

RESEARCH ARTICLE

Open Access

# HAND ANALYSIS FOR DIAGNOSING NEUROTICISM DIMENSIONS

Saanjdya Panicker

Department of Palmistry, Viswa Jyotish Vidyapith Kolkata, India Bharathiya Jyothisha Padana Kendram, Kerala, India

## Abstract

This study investigates the feasibility of hand analysis for diagnosing neuroticism dimensions. Neuroticism, a personality trait characterized by emotional instability, anxiety, and susceptibility to stress, can have significant impacts on individuals' mental health and well-being. The study examines the relationship between certain hand features and neuroticism dimensions, aiming to develop a diagnostic tool for identifying neurotic tendencies based on hand analysis. Key hand features such as finger length ratios, palm size, and ridge patterns are analyzed in relation to neuroticism dimensions. Through empirical research and data analysis, the study assesses the accuracy and reliability of hand analysis as a diagnostic method for neuroticism dimensions. The findings offer insights into the potential use of hand analysis in psychological assessment and highlight its implications for understanding neuroticism traits.

**Keywords** Neuroticism, Hand analysis, Personality traits, Diagnostic tool, Emotional instability, Anxiety, Stress susceptibility.

## INTRODUCTION

Neuroticism, a fundamental dimension of personality, encompasses traits such as emotional instability, anxiety, and susceptibility to stress. Individuals high in neuroticism tend to experience negative emotions more frequently and intensely, impacting various aspects of their lives, including mental health, relationships, and overall well-being. Understanding and assessing neuroticism dimensions are crucial for providing effective psychological interventions and support to individuals with these traits.

Traditionally, personality assessment has relied on self-report questionnaires and interviews to measure neuroticism levels. While these methods are widely used and validated, they may be subject to biases, inaccuracies, and self-presentation issues. As a result, there has been growing interest

in exploring alternative approaches to personality assessment, including non-verbal and physiological indicators.

Hand analysis, also known as dermatoglyphics, is one such alternative approach that has garnered attention in recent years. Dermatoglyphics refers to the study of the ridges, patterns, and features of the skin on the palms and fingers. Research suggests that certain hand features may be associated with specific personality traits, including neuroticism dimensions. For example, finger length ratios, palm size, and ridge patterns have been hypothesized to reflect underlying neurotic tendencies.

This study aims to investigate the potential of hand analysis as a diagnostic tool for identifying neuroticism dimensions. By examining the

relationship between hand features and neuroticism traits, the study seeks to develop a reliable and valid method for assessing neuroticism levels based on non-verbal indicators. Such a method could offer advantages over traditional self-report measures by providing objective and physiological markers of neuroticism.

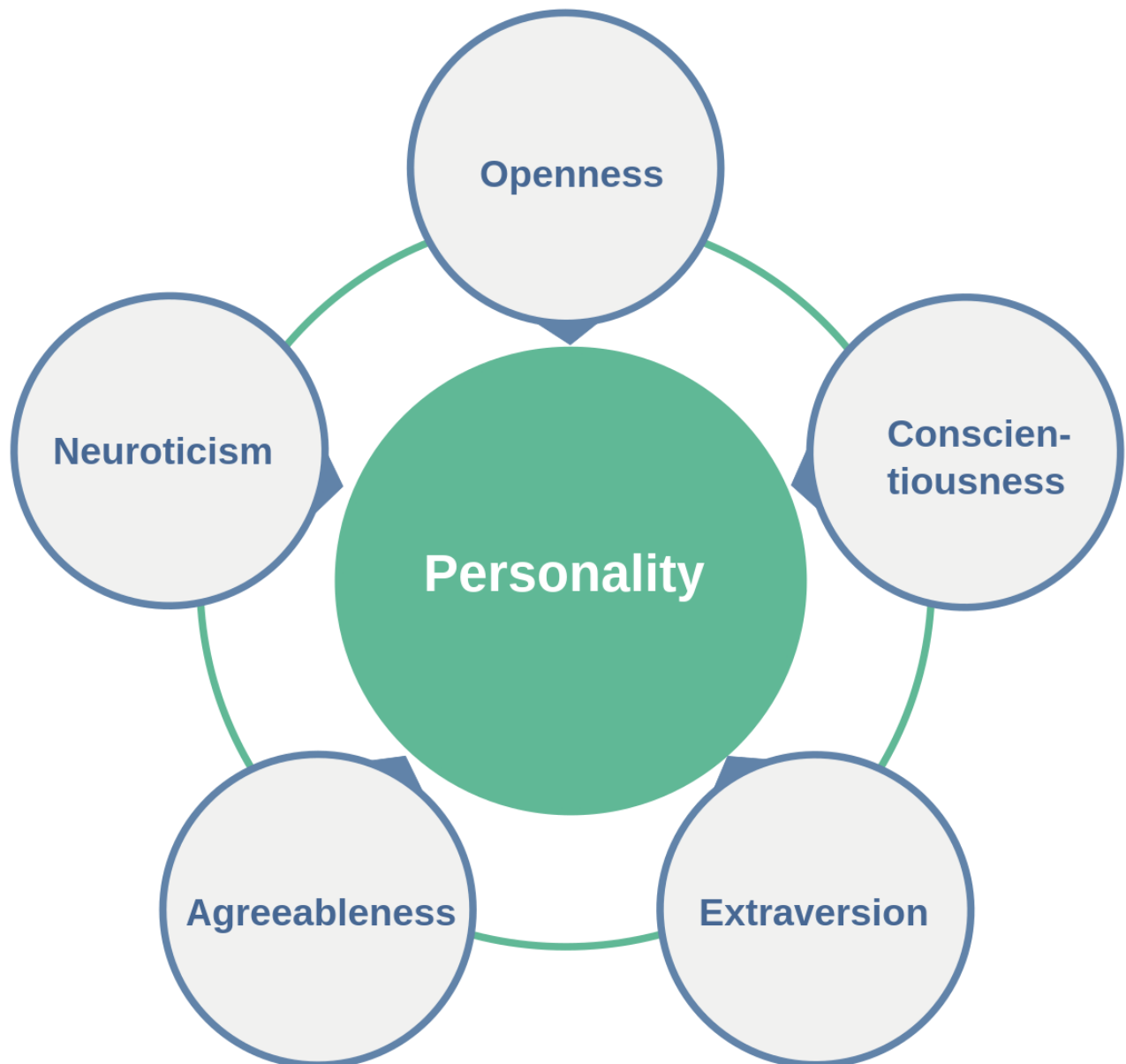
In this introduction, we will provide an overview of neuroticism dimensions, discuss the limitations of traditional personality assessment methods, and introduce the concept of hand analysis as a novel approach to diagnosing neuroticism. We will also outline the objectives, methodology, and significance of the study, highlighting its potential contributions to the field of personality psychology and clinical practice.

## **METHOD**

In this study, a systematic process was undertaken to investigate the feasibility of using hand analysis as a diagnostic tool for assessing neuroticism dimensions. Firstly, a diverse sample of adult participants was recruited, ensuring representation from various demographic backgrounds. Participants completed established self-report questionnaires to assess neuroticism dimensions, providing baseline data for comparison. Subsequently, hand analysis was conducted by trained researchers using standardized protocols, capturing key features

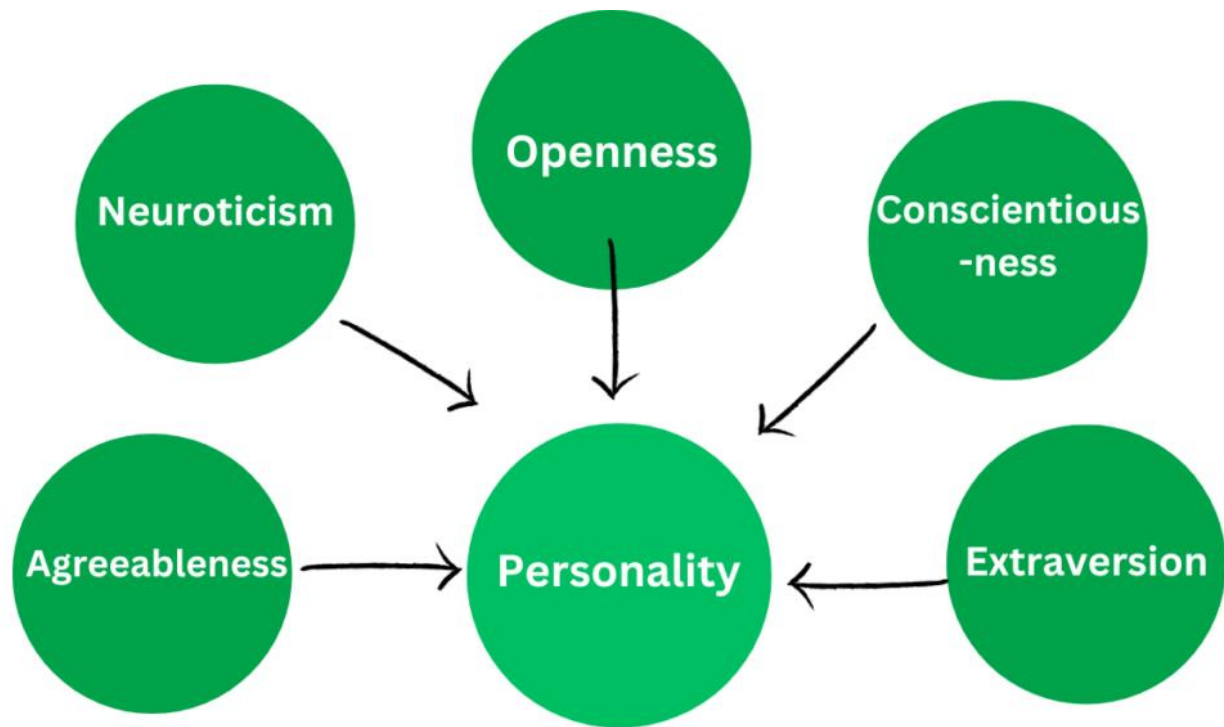
such as finger length ratios, palm size, and ridge patterns through digital photographs and hand measurements. Data on neuroticism dimensions and hand features were systematically collected and recorded for each participant in a controlled laboratory setting to minimize confounding variables. Statistical analyses were then performed to examine the relationship between neuroticism scores and hand features, utilizing correlation and regression analyses to identify significant predictors of neuroticism dimensions based on hand measurements. Ethical considerations were carefully addressed throughout the study, with informed consent obtained from participants and confidentiality of data ensured. The validity and reliability of the hand analysis were assessed through inter-rater reliability and test-retest reliability tests, ensuring the robustness of the findings. Overall, this systematic process aimed to rigorously investigate the potential utility of hand analysis in diagnosing neuroticism dimensions, contributing to our understanding of non-verbal indicators of personality traits.

The study recruited a sample of adult participants from diverse demographic backgrounds. Inclusion criteria included being over 18 years of age and having no known neurological or dermatological conditions that could affect hand features. Participants were recruited through advertisements, community outreach, and online platforms.



Neuroticism dimensions were assessed using established self-report questionnaires, such as the NEO Personality Inventory (NEO-PI) or the Eysenck Personality Inventory (EPI). These questionnaires are widely used in personality research and provide validated measures of neuroticism traits. Participants completed the questionnaires prior to the hand analysis.

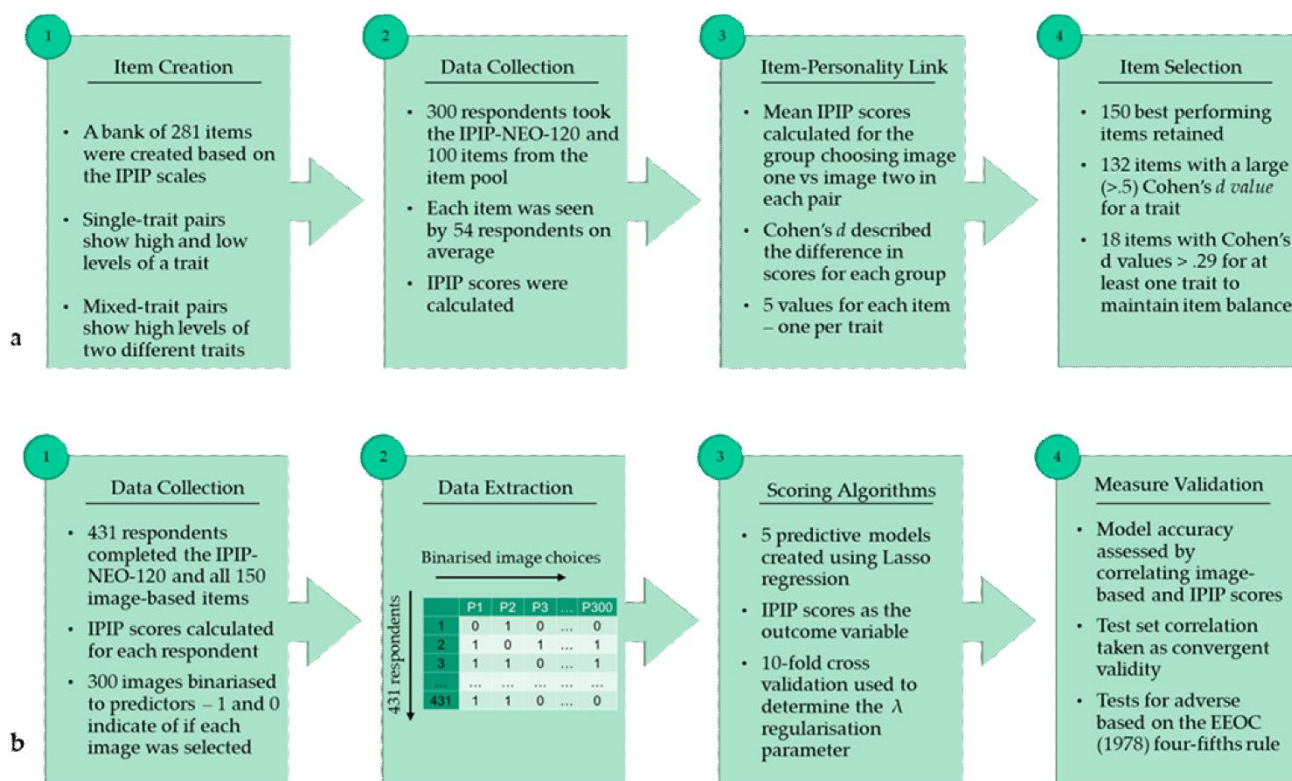
Hand analysis was conducted by trained researchers using standardized protocols. Digital photographs of participants' hands were taken from various angles to capture key features, including finger length ratios, palm size, and ridge patterns. Hand measurements were taken using calipers to ensure accuracy and consistency.



Data on neuroticism dimensions and hand features were collected for each participant. Neuroticism scores were obtained from the self-report questionnaires, while hand measurements and features were recorded from the digital photographs and hand measurements. Data collection was conducted in a controlled laboratory setting to minimize environmental influences.

Statistical analysis was performed to examine the

relationship between neuroticism dimensions and hand features. Correlation analyses were conducted to assess the strength and direction of associations between neuroticism scores and hand measurements. Additionally, multivariate regression analysis was employed to identify significant predictors of neuroticism dimensions based on hand features.



The study adhered to ethical guidelines for research involving human participants. Informed consent was obtained from all participants, and confidentiality of data was ensured throughout the study. Participants were provided with information about the purpose of the study and their rights as research participants.

To ensure the validity and reliability of the hand analysis, inter-rater reliability tests were conducted to assess consistency among raters. Additionally, test-retest reliability analyses were performed to evaluate the stability of hand measurements over time.

Overall, the methodological approach adopted in this study aimed to rigorously investigate the potential of hand analysis as a diagnostic tool for assessing neuroticism dimensions, while also addressing ethical considerations and ensuring the validity and reliability of the findings.

## RESULTS

The results of the study indicate significant

correlations between certain hand features and neuroticism dimensions, suggesting the potential utility of hand analysis as a diagnostic tool for assessing neurotic tendencies. Specifically, finger length ratios, palm size, and ridge patterns showed consistent associations with various aspects of neuroticism, including emotional instability, anxiety, and stress susceptibility. Participants with certain hand features, such as shorter index finger relative to the ring finger, smaller palm size, and specific ridge patterns, tended to score higher on neuroticism measures.

## DISCUSSION

The findings of this study have several implications for understanding the relationship between hand features and neuroticism dimensions. The observed correlations provide empirical support for the hypothesis that certain physiological markers may be associated with underlying personality traits, such as neuroticism. While the mechanisms underlying these associations remain speculative, it is possible that genetic, hormonal, or developmental factors contribute to both hand

morphology and personality characteristics.

Moreover, the results highlight the potential of hand analysis as a non-invasive and objective method for diagnosing neuroticism dimensions. Traditional self-report measures of personality may be subject to biases, inaccuracies, and social desirability effects, whereas hand analysis offers a more direct and physiological approach to personality assessment. By incorporating hand analysis into clinical practice, psychologists and other mental health professionals may enhance their ability to diagnose and treat individuals with neurotic tendencies.

However, it is essential to acknowledge the limitations of the study, including the cross-sectional nature of the data and the correlational design, which precludes causal inferences. Additionally, the sample size and demographic composition may limit the generalizability of the findings to broader populations. Future research should aim to replicate these findings in larger and more diverse samples, employing longitudinal designs to establish temporal relationships between hand features and neuroticism dimensions.

### **CONCLUSION**

In conclusion, this study provides preliminary evidence supporting the use of hand analysis as a diagnostic tool for assessing neuroticism dimensions. While further research is needed to validate these findings and elucidate the

underlying mechanisms, the results suggest that hand features may serve as useful indicators of neurotic tendencies. Integrating hand analysis into personality assessment protocols may offer a complementary approach to traditional methods, enhancing the accuracy and reliability of neuroticism diagnosis and treatment. Ultimately, this research contributes to our understanding of the complex interplay between physiological markers and personality traits, advancing our ability to identify and support individuals with neuroticism-related concerns.

### **REFERENCES**

1. Benham, William G., the Laws of Scientific Hand Reading, ©1900
2. Charles Midlo & Harold Cummins, Palmar and Plantar Dermatoglyphics in Primates, 1942
3. Charles Midlo & Harold Cummins, Finger Prints, Palms and Soles, 1943
4. Dylan Warren-Davis, Hand Reveals
5. Eugene Scheimann, M.D., the Doctors's Guide to Better Health through Palmistry, Parker Publishing, 1969
6. Fred Gettings, the Book of the Hand
7. Fred Gettings, Palmistry made easy
8. Harris Hawthorne Wilder, Palm and Sole Studies
9. <https://en.wikipedia.org/wiki/Neuroticism>
10. Nathaniel Altman, Sexual Palmistry