

Personality Traits and Communication Apprehension: The Role of Neuroticism among Family Planning Counselors

Benedicta Ika Ermadela*, Rachmat Kriyantono

Universitas Brawijaya, Indonesia

benedictaika@student.ub.ac.id*

<p>Submitted: 2026-01-07</p> <p>Published: 2026-02-01</p> <p>Keywords: Communication Apprehension, Neuroticism, Personality</p> <p>Copyright holder: © Author/s (2026)</p> <p>This article is under:</p>  <p>How to cite: Ermadela, B. I., & Kriyantono, R. (2026). Personality Traits and Communication Apprehension: The Role of Neuroticism among Family Planning Counselors. <i>Bulletin of Counseling and Psychotherapy</i>, 8(1). https://doi.org/10.51214/002026081770000</p> <p>Published by: Kuras Institute</p> <p>E-ISSN: 2656-1050</p>	<p>ABSTRACT: This study aims to examine the correlation between the personality dimension of neuroticism and communication anxiety. In the personality dimensions formulated by Eysenck, there is one personality dimension that characterizes 'anxiety-type feelings', namely neuroticism which is associated with anxiety. The research was conducted using a cross-sectional study method with the communibiology paradigm which has the premise that biological factors play a role in determining individual communication behavior. Using simple random sampling, total of 49 Family Planning Counselors in East Java, Indonesia have neuroticism personality tendencies through the Eysenck Personality Questionnaire Short Form. Meanwhile, the Personal Report of Communication Apprehension was used to measure the level of communication apprehension. The results showed that neuroticism was positively correlated with communication apprehension ($r = 0.423$). This finding can be explained by cortical emotional processing processes, including emotional regulation, cognitive appraisal, and heightened sensitivity to perceived social threats, which are commonly associated with individuals high in neuroticism. This study contributes to the growing body of research on personality by encouraging further exploration of how personality traits interact with communication-related psychological variables.</p>
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INTRODUCTION

Individual personality is a complex matter. There are many academic opinions on how to define personality, ranging from the personality theories of Sigmund Freud and Carl Jung to those of Gordon Allport. There are various perspectives on personality based on the theory used. One personality theory by Hans Eysenck states that there are three main dimensions of personality, namely extraversion, neuroticism, and psychotism. The perspective used by Eysenck is psychophysiology. Neuroticism is related to differences in the functioning of the limbic system mediated by the nervous system. It is said that individuals with neurotic personality tendencies are characterized by excessive functioning of these variables (Eysenck, 1983). In Eysenck's personality structure, there are nine traits that characterize neuroticism, namely anxiety, depression, guilt, low self-esteem, tension, shyness, irrationality, melancholy, and emotionality (Eysenck, 1983). These traits are inborn traits that cannot be changed. Individuals with neuroticism personality tendencies will feel anxious when faced with stimuli such as communication.

Hans Eysenck's approach to personality theory emphasizes a biosocial perspective, which states that human behavior is the result of inherent biological and genetic factors as well as environmental influences (Engler, 2014). Eysenck believed that personality is not solely a product of one's environment or genetic makeup, but rather a complex interaction of both. Eysenck defined personality as a combination of several core aspects, including character, temperament, intelligence, and a person's physical constitution. These characteristics work together to shape how a person interacts with and responds to their environment. In this view, a person's personality helps

determine how they perceive, react to, and ultimately adapt to various situations in their environment (Engler, 2014). This theory underscores the complexity of human behavior, suggesting that no single factor can fully explain personality.

According to Eysenck, there are three dimensions that shape personality, namely psychotism-emotional control, extraversion-introversion, and neuroticism-emotional stability (Beatty et al., 1998). Eysenck (1983) mapped two initial personality types, namely extraversion-introversion and neuroticism-emotional stability. In neuroticism-emotional stability personality, neuroticism refers to a personality with unstable emotions. Eysenck (1983) elaborated on this because of differences in limbic system function, so that individuals with unstable emotions will react excessively (neurotically).

The dimension of neuroticism is related to the concept of communication apprehension. A study conducted by Beatty et al. (1998) shows that communication apprehension is a combination of neuroticism and introversion the opposite of extraversion. A positive correlation between extraversion and communication apprehension was also proven in studies by McCroskey et al. (2001), Neuliep et al. (2003), and Jung & McCroskey (2004).

Neuliep et al. (2003) measured the association between Eysenck's personality dimensions and communication anxiety in two groups of respondents, namely participants from Japan and participants from the United States. The results showed consistent figures between the two different cultural groups. This indicates that personality dimensions including neuroticism play a role in communication behavior regardless of culture. This study was conducted within the framework of communibiology, which holds the premise that human anxiety stems from biological factors, meaning that social factors such as environmental influences do not affect the formation of anxiety.

McCroskey (1977) defines communication anxiety as "an individual's level of fear or anxiety with either real or anticipated communication with another person or persons." During the process of examining communication apprehension, James McCroskey and his colleague Michael Beatty gathered evidence that human behavior is largely determined by "inborn, biological traits" or characteristics possessed since birth. Communication orientation including communication apprehension is determined by nature or innate traits. Thus, McCroskey and his colleagues concluded that communication apprehension is a genetic program not a learned communication behavior (McCroskey et al., 2014).

Although research in Indonesia has linked the Big Five personality dimensions, particularly neuroticism, to public speaking anxiety or communication anxiety, most existing studies are conducted within academic contexts and focus on student populations (Hanifa, 2022; Sarira et al., 2023). As a result, communication anxiety is often framed as an academic or learning-related issue rather than as a psychological factor embedded in professional work demands. Empirical research examining communication anxiety among frontline public service professionals remains limited, despite the fact that such roles require continuous and intensive communication. Family planning counselors, in particular, engage regularly in interpersonal and public communication as part of their daily responsibilities, yet their psychological communication challenges have received little scholarly attention. Understanding the role of personality traits, especially neuroticism, in shaping communication anxiety within this professional context is therefore essential.

Based on this rationale, this study aims to examine the relationship between the neuroticism personality dimension and communication anxiety among family planning counselors in East Java. Based on the communibiology paradigm (Beatty et al., 1998), this study hypothesises that the higher the neuroticism, the higher the communication anxiety. Specifically, the study seeks to provide empirical evidence on whether and to what extent neuroticism is associated with communication anxiety in a professional public service setting, thereby contributing to a more contextualized

understanding of personality and communication within applied communication and counselors research.

METHODS

Design

This study used a quantitative correlational design with a cross-sectional survey method. The conceptual research design illustrating the relationship between neuroticism and communication apprehension is shown in Figure 1.

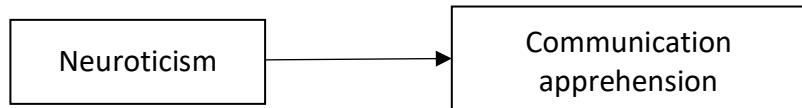


Figure 1. Conceptual research design illustrating the relationship between neuroticism and communication apprehension within a quantitative correlational and cross-sectional survey approach.

Participants

The population in this study consisted of 1,535 Family Planning Counselors in East Java. The sampling technique used was probability sampling using simple random sampling. The requirement for using this simple random sampling technique is the existence of a sampling frame or sampling list (Kriyantono, 2022). Kriyantono (2022) states that there is no definite number regarding sample size in various literature. A total of 191 Family Planning Counselors in East Java participated in this study. All respondents completed a personality assessment to measure personality traits. Based on the assessment results, 49 respondents were identified as having dominant neuroticism traits, and this subgroup was used for further analysis. Among these respondents, 68% were female, and 45% had more than 20 years of work experience as Family Planning Counselors. The questionnaires were distributed across 38 districts and cities in East Java, with the largest proportion of respondents coming from Gresik Regency ($n = 9$).

Instruments

Data collection was conducted using questionnaires. The questionnaire used to measure Eysenck's personality dimensions, namely extraversion, neuroticism, and psychotism, was the Eysenck Personality Questionnaire Short Form. Meanwhile, the second questionnaire to measure communication apprehension was McCroskey's Personal Report Communication Apprehension.

Validity and reliability tests were conducted before the instruments were distributed. These instrument tests were conducted on 30 people in the population who were not included in the sample. To test the validity or correlation between items, the Pearson Product-Moment formula was used with the help of SPSS 25. Based on the calculations for both variable X (personality dimensions) and variable Y (communication anxiety), it was found that all R count values were $> R$ table, so it can be said that all items are valid, meaning that every question in the research instrument for each variable can be used for research data collection. An example of the R count value for item 1 on variable X is 0.463 (> 0.355), and the R count value for item 1 on variable Y is 0.451 (> 0.355).

A reliability test was also conducted to test the reliability of the instrument used. The calculation used the Cronbach Alpha formula with the help of the SPSS 25 application. The value obtained was 0.927 for variable X and 0.845 for variable Y. These values are > 0.6 , so it can be said that the instrument is reliable.

Data Analysis

Hypothesis testing was carried out using quantitative correlation methods using Spearman's Rho. The scale to be used has also been tested for validity and reliability before use. Data processed with IBM SPSS Statistics 25 for Windows software.

RESULTS AND DISCUSSION

Results

A total of 191 Family Planning Counselors in East Java participated in this study. All respondents completed a personality assessment to measure the Big Five personality dimensions using Eysenck Personality Questionnaire Short Form. Based on the personality assessment results, 49 respondents were identified as having dominant neuroticism traits, while the remaining respondents were classified into other personality tendencies, such as extraversion and psychotism. The subsequent analysis in this study focused on respondents with dominant neuroticism traits. Among these 49 respondents, 68% were female, and 45% had more than 20 years of work experience as Family Planning Counselors. The questionnaire was distributed across 38 districts and cities in East Java, with the largest proportion of respondents originating from Gresik Regency ($n = 9$).

Based on the correlational research design illustrated in Figure 1, Spearman's rho correlation analysis was conducted to examine the relationship between neuroticism and communication apprehension among family planning counselors. The analysis revealed a statistically significant positive correlation between neuroticism and communication apprehension ($r = 0.423$, $p = 0.002$, $N = 49$), as presented in Table 1.

Table 1. Result

	Communication apprehension
Correlation coefficient	.423
Sig. (2-tailed)	.002
N	49

The results of this study indicate a statistically significant positive relationship between neuroticism and communication anxiety, with a moderate correlation coefficient ($r = 0.423$, $p = 0.002$). This finding suggests that family planning counselors with higher levels of neuroticism tend to experience greater anxiety in communication situations. From a psychological perspective, individuals high in neuroticism are more likely to exhibit emotional instability, heightened sensitivity to perceived social threats, and difficulties in emotional regulation, which may contribute to increased communication anxiety during interpersonal and public interactions.

The moderate strength of the correlation indicates that neuroticism represents a meaningful psychological factor associated with communication anxiety, although it does not operate in isolation. This finding is consistent with previous studies reporting a positive relationship between neuroticism and communication anxiety (McCroskey et al., 2001; Neuliep et al., 2003), thereby extending these findings to a professional public service context. Notably, the presence of communication anxiety among experienced counselors suggests that personality traits continue to influence emotional responses in communication, even within long-term professional practice. This highlights the importance of considering both stable personality characteristics and contextual factors when addressing communication anxiety in applied settings.

Discussion

In the definition of communication apprehension, there are characteristics of 'anxiety-type feelings' that reflect neuroticism (Beatty et al., 1998). Individuals with neuroticism tendencies

usually experience anxiety in various situations, including when communicating. Family Planning Counsellors need to have good communication skills in various contexts (such as interpersonal, group, or public speaking) to carry out their duties to educate the community and communicate with partners such as village and sub-district governments. This individual's anxiety will certainly affect their communication style. In addition, high neuroticism is often associated with low implicit self-esteem, which can predict negative emotions in individuals (Robinson & Meier, 2005).

Personality neuroticism is seen as an innate trait linked to an individual's nervous system. Neuroticism is related to changes in the parts of the brain that process emotions and respond to threats, and involves negative emotions and emotion dysregulation. Research shows that neuroticism is associated with decreased volume in the dorsomedial prefrontal cortex (PFC) and left medial temporal lobe, including the posterior part of the hippocampus, as well as increased volume in the middle cingulate gyrus. The hippocampus, which plays a role in managing uncertainty, anxiety and rumination, is often smaller in individuals with stress and depression. The middle cingulate gyrus, which detects errors and responses to emotional or physical pain, has also shown that individuals with high neuroticism are more sensitive to punishment. A smaller dorsomedial prefrontal cortex is associated with self-evaluation and emotion regulation, which may lead to emotion dysregulation and a tendency to judge oneself negatively in individuals with high neuroticism (DeYoung et al., 2010).

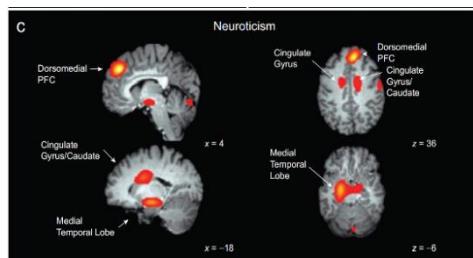


Figure 2. Images of dorsomedial prefrontal cortex, cingulate gyrus, and medial temporal lobe brain regions that are active in individuals with neuroticism personality (DeYoung et al., 2010)

In individuals with high neuroticism, there is an active mechanism in the medial prefrontal cortex area related to negative self-evaluation. When facing negative stimuli, this part remains active longer, so that the negative emotions felt by the individual become stronger (Haas et al., 2008). The brain's response to emotional stimuli is strongly related to personality traits; negative stimuli are strongly associated with neuroticism. Personality-related brain activity is seen in various cortical and subcortical parts, suggesting that the personality nervous system is spread throughout the brain (Canli, 2004).

Another part of the brain, the dorsal anterior cingulate cortex (dACC), in individuals with neuroticism functions to detect differences between expectations and reality. This is in line with J. A. Gray's theory, which states that anxiety arises in neuroticism individuals because their brains are more sensitive to discrepancies between expectations and reality (Eisenberger et al., 2005). Research by Haas et al. (2007) also found activation in the amygdala and anterior cingulate subgenual areas in individuals with neuroticism when facing emotional conflict.

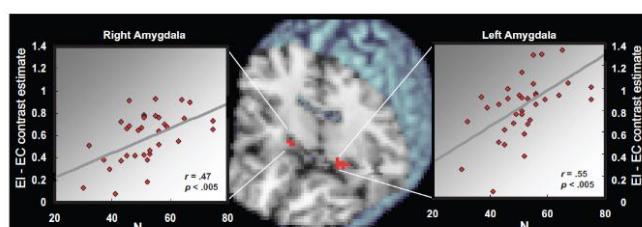


Figure 3. is in individuals with neuroticism personality under emotional conflict conditions (Haas et al., 2007)

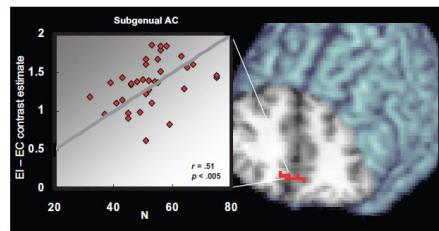


Figure 4. is in individuals with neuroticism personality under emotional conflict conditions (Haas et al., 2007)

Implication

The findings of this study have important theoretical and practical implications for psychological research on personality and communication. Theoretically, the significant relationship between neuroticism and communication anxiety supports trait-based models of emotional regulation by demonstrating that individuals with higher levels of neuroticism are more likely to experience heightened anxiety in communication-intensive professional contexts. This extends previous findings, which have largely been confined to academic settings, by confirming the relevance of neuroticism in explaining communication anxiety among public service professionals. Consequently, this study contributes to a more contextualized understanding of how personality traits operate within real-world occupational demands.

From a practical psychology perspective, the findings suggest that personality assessment may play a meaningful role in identifying communication-related psychological vulnerabilities among family planning counselors. Psychological interventions, such as anxiety management training, emotional regulation strategies, and confidence-building programs, may be particularly beneficial for counselors with higher levels of neuroticism. These findings also highlight the importance of integrating psychological support into professional development programs to enhance communication effectiveness and psychological well-being in public service settings.

Limitations

This study has some limitations. This study focused on respondents with dominant neuroticism traits due to the theoretical relevance of neuroticism to anxiety-related constructs, including communication apprehension. Furthermore, personality research is generally conducted using measuring instruments such as fMRI, EEG, and ECG to see activity in the brain and heart rate measurements. However, in this study the measuring instrument used is pencil-and-paper or questionnaire so that the level of accuracy is not as high as physiological measurement instruments.

CONCLUSION

In the personality dimension of neuroticism, a significant relationship with communication anxiety was identified, indicating that individuals with higher levels of neuroticism are more likely to experience anxiety in communication situations. From a psychological perspective, neuroticism is characterized by emotional instability, heightened sensitivity to stress, and a tendency toward negative emotional responses. These characteristics may lead individuals to perceive communication situations as more threatening, thereby increasing cognitive appraisal of risk and reducing emotional regulation during interpersonal interactions. As a result, individuals with high communication anxiety may experience difficulties in managing emotional responses, which can negatively affect communication effectiveness, including reduced confidence, avoidance of communication situations, and impaired message delivery. In professional contexts such as family

planning counseling, where effective communication is essential, this tendency may hinder the quality of interaction with clients. Therefore, the relationship between neuroticism and communication anxiety underscores the role of stable personality traits in shaping emotional experiences during communication and highlights the need to consider psychological factors when addressing communication effectiveness in applied settings.

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AUTHOR CONTRIBUTIONS STATEMENT

BIE and RK agree to the final version of this article.

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