

## Religiosity and Neuroticism: Exploring the Psychological Characteristics of Coastal Communities in Tlocor

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### ABSTRACT

This study aimed to examine the relationship between religiosity and tendencies toward neuroticism among coastal communities in Tlocor Beach. Using a quantitative correlational design with 110 respondents, data were collected through religiosity and neuroticism scales. Simple linear regression analysis indicated no significant relationship between the two variables. These findings suggest that levels of religiosity, whether high or low, do not influence tendencies toward neuroticism among coastal populations. The discrepancy between these results and previous studies may be attributed to the socio-cultural characteristics of the community and the potential presence of social desirability bias in completing the instruments.

**Keywords :** Religiosity, Neuroticism, Coastal Communities.

### INTRODUCTION

Indonesia is the world's largest archipelagic country, located in the tropical region and intersected by the equator, with marine waters covering approximately 70% of its total territory and characterized by rich marine biodiversity (Badan Pusat Statistik, 2024). The vast number of islands and abundant marine resources have led many coastal residents to rely on occupations such as fishing, aquaculture, fish farming, and other livelihoods associated with the utilization of marine resources. One coastal area that reflects these conditions is the coastal community of Tlocor Beach.

The coastal community of Tlocor Beach predominantly works as fishermen, pond farmers, and seafood collectors, living under conditions that require a high level of adaptability to various environmental stressors. One such stressor is adverse weather conditions, during which fishermen are unable to carry out fishing activities. High levels of environmental stress among fishermen have been shown to be associated with greater symptoms of anxiety (Hu et al., 2022). According to the diathesis–stress model, these symptoms are not solely caused by external stressors but are also influenced by internal vulnerabilities, such as neurotic personality traits, which render individuals more susceptible to anxiety disorders when facing stressful situations.

Neuroticism, one of the dimensions within the Big Five personality model, explains individual differences in emotional adaptability and maladjustment. Individuals with high levels of neuroticism are more prone to experiencing negative emotions such as fear, anxiety,

and irritability (Martika Anggriana, 2021). In addition, individuals high in neuroticism tend to avoid risk and exhibit heightened sensitivity to stress-related threats (Van Scoy et al., 2023). Conversely, individuals with lower levels of neuroticism typically demonstrate emotional stability, are less easily angered, more relaxed and calm, and show a neutral response to stress with lower levels of negative affect (Zhang, 2020).

Neuroticism develops through the interaction of genetic and environmental factors (Tackett & Lahey, 2016). Individuals with higher levels of neuroticism tend to have a stronger tendency to recall negative experiences (Mader et al., 2023). From a trait–state perspective, both genetic and environmental influences contribute significantly, with environmental factors playing a more dominant role in state aspects and becoming increasingly relevant with age, as environmental exposure contributes to elevated levels of neuroticism (Pelt et al., 2024). Neuroticism has been associated with an increased risk of various health conditions, including neuropsychiatric disorders, cardiometabolic diseases, infections, and multimorbidity, defined as the co-occurrence of two or more chronic diseases (Huang et al., 2025)

In this context, one factor presumed to influence levels of neuroticism is religiosity. Religiosity refers to an individual's awareness of and adherence to religious teachings, manifested through daily behaviors, in which individuals not only understand religious rules and principles but also practice them with devotion as an expression of internalized religious values (Alwi, 2018). Religiosity can provide inner peace, reduce stress throughout the lifespan, and enhance individuals' capacity to adjust to everyday life stressors (Whitehead & Bergeman, 2020).

Within coastal communities, religiosity often serves as a source of comfort and a coping mechanism that strengthens psychological resilience (Zahroo et al., 2024). Religiosity plays an important role in the daily lives of fishermen by helping them cope with occupational uncertainty and fostering a belief that occupational success is achieved through prayer and reliance on God (Baedowi et al., 2024).

Based on these conditions, this study aims to examine the relationship between religiosity and tendencies toward neuroticism among the coastal community of Tlocor Beach, given the high levels of environmental and social stress experienced by fishermen. This study is motivated by the need to understand how religious values may contribute to emotional stability amid economic and occupational uncertainty. Using a quantitative approach with a questionnaire-based method employing Likert-type scales, data were collected through validated and reliable measures of religiosity and neuroticism. The results indicate that there is no significant relationship between religiosity and levels of neuroticism among the coastal community.

## **LITERATURE REVIEW**

Neuroticism is a personality dimension characterized by vulnerability to negative emotional experiences, including anxiety, nervousness, sadness, and tension, and is considered the opposite of emotional stability. In addition, neuroticism has been defined as one of the most complex personality factors in relation to health, marked by persistent patterns of anxiety, worry, low mood, and negative affect, in contrast to calmer, more stable emotional conditions

and more balanced social reactivity (Friedman, 2019). Neuroticism plays a role in increasing individuals' vulnerability to various adverse life outcomes and in impairing adaptive capacities when facing stress or pressure (Widiger & Oltmanns, 2017). Based on these definitions, neuroticism can be understood as a personality trait characterized by emotional instability, anxiety, nervousness, sadness, tension, and difficulties in coping with stress.

According to the Big Five Personality Theory, the facets of neuroticism include six components: anxiety, anger, self-consciousness, depression, impulsiveness, and vulnerability. From the perspective of the Triple Vulnerability Theory, the development of neuroticism is influenced by general biological vulnerability, which refers to neurotic personality traits shaped by biological risk factors, including genetic and neurobiological influences. Empirical evidence suggests that genetic contributions to neuroticism range from approximately 40% to 60%. These genetic factors influence neurobiological reactivity, such as amygdala hyperexcitability and reduced inhibitory control in prefrontal regions. Beyond genetic influences, serotonin gene polymorphisms have also been associated with heightened emotional responsiveness and increased risk for emotional dysregulation. However, environmental factors, such as childhood stress or trauma, play a crucial role in triggering stress responses that may contribute to the development of neuroticism. Furthermore, at the level of specific psychological vulnerability, neuroticism is closely associated with emotional disorders arising from the interaction of psychological and biological factors. Individuals with high levels of neuroticism are more prone to experiencing negative emotions, particularly anxiety and depression (Barlow dkk., 2014). In this context, individuals with neurotic tendencies are more susceptible to environmental influences, especially through learning experiences. One form of environmental experience that may exert a significant influence on individuals with neurotic tendencies is religiosity, which can serve as a source of inner peace.

Religiosity is defined as the degree of an individual's beliefs and attitudes toward the religious teachings they adhere to, accompanied by the practice of religious rituals in relation to God and fellow human beings, as an effort to find meaning in life and achieve well-being (Suryadi & Hayat, 2021). From another perspective, religiosity is understood as a system of personal religious constructs that functions as a motivational system within an individual's personality.

Religiosity comprises five core dimensions: intellectual, ideological, public practice, private practice, and religious experience. The intellectual dimension reflects an individual's knowledge, interest, and understanding of religious matters. The ideological dimension represents fundamental beliefs in the existence of a spiritual reality that is taken for granted and serves as the foundation of religious teachings. Public religious practice refers to an individual's involvement in religious communities through participation in collective rituals and communal activities. Private religious practice reflects personal devotion to transcendence through individual rituals and spiritual activities, such as prayer and meditation. Religious experience describes an individual's emotional relationship with ultimate reality, which may manifest as direct, dialogical spiritual experiences. Factors influencing religiosity can be viewed from two aspects: objective and subjective. From the objective aspect, religious individuals adhere to divine prescriptions established by God, with

beliefs strengthened by external factors, namely divine guidance as recorded in sacred texts, leading to the perception of religious truth as absolute. From the subjective aspect, religiosity emerges from internalized beliefs that develop within the individual. These beliefs are shaped through personal understanding of sacred texts, which are then interpreted and integrated as guiding principles in the practice of religious life.

## METHODS

A total of 110 participants from the Tlocor hamlet community were selected to take part in this study based on the following inclusion criteria:

- a. Residents of Tlocor Hamlet,
- b. Male or Female,
- c. Married, and
- d. Engaged in occupations or earning income derived from marine resources, such as fishermen, fish farmers, laborers, pond farmers, traders, and other related professions.

**Table 1. Number of Respondents by Gender**

Category	Frequency	Percentage (%)
Male	97	88,2%
Female	13	11,8%
<b>Total</b>	<b>110</b>	<b>100%</b>

**Table 2. Number of Respondents by Age**

Age	Frequency	Percentage (%)
<30 years old	7	6,36%
30-39 years old	29	26,36%
40-49 years old	45	40,9%
50-59 years old	21	19%
60-69 years old	5	4,45%
>70 years old	3	2,27%
<b>Total</b>	<b>110</b>	<b>100%</b>

**Table 3. Number of Respondents Based on Faith**

Category	Frequency	Percentage (%)
Islam	110	100%
<b>Total</b>	<b>110</b>	<b>100%</b>

This study employed a quantitative approach with a correlational design. This method was used to identify the degree of association between two or more variables and how they are interrelated. The research was conducted within a specific population to observe the relationships among the variables examined. Data were collected using Likert-type scales. Likert scales are designed to assess individual attitudes along a continuum, in which

respondents evaluate themselves based on statements presented in the questionnaire. In general, Likert scales use a scoring range from 1 to 5. The scale items consist of two types: favorable items, which reflect supportive statements, and unfavorable items, which reflect non-supportive statements.

In this study, the neuroticism scale consisted of 48 items, divided equally into favorable and unfavorable items, with 24 items in each category. This instrument was developed based on the dimensions of neuroticism, namely anxiety, angry hostility, self-consciousness, depression, impulsiveness, and vulnerability. The scale was administered to the coastal community of Tlocor Beach and demonstrated satisfactory validity and reliability.

**Table 4. Neuroticism Scale Validity Test**

<b>Initial number of items</b>	<b>Tested</b>	<b>Number of items failed</b>	<b>Number of items remaining</b>	<b>Description</b>
46	I	1	45	Index corrected item ranges from 0,157 to 0,735
45	II	-	45	Index corrected item ranges from 0,325 to 0,730

**Table 5. Neuroticism Scale Reliability Test Results**

<b>Rounds</b>	<b>Initial number of items</b>	<b>Number of valid items</b>	<b>Number of items eliminated</b>	<b>Cronbach's Alpha</b>
I	46	45	1	0,945
II	45	45	-	0,946

The religiosity scale consisted of 40 items, also divided into favorable and unfavorable items, with 20 items in each category. This instrument was developed based on the dimensions of religiosity proposed by Huber & Huber (2012), which include intellectual, ideological, public practice, private practice, and religious experience.

**Tabel 6. Religiosity Scale Validity Test**

Initial number of items	Tested	Number of items failed	Number of items remaining	Description
40	1	8, 28	38	Index corrected item ranges from 0,139 to 0,768
38	2	-	38	Index corrected item ranges from 0,352 to 0,759

**Tabel 7. Religiosity Scale Reliability Test Results**

Rounds	Initial number of items	Number of valid items	Number of items eliminated	Cronbach's Alpha
1	40	38	2	0,946
2	38	38	-	0,950

## RESULTS

In this study, regression analysis was employed to examine the effect of religiosity on neuroticism. Several prerequisite tests were conducted to determine the appropriateness of the data analysis, including tests of normality, linearity, and heteroscedasticity. All prerequisite tests and data analyses were performed using IBM SPSS Statistics for Windows version 27.0.

**Table 8. Normality Test Results**

Variable	Kolmogorov- Smirnov		
	Statistic	Sig	Description
Perceived financial threat, religiusitas, neurotisme	0,051	0,200	Normal

Based on the data presented in the table above, the Kolmogorov–Smirnov test indicated a significance value of 0.200, such that  $p > 0.05$ , suggesting that the data were normally distributed and that the assumption of normality was satisfied.

**Table 9. Linearity Test Results**

Variable	F	Sig	Description
Religiosity_Neuroticism	1,115	0,341	Linier

Referring to the data in the table above, the results of the linearity test showed a significance value of 0.341, indicating that  $p > 0.05$ . This finding suggests that the relationship between the variables was linear, and therefore the assumption of linearity was met.

**Table 10. Heteroscedasticity Test Results**

Variable	Sig	Description
Religiosity_Neuroticism	0,531	No heteroscedasticity occurred.

The heteroscedasticity test for the religiosity variable yielded a significance value of 0.531 ( $p > 0.05$ ), indicating that heteroscedasticity was not present in the data.

**Table 11. Partial Test Results**

Variable	B	t	P	Description
Religiosity	-200	-1,830	0,07	Not significant

Partial correlation analysis between religiosity and neuroticism produced a t-value of  $-1.830$  with a significance level of 0.07 ( $p > 0.01$ ), indicating that religiosity was not significantly associated with neuroticism.

**Table 12. Descriptive Analytics Results**

Variable	Lowest Score	Highest Score	Mean	Standar Deviation
Religiosity	38	190	114	25,33
Neuroticism	45	225	135	30

The table above presents descriptive statistics showing that religiosity scores ranged from a minimum of 38 to a maximum of 190, with a mean of 114 and a standard deviation of 25.33. Neuroticism scores ranged from a minimum of 45 to a maximum of 225, with a mean of 135 and a standard deviation of 30.

**Tabel 13. Religiosity Scale Categorization Results**

Category	Interval	Frequency
High	$X > 139,33$	51
Medium	88,33-139,33	59
Low	$X < 88,66$	0
<b>TOTAL</b>		<b>110</b>

Based on the table above, the categorization of religiosity scores indicates that high levels were defined as scores greater than 139.33, moderate levels ranged from 88.66 to 139.33, and low levels were defined as scores below 88.66. Referring to this classification, the researchers categorized each participant's total score accordingly. A total of 51 participants demonstrated

high levels of religiosity, 59 participants were classified as having moderate levels of religiosity, and none were categorized as having low levels of religiosity.

**Table 14. Neuroticism Scale Categorization Results**

Category	Interval	Frequency
High	$X > 165$	27
Medium	105-165	76
Low	$X < 105$	7
<b>TOTAL</b>		<b>110</b>

Based on the table above, the categorization of neuroticism scores indicates that high levels were defined as scores greater than 165, moderate levels ranged from 105 to 165, and low levels were defined as scores below 105. According to this classification, 27 participants were identified as having high levels of neuroticism, 76 participants had moderate levels of neuroticism, and 7 participants had low levels of neuroticism.

## CONCLUSION

Based on the results of the data analysis, this study found no significant relationship between religiosity and tendencies toward neuroticism among the coastal community of Tlocor Beach. The findings indicate that both high and low levels of religiosity are not associated with neurotic personality tendencies.

Neuroticism reflects an individual's propensity toward emotional instability, including heightened anxiety, excessive worry, and irritability. Previous research by (Furnham & Fenton O'Creevy, 2024) reported a negative relationship between neuroticism and religious attitudes among individuals with strong religious commitment, suggesting that mental stability may reinforce faith, and conversely, strong faith may enhance mental stability. In contrast, the present study did not identify such an association between religiosity and neuroticism. This finding is consistent with the study conducted by (Szcześniak et al., 2019) which also reported no significant relationship between religious attitudes and the neuroticism dimension. Thus, religiosity, whether at high or low levels, does not appear to be directly related to neurotic pathology or psychological stability.

The categorization results of the religiosity scale revealed that nearly half of the total sample exhibited high levels of religiosity. This raises the possibility of social desirability bias or a tendency toward faking good in responses. The likelihood of a faking-good phenomenon in completing the religiosity scale cannot be overlooked. As members of a community embedded in a strong religious culture, respondents may have felt compelled to provide socially desirable or norm-consistent answers rather than responses that genuinely reflect their internal experiences. This phenomenon may help explain why high religiosity scores did not correspond to lower levels of neuroticism. Consistent with this interpretation, Francis found that individuals with higher levels of religiosity showed a positive correlation with scores on lie scales. Furthermore, meta-analytic findings suggest that religiosity may function as a means of self-presentation, whereby individuals display religious behavior not solely due to deep personal conviction, but also due to a desire to appear socially favorable.

Consequently, within strongly religious cultural contexts, social desirability responding (SDR) may contribute to a more superficial form of religiosity (Jones & Elliott, 2017). These considerations highlight the importance of incorporating lie or social desirability scales in future research to better assess the authenticity of reported religiosity.

Research by (Yoo et al., 2022) identified a significant negative relationship between religiosity and neuroticism among university students in Korea, which contrasts with the present findings obtained from the coastal community of Tlocor Beach. Differences in population characteristics, such as educational background, social context, and sources of stress, may account for these divergent results. However, the findings of the present study are in line with those reported by (Pfeifer & Waelty), who found no correlation between religiosity and neuroticism, but instead observed that neuroticism was more strongly associated with factors such as sexuality-related anxiety and superego conflict rather than religiosity itself.

Based on the findings of this study, it can be concluded that religiosity is not correlated with neuroticism among the coastal community of Tlocor Beach. This lack of association may be attributed to differences in population characteristics across studies, including educational level and socio-cultural context, as well as the presence of faking good tendencies in responses to religiosity measures. Therefore, interventions or programs aimed at reducing neurotic tendencies in coastal communities should focus on other, more influential factors, such as strengthening psychological resilience and enhancing social support that aligns with the local cultural context. In addition, future research should consider employing religiosity measurement instruments that are more sensitive to the socio-cultural context of coastal communities in order to minimize biases such as faking good or social desirability responding. Such an approach is expected to provide a more accurate understanding of the relationship between psychological variables and religiosity, and to inform the development of more targeted and effective intervention strategies.

## **LIMITATION**

This study has several limitations that should be taken into consideration. First, the research population was limited to the coastal community of Tlocor Beach, which restricts the generalizability of the findings to other populations with different social, economic, and cultural characteristics. Second, the religiosity measure relied on self-report instruments, which may be susceptible to faking good or social desirability bias, potentially affecting the accuracy of the data. Third, the correlational research design does not allow for causal inferences regarding the relationship between religiosity and neuroticism. Fourth, other variables that may influence neuroticism, such as genetic factors, environmental stressors, or social support, were not assessed in this study, and therefore their potential effects could not be controlled.

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