

HANDWRITING ANALYSIS FOR DETECTION OF PERSONALITY OF POSTGRADUATE STUDENTS

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Abstract

Handwriting is the primary tool of communication and knowledge evaluation for students in academic work. This study investigated the types of personality based on Kannada Handwriting of Postgraduate Students in Kuvempu University Karnataka Indian. This study employed a descriptive method of research. Simple random and purposive sampling techniques were employed to select the sample. This study used Eysenck's Personality inventory and Kannada Handwriting Analysis scale for collecting the data. The chi-square statistical technique was used for the analysis and interpretation of the data. The results show that the finding related to Baseline Handwriting of Post Graduate Students, It is found that there is a significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their Baseline Handwriting. The finding related to the size of the Handwriting of Post Graduate Students; It is found that there exists a significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with the size of Handwriting. This study inferred that personality could be analyzed in various ways, and Handwriting analysis is one of the methods.

Keywords: Handwriting Analysis, Kannada Handwriting, Personality, Post Graduate Students.

BACKGROUND OF THE STUDY:

Graphology is the scientific study of Handwriting. Graphology analysis is the most influential science of understanding the strength and weaknesses of a person (RavindraNegi, 2014). Handwriting helps you to the study of personality and find out the characteristics of personality. Handwriting is one of the analytical tools of personality. Handwriting is very intimately related to Educational and Psychological aspects. Handwriting Analysis is very easy to identify the educational skills and personality traits for students, (Girisha T., Dange, J. K., & Nagaraj S.H, 2016).

The significance of handwriting in the Education and improvement of individuals can never be extravagant. Handwriting is a mirror of a unique personality. Mihai Gavrilescu and Nicolae Vizireanu,, (2018) study found that, relationships between particular handwriting features and predict with high accuracy of specific personality traits. Ashraf Karami, (2017) found the difference of personality (Eysenck) based on handwriting characters with an introvert- extrovert (Ambivert), emotional stability-instability (neuroticism) personality, and psychotic. Kale Madhukar Dnyandeo, (2015) found there is a positive correlation between Handwriting features with optimistic Attitudes and pessimistic attitude

about the college student. There are several studies which support the idea of a construction and connection between personality and Handwriting, (Keinan and Eilat-Greenberg, 1993; Rafaeli and Drory, 1988; Van Rooij and Hazelzet, 1997; Wellingham-Jones, 1989). A similar study by Kanchana V. et al. (2015) predicted the behaviour of a person through the baseline, the slant of the letter and size of the letter as found in a person's handwriting.

Some scientists in the neuromuscular field of research state that some small neuromuscular movements are associated with the person's personality. A neurological brain pattern shows each trait of personality. A unique neuromuscular change is produced by each neurological brain pattern, which is similar for every person who has that personality trait (Abdul Rahiman et al. 2013).

NEED AND IMPORTANCE OF THE STUDY

Graphology is the allegedly scientific practice of determining people's social, psychological, professional, and medical features from the formation of their letters, lines, and paragraphs on a page, (Beyerstein, 1996). It is believed Scanlon and James Mauro, (1992) that detailing one's handwriting can help determine "a person's general intelligence, emotional stability, characteristics as a leader or follower, their level of honesty, and physical activity level." Kale Madhukar Dnyandeo (2015) found there is a positive correlation between Handwriting features with optimistic Attitudes and pessimistic attitude about the college student. Another study (Mihai Gavrilescu and Nicolae Vizireanu, 2018), found that there are relationships between specific handwriting features and predict with high accuracy of exact personality traits. A similar study by Kanchana V., et al. (2015) predicted the behaviour of a person through the Baseline, the slant of the letter and size of the letter as found in a person's Handwriting. Handwriting analysis is very vital for teachers to understand the students and helpful for Teachers in developing the student personality, promote to good academic goal, good citizen characters, develop ambition, idealism, leadership, (Girisha, T et al.2016). Psychoanalysis experts, such as Freud and Jung, affirmed that graphology could help gain insight into the conscious and unconscious mind of individuals and "closely indications our evolving physical and mental state", (Scanlon, and James Mauro. 1992).

Many researchers and graphologists' introduced graphology in India in recent decades, and apply the graphology principles for the identification of personality, behaviour and academic achievement of students through Indian language. But there is no standard test and norms for the analysis of personality based on Kannada handwriting. This study attempted to an analysis of personality through Kannada Handwriting. This study considered to measure and analyze of personality types through Kannada Handwriting like Baseline (directions) and size of Handwriting using the Eysenck's personality questionnaire, and Kannada Handwriting Analysis Scale (Girish and Jagannath Dange, 2017).

OBJECTIVES OF THE STUDY:

1. To Measure and analyze the difference in personality types of Post Graduate Students with their Baseline Handwriting.
2. To Measure and analyze the difference in personality types of Post Graduate Students with their size of Handwriting.

HYPOTHESIS OF THE STUDY:

For testing significance of differences, the null hypothesis is a useful form of stating hypotheses and the study based on following hypotheses.

1. There is no significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their Baseline Handwriting.
2. There is no significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their size of Handwriting.

VARIABLES OF THE STUDY:

The variables considered are Post Graduate student's Kannada Handwriting and Personality.

METHODOLOGY OF RESEARCH:

In this study, Descriptive survey method of research was used. In this study, Descriptive survey method of research was used and Employed the Simple random and purposive sampling technique used to select the sample of 400 (Four hundred) Post Graduate Students (without physically challenged students) from different departments of Post Graduate in Kuvempu University Karnataka India.

TOOLS USED FOR THE STUDY:

This study used Eysenck's Personality Inventory (H.J. Eysenck), and Kannada Handwriting Analysis scale (Girish and Jagannath Dange, 2017) was used to collect and analyzed the data.

STATISTICAL TECHNIQUES USED FOR THE STUDY:

In pursuance of objectives of the study and in order to test the research hypothesis set up, the Chi square statistical technique was used to see the significance of variables.

TOOLS USED FOR THE STUDY:

This study used Eysenck's Personality Inventory (H.J. Eysenck), and Kannada Handwriting Analysis scale (Self developed).

ANALYSIS AND INTERPRETATION OF DATA:

The data interpretation is done on the basis of objectives and Hypothesis.

Hypothesis-01: There is no significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their Baseline Handwriting.

Table-1: Table shows Number, Percentage and Chi-Square Value of the students with Neuroticism, Emotional Stability and general Personality types falling under different types of Baseline Handwriting.

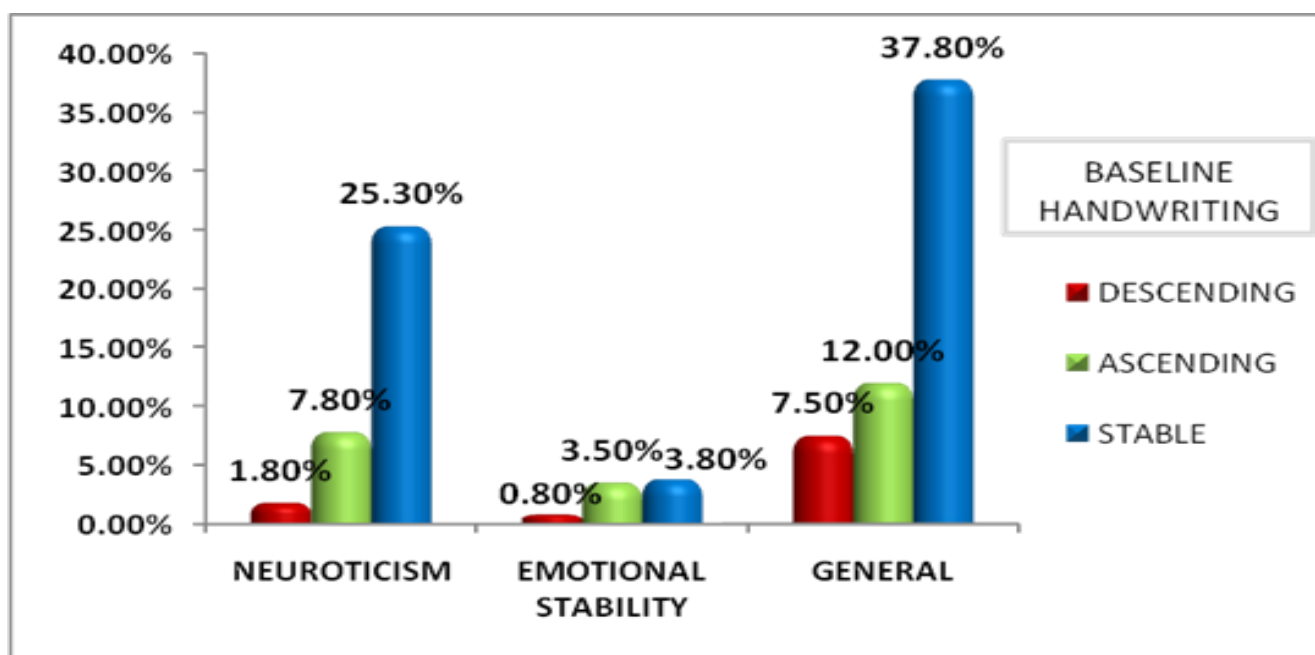
Types of Personality		Baseline Handwriting			Total
		Descending	Ascending	Stable	
Neuroticism	Observed Frequency (fo)	7	31	101	139
	Expected Frequency (fe)	13.9	32.3	92.8	139.0
	% within Personality	5.0%	22.3%	72.7%	100.0%
	% within Baseline	17.5%	33.3%	37.8%	34.8%
	% of Total	1.8%	7.8%	25.3%	34.8%
Emotional stability	Observed Frequency (fo)	3	14	15	32
	Expected Frequency (fe)	3.2	7.4	21.4	32.0
	% within Personality	9.4%	43.8%	46.9%	100.0%
	% within Baseline	7.5%	15.1%	5.6%	8.0%
	% of Total	.8%	3.5%	3.8%	8.0%
General	Observed Frequency (fo)	30	48	151	229
	Expected Frequency (fe)	22.9	53.2	152.9	229.0
	% within Personality	13.1%	21.0%	65.9%	100.0%
	% within Baseline	75.0%	51.6%	56.6%	57.3%
	% of Total	7.5%	12.0%	37.8%	57.3%
Total	Observed Frequency (fo)	40	93	267	400
	Expected Frequency (fe)	40.0	93.0	267.0	400.0
	% within Personality	10.0%	23.3%	66.8%	100.0%
	% within Baseline	100.0%	100.0%	100%	100.0%
	% of Total	10.0%	23.3%	66.8%	100.0%
$\chi^2 = 14.637, df=4, N=400, P < 0.006 (S)$					

The above table-1 reveals that, about 34.8% of the students fall in Neuroticism type of personality, about 8% of the students fall under Emotional stable type of personality and remaining about 57.3% of the students fall under general type of personality.

Among 34.8 % of Neurotic students, 25.3% of the students have stable baseline Handwriting, 7.8% of the students have ascending baseline Handwriting and remaining 1.8% of the students have descending baseline handwriting. Among 8 % of Emotionally stable students, 3.8% of the students have descending baseline Handwriting, 3.8% of the students have stable baseline handwriting and remaining 3.5 of the students have ascending baseline handwriting. Among 57.3% of general students, 37.8% of the students have stable baseline Handwriting, 12% of the students have ascending baseline Handwriting and 7.5% of the students have descending baseline Handwriting.

It is observed that, about 66.8% of students who have stable baseline Handwriting comprised 37% of students have general type of personality, 25.3% of students have neurotic type of personality and 3.8% students have emotional stable personality.

It can be inferred from the above table-1 obtained χ^2 value 14.637 with $df=4$, which is higher than the theoretical table value 9.48 at 0.05 level of significance. So, above null Hypothesis is rejected and formulated the alternative hypothesis “There is a significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their Baseline Handwriting.”



Graph-1: Graph showing difference between Post Graduate Students with different type of personality and their baseline Handwriting.

Graph-1 Illustrates the percentage of baseline handwriting of postgraduate students having more stable baseline handwriting (66.8%), descending baseline (10%) and ascending baseline (23.3%). The graph also depicts that among stable baseline handwriting students, 37.8% students have general type of personality, 25.3% students have neurotic type of personality and 3.8% students have emotional stable personality.

Hypothesis: 02. There is no significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their size of Handwriting.

Table-02: Table shows Number, Percentage and Chi-Square Value of the students with Neuroticism, Emotional Stability and general Personality types falling under different types of Size of Handwriting.

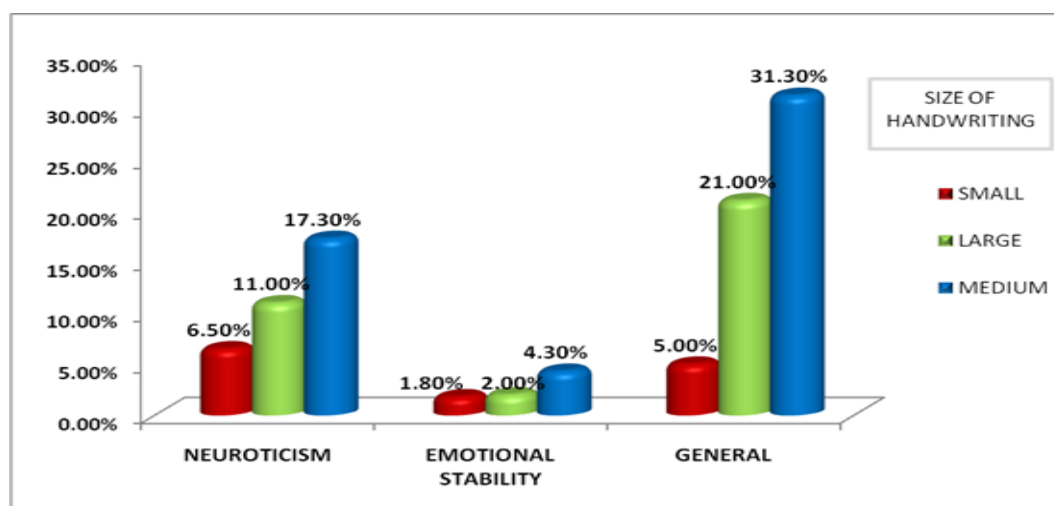
Types of Personality		Size of Handwriting			Total
		Small	Large	Medium	
Neuroticism	Observed Frequency (fo)	26	44	69	139
	Expected Frequency (fe)	18.4	47.3	73.3	139.0
	% within Personality	18.7%	31.7%	49.6%	100.0%
	% within Size	49.1%	32.4%	32.7%	34.8%
	% of Total	6.5%	11.0%	17.3%	34.8%
Emotional stability	Observed Frequency (fo)	7	8	17	32
	Expected Frequency (fe)	4.2	10.9	16.9	32.0
	% within Personality	21.9%	25.0%	53.1%	100.0%
	% within Size	13.2%	5.9%	8.1%	8.0%
	% of Total	1.8%	2.0%	4.3%	8.0%
General	Observed Frequency (fo)	20	84	125	229
	Expected Frequency (fe)	30.3	77.9	120.8	229.0
	% within Personality	8.7%	36.7%	54.6%	100.0%
	% within Size	37.7%	61.8%	59.2%	57.3%
	% of Total	5.0%	21.0%	31.3%	57.3%
Total	Observed Frequency (fo)	53	136	211	400
	Expected Frequency (fe)	53.0	136.0	211.0	400.0
	% within Personality	13.3%	34.0%	52.8%	100.0%
	% within Size	100.0%	100%	100.0%	100.0%
	% of Total	13.3%	34.0%	52.8%	100.0%
$\chi^2 = 10.317$, $df=4$, $N=400$, $P < 0.035$ (S)					

The above table-2 reveals that, about 34.8% of the students fall in Neuroticism type of personality, about 8% of the students fall in Emotional stability type of personality and remaining about 57.3% of the students fall in general type of personality.

Among 34.8 % of Neuroticism students, 17.3% of the students have medium size Handwriting, 11% of the students have large size Handwriting and remaining 6.5% of the students have small size handwriting. Among 8 % of Emotional stability students, 4.3% of the students have medium size Handwriting, 2% of the students have large size handwriting and remaining 1.8% of the students have small size handwriting. Among 57.3% of general students, 31.3% of the students have medium size Handwriting, 21% of the students have large size Handwriting and remaining 5% of the students have small size Handwriting.

It is observed that, about 52.8% of students who have medium size of Handwriting comprised 31% of students have general type of personality, 17.3% of students have neurotic type of personality and 4.3% students have emotional stable personality.

It can be inferred from the above table-2 that, the obtained χ^2 value 10.317 with $df=4$, which is higher than the theoretical table value 9.48 at 0.05 level of significance. So above null Hypothesis is rejected and formulated the alternative hypothesis “There is a significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with size of Handwriting.



Graph-2: Graph showing difference between Post Graduate Students with different type of personality and their size of Handwriting.

Graph-2 illustrates the percentage of size of handwriting of postgraduate students having more medium size handwriting (52.8%), large size (34%) and small size (13.3%). The graph also depicts that among medium size handwriting students, 31.3% students have general type of personality, 17% students have neurotic type of personality and 4.3% students have emotional stable personality.

CONCLUSION AND DISCUSSION:

This study indicates that the finding related to Baseline Handwriting of Post Graduate Students, It is found that there is a significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with their Baseline Handwriting” ($\chi^2=14.637, P<0.006$). It is found that the Percentage of the baseline handwriting of postgraduate students having more stable baseline handwriting (66.8%), than the descending baseline (10%) and ascending baseline handwriting (23.3%). Among stable baseline handwriting students, 37.8% students have general type of personality, 25.3% students have the neurotic type of personality and 3.8% students have emotional stable personality. The result is supported by the result of Jess E. Dines (1994) found straight baseline indicates a consistent and controlled behavior exhibited. The similar study Andrea McNichol and Jeffrey A

Nelson, (1994) also found some personality characters; outward behaviour, even-keeled, level, Consistent and controlled behaviour. One more study found Karen amend and Mary S. Ruiz, (1980) stable writer's mind disciplines his emotions, Composure, orderliness, emotional stability, dependability, and perseverance. Similar study John Antony (2008) found that, Ascending baseline indicates rising in the world, surmounting obstacles and difficulties. Its meaning can be ambition, aggression, optimism, hopefulness, and cheerfulness. Andrea McNichol and Jeffrey A Nelson, (1994) showed that ascending writing mean healthy mental energy and indicates. But another two studies found personality characters in descending handwriting.

This study shows that, the finding related to size of Handwriting of Post Graduate Students, There exists a significant difference in Neuroticism, Emotional Stability and general personality types of Post Graduate Students with size of Handwriting. ($\chi^2=10.317, P<0.035$) It is found that the percentage of size of the handwriting of postgraduate students having more medium size handwriting (52.8%), large size (34%) and small size handwriting (13.3%). among medium size handwriting students, 31.3% students have general type of personality, 17% students have neurotic type of personality and 4.3% students have emotional stable personality. Similar study John Antony (2008) showed that, Small writing means introversion. According to the study Jess E. Dines (1994) found small writing indicates the person can concentrate on small details. Also one more author Jess E. Dines, (1994) established same personality traits on Medium Size Writing. Andrea McNichol and Jeffrey A Nelson, (1994) also found that large size writing indicates they are sensitivity usually social and has an average ability to focus. Similar study Karen amends and Mary S. Ruiz, (1980) shows the writer's need to make an impress, to be detected, to win appreciation. Enjoy attention and admiration; do not like to be alone, Boldness, enthusiasm, and optimism, but also capable of boastfulness, restlessness, and lack of concentration and discipline. This study helps the teachers to understanding the students' psychological and academic aspects through their Handwriting. So personality can be analyzed through various ways, Handwriting analysis is one of the method.

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