative probability.

RESULTS

Descriptive Statistical Test

Figure 1 and Table 2 present the descriptive analysis of the variables. Religiosity scores ranged from one to seven ($M = 5.893$, $SD = 1.078$). To interpret these findings within an ordinal framework, the composite mean for each participant was treated as an ordinal-level measurement. The majority of participants were positioned at rank 6 ($n = 268$), with only a small minority ($n = 4$) at the lowest rank.

Likewise, virginity value ranged from 1 to 5 ($M = 3.998$, $SD = 1.040$) with the highest rank (rank 5) being the most frequent response ($n = 260$), indicating a high level of adherence to virginity

value across the sample. By reporting both the frequency of ranks and the composite mean, the data captures both the specific distribution and the overall central tendency of the ordinal categories.

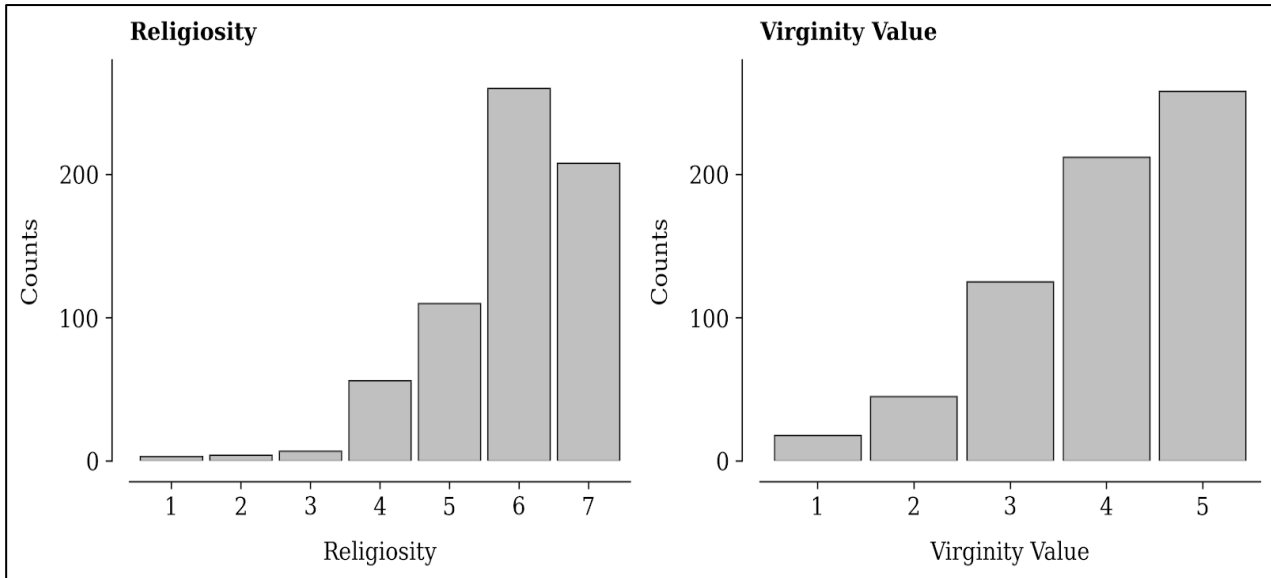


Figure 1. Participants' Level of Religiosity and Virginity Value

Table 2.

The Distribution of Total Score

Total Score/Rank	Religiosity	Virginity Value
1	4	17
2	4	43
3	7	124
4	56	212
5	109	260
6	268	
7	208	

Normality Test

The results of the normality test show that the data for both religiosity and virginity value are not normally distributed. This is because the significance values from the Shapiro-Wilk test for both religiosity ($p < .01$) and virginity value ($p < .01$) do not meet the standard threshold for a normal distribution ($p > .05$; Gravetter & Wallnau, 2013). This finding directly determined the choice of statistical analysis. Given the violation of the normality assumption, which is a prerequisite for parametric tests like Pearson's correlation, a non-parametric approach was required. Consequently, the preliminary hypothesis test was conducted using Spearman's correlation, a robust non-parametric test that assesses monotonic relationships without assuming a specific data distribution.

Correlation Test

The correlation analysis indicates a significant positive correlation between religiosity and virginity value ($r = .318, p < .001$). Significant positive correlations were also found across all four dimensions of religiosity, namely believing ($r = .337, p < .001$), bonding ($r = .192, p < .001$), behaving ($r = .271, p < .001$), and belonging ($r = .317, p < .001$).

Ordinal Regression Test

The model fitting information explains whether the model when including predictor variables (final) can provide better predictions compared to without predictor variables (intercept only; Kadir & Omer, 2021). The final model showed a significant improvement in fit over the intercept-only model, $\chi^2(1) = 88.825, p < .001$, with the -2 log likelihood decreasing from 187.262 to 98.437. Because the significance value meets the standard ($p < .05$), this model is significantly better at predicting the outcome than the intercept-only model.

The goodness-of-fit test explains whether this model fits the research data used. By looking through Pearson's Chi-square test statistics for model fit and deviance, these two tests show whether the observed data and predicted values coincide as indicated by a significance value of $< .05$ (Kadir & Omer, 2021). The analysis revealed that both the Pearson test, $\chi^2(23) = 20.806, p = .593$, and the Deviance test, $\chi^2(23) = 24.786, p = .361$, yielded non-significant results. Because the significance value is greater than $.05$, there was no significant difference between the observed and predicted values, indicating good model fit. Hence, the model is deemed suitable for use on this research data.

Next, the test of parallel lines tests the assumption in the ordinal regression model to test proportional odds, with the assumption that the odds are proportional in each category (Kadir & Omer, 2021). This test is essential for ensuring that the model's coefficients are valid and the results can be reliably interpreted. The generalized model did not significantly improve fit over the null hypothesis model, $\chi^2(3) = 2.884, p = .410$, with the -2 log likelihood changing slightly from 98.437 to 95.553. Because the significance value is greater than $.05$, the odds are proportional in the four categories. Hence, the assumption test for ordinal regression is met.

Furthermore, Table 3 below shows the Wald test and significance values which indicate whether religiosity is a significant predictor of virginity value, as well as the significance of the estimated coefficient (Meiza, 2023). Based on Table 3, religiosity significantly predicts virginity value ($\chi^2 = 88.839, p < .001$), with a coefficient of $.666$. This indicates that the effect of religiosity was assumed to be constant across thresholds under the proportional odds assumption.

Table 3.
Parameter Estimates

		Estimate	Std. Error	Wald	df	p-value
Threshold	Virginity Value = 1	-.007	.439	.000	1	.988
	Virginity Value = 2	1.428	.405	12.459	1	< .001
	Virginity Value = 3	2.909	.413	49.610	1	< .001
	Virginity Value = 4	4.408	.432	104.026	1	< .001
Location	Religiosity	0.666	.071	88.839	1	< .001

Additionally, constants are obtained at each threshold on the virginity value which differentiate the logit function into four functions that apply to each category (Meiza, 2023). In this case, the constant is obtained from the estimated value in Table 3 above. Furthermore, the significance value tests the significance of these constants, so that functions (2), (3), and (4) are considered significant, while function (1) is not significant. In this way, a regression model equation can be created as follows:

$$\text{Logit}(Y1) = -0.007 - 0.666 (\text{Religiosity}) \quad (1)$$

$$\text{Logit}(Y2) = 1.428 - 0.666 (\text{Religiosity}) \quad (2)$$

$$\text{Logit}(Y3) = 2.909 - 0.666 (\text{Religiosity}) \quad (3)$$

$$\text{Logit}(Y4) = 4.408 - 0.666 (\text{Religiosity}) \quad (4)$$

The above function helps to see the cumulative probability which is calculated using the following formula:

$$Cpk = \exp(\text{Logit}(Yj)) / (1 + \exp(\text{Logit}(Yj))) \quad (5)$$

Table 4 shows the individual cumulative probabilities, which are important for understanding how the model predicts the likelihood of an individual falling into a specific category or a lower category. In practical terms, these probabilities inform the relationship between religiosity and virginity value. From this table, it can be seen that an individual with a religiosity value on a scale of 1 will most likely have a virginity value on a scale of one or two. This suggests a strong correlation between low religiosity and a lower virginity value. Likewise, an individual with a religiosity value of 2 will most likely have a virginity value of 2 or 3, and so on.

Pseudo R-Square indicates how much of the variance in the dependent variable is explained by the independent variable. The model yielded a Cox and Snell value of .127, a Nagelkerke value of .136, and a McFadden value of .051. Specifically, the Nagelkerke Pseudo R-square value indicates that religiosity explains approximately 13.6% of the variance in virginity value (Kadir & Omer, 2021). These findings highlight that a significant portion of the variance is unexplained by the model, suggesting that other unmeasured factors also play a role in determining virginity value.

Table 4.
Cumulative Probability (C_{pk}) of Ordinal Regression Model

C_{pk}	Virginity Value					
	1	2	3	4	5	
Religiosity	1	33.78%	34.40%	22.23%	7.28%	2.32%
	2	20.77%	31.63%	30.48%	12.71%	4.41%
	3	11.87%	24.26%	35.20%	20.44%	8.24%
	4	6.47%	16.04%	33.58%	29.02%	14.88%
	5	3.43%	9.56%	26.64%	34.98%	25.39%
	6	1.79%	5.33%	18.10%	34.94%	39.84%
	7	0.93%	2.86%	10.98%	28.92%	56.32%

Apart from that, the ordinal regression test also shows the odds ratio (OR), which is taken from the exponent of the logit value (Kadir & Omer, 2021). The OR for religiosity was 1.946, which indicates that for every one-unit increase in an adolescent’s religiosity score, the odds of being in a higher category of the virginity importance variable increase by 94.6%. In simpler terms, adolescents with higher levels of religiosity are significantly more likely to place greater importance on virginity value.

DISCUSSION

The descriptive analysis shows that participants reported high scores for both religiosity and virginity value. These findings align with broader research on the Indonesian population, which consistently shows a high commitment to religion. For example, a study by Tamir et al. (2020) found that 98% of Indonesians have a strong religious commitment and believe that religion is very important in their lives. This external finding validates the high religiosity scores observed in the sample, confirming that this research data accurately reflects a key characteristic of Indonesian society.

Moreover, the connection between religiosity and personal values in our study is supported by findings from Tamir et al. (2020), which noted that 96% of Indonesians believe that faith in God

is necessary for having good values. This context helps explain why our participants reported high scores on virginity value, as it is often considered a moral and religious virtue. The strong, significant positive correlation between these two variables, as demonstrated by our correlation test, further reinforces the finding that religiosity is closely tied to the moral values held by Indonesian adolescents. Thus, our research findings are consistent with existing literature that highlights the relationship between religiosity and morality in Indonesia.

Furthermore, this study statistically establishes religiosity as a significant predictor of virginity value, as evidenced by the ordinal regression analysis. These findings demonstrate that an increase in religiosity significantly raises the probability of holding higher virginity value. This is consistent with religious teachings that emphasize and reinforce the importance of maintaining sexual purity.

All six major religions in Indonesia share the same view that virginity should be maintained until marriage. In Islam, premarital sex or adultery is a *fahisyah* or heinous act (Zumaro, 2021). This act is classified as the third major sin with the punishment given to the perpetrator being flogged 100 times and prohibited from marrying or being married to a woman who has not committed adultery (Zumaro, 2021). In Christianity (Protestant and Catholic), God created sexuality as His good and holy gift (Tampenawas & Mangantibe, 2020) to mankind. God's will in sexuality is clear that it can only be done in marriage, which is an institution that God esteems, otherwise premarital sex will be judged as a sin of adultery (Tampenawas & Mangantibe, 2020). God forbids adultery as stated in the seventh commandment (Torah), which reads "You shall not commit adultery" (Alkitab, 2019, Exodus 20:14). In Buddhism, the prohibition of premarital sex can be seen in the five precepts, which are the most important rules for its followers. Of the five precepts, there is a third precept which refers to the prohibition of adultery, which in English reads, "I undertake the training-precept to abstain from sexual misconduct" (Oktaviani & Agusmidah, 2023, p. 184). In Hinduism, the prohibition on premarital sex can be seen in MDS VIII. 367 and 372, Manawa Dharmasastra VIII.359, which says that "A non-Brahmin is threatened with the death penalty for committing adultery, because wives of the four colors must be strictly protected" (Oktaviani & Agusmidah, 2023, p. 184). In Confucianism, the prohibition of premarital sex can be seen in the holy book of Si Shu (Holy Words XII: 1–2) where the Prophet said "What is immoral must not be seen, what is immoral must not be heard, what is immoral must not be talked about, and what is immoral must not be done" (Oktaviani & Agusmidah, 2023, p. 184). Thus, the taught values mentioned above will be implemented and conflicting behavior will be avoided. Therefore, individuals who have high religiosity will also have a high virginity value.

However, these findings must be interpreted critically given the national data indicating substantial rates of premarital sexual activity among Indonesian adolescents, which presents a significant value-behavior gap. While our participants' high virginity value reflects the predictive role of religiosity, national trends suggest that this perceived value does not universally translate into consistent behavioral practice. This suggests that virginity value may function more as a socially desirable ideal than a fully internalized, behavior-guiding principle, particularly when adolescents confront compelling counterinfluences such as peer pressure, media exposure, or situational contingencies (Papalia et al., 2009). For instance, the initial widespread adoption of the internet in the USA previously corresponded with major shifts toward greater acceptance of premarital sex (Papalia et al., 2009). This historical parallel indicates that Indonesia's current, far more saturated digital environment poses a significant risk of shifting adolescent sexual attitudes, further exacerbating the gap between religious values and behavioral outcomes. This is supported by external Indonesian findings: a review by Realita et al. (2022) confirmed a correlation between social media use and adolescent premarital sexual behavior in eight out of ten studies. A deeper exploration of this phenomenon, focusing on the attitude-behavior gap, is essential to understand the complexity.

The dynamics of this predictive relationship are further explained by the four dimensions of religiosity, each of which demonstrates a significant positive correlation with the virginity value ($p < .001$). This means that the dimensions of believing, bonding, behaving, and belonging have a relationship with an individual's virginity value. Individuals with high religiosity have the belief and desire to behave according to the teachings of their religion. Individuals believe in the existence of a transcendent God, and this belief makes individuals have confidence in the ideas and norms taught in religion (Saroglou, 2011). Apart from the intellectual aspect, individuals also have an emotional bond with God with a sense of admiration evoking a desire to behave piously (Saroglou, 2011). Therefore, the beliefs and desire to follow existing moral standards shape an individual's virginity value. Thus, individuals with high religiosity will also have high virginity value in accordance with the moral standards taught, because the individual is convinced to follow them.

High religiosity is associated with belonging to a religious community which reinforces beliefs, emotions and morality (Saroglou, 2011). In turn, the practice of shared beliefs, including virginity value, reinforces social cohesion and community identity. The dimension of belonging clarifies why religiosity maintains its predictive power, although theoretical frameworks suggest that adolescents are more likely to conform to community standards than to God (Papalia et al., 2009). Indonesian society, which has a high commitment to religiosity (Tamir et al., 2020), will form

community standards that encourage adolescents to also be committed to God. Thus, adolescents' tendency to conform to community standards is also in line with obedience to God.

This research has several limitations, particularly regarding its data. The non-normal distribution of the data restricts the generalizability of the findings, as it violates the assumptions of common parametric statistical tests (e.g., Pearson correlation, regression). While appropriate non-parametric tests (e.g., Spearman's correlation) were used, this approach carries a limitation of reduced statistical power, which increases the risk of a Type II error (failing to detect a true relationship; (Gravetter & Walnau, 2017). The sample was also heavily weighted toward respondents from Islam and Christianity, with minimal representation from other faiths. This religious imbalance limits the generalizability of the findings across Indonesia's diverse religious landscape.

The study may also be affected by social desirability bias ("faking good"), a tendency for participants to present themselves favorably (Monaro et al., 2020). To mitigate this, researchers took several steps. They explained the informed consent process and encouraged participants to respond honestly based on their own thoughts, feelings, and beliefs. To further ensure honest responses, participants were also assured of anonymity and confidentiality, which helps reduce the pressure to provide socially acceptable answers.

CONCLUSION AND RECOMMENDATIONS

This study demonstrated that religiosity is a significant positive predictor of virginity value, a primary finding supported by a detailed correlation analysis showing a significant positive relationship between virginity value and all four dimensions of religiosity. Through the dimension of believing, late adolescents internalize religious teachings that uphold virginity value. The bonding dimension, or an emotional connection with God, inspires adolescents to live a pious life that aligns with their faith's teachings on purity. Furthermore, behaving in accordance with religious principles directly translates into actions consistent with a high virginity value. Lastly, belonging to a religious community reinforces these behaviors, as adolescents conform to community standards for virginity value.

This study suggests that leveraging religiosity can serve as a powerful protective factor in promoting virginity value. Practically, this implies that parents and schools should continue to teach and reinforce religious values to instill a strong moral and ethical framework. Encouraging adolescents to foster a close relationship with God, follow religious teachings, and engage with their faith community leverages Indonesia's deeply religious culture to guide them toward positive values.

Future research should examine the moderating roles of family dynamics, peer influence, and digital media on the religiosity-virginity value relationship and exploring the findings across different developmental stages and diverse religious cultures to determine broader applicability. Additionally, studies should investigate the attitude-behavior gap, identifying effective interventions that translate religious values into consistent adolescent behavior. Further work is also needed on methodological refinement to minimize error, particularly participant response bias, through an emphasis on anonymity, confidentiality, and validated instruments.

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COMPLIANCE WITH ETHICAL STANDARD

Ethical Statement

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

Conflict of Interest

All authors declare no conflict of interest.

Daya Availability

The datasets associated in this study are not publicly available due to confidentiality.

USE OF AI SERVICES

The authors declare that they used Gemini and Grammarly services, specifically for translation assistance, grammar correction, and minor stylistic refinements to ensure a concise scientific tone. All suggestions provided by these services were carefully reviewed and edited by the authors to ensure that the original meaning and factual accuracy were maintained.

AUTHOR CONTRIBUTIONS

RAVS conceptualized and designed the study, developed the methodology, and conducted the research investigation, data collection, and project administration. P supervised the research process, advised on the study design, and co-managed funding acquisition. RAVS drafted the manuscript, and P provided critical guidance and revisions. Both authors approved the final manuscript.

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