



A Statistical Study of Relation between Graphology, Zodiac Sign and Numerology with Personality Traits

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Abstract

It is a matter of curiosity to identify the traits, evaluate them and figure out the personality of someone. In order to carry out this exercise Graphology or Handwriting analysis is a scientific method. This approach is based on the strokes and pattern revealed through handwriting. Handwriting is expected to reveals the personality including emotional outlay, honesty, fears and defences etc. Handwriting stroke reflects the written trace of each individual's rhythm and style. The purpose of this study is to use the group data, extract some of the common features and understand the personality of an individual to some extent. The data collected through handwriting, numerology and zodiac sign will work as a base for the present study. The present is an attempt using the data on zodiac sign and personality number for 150. The data is analyzed first by segmenting the data by cluster analysis. Then applying methods of correspondence analysis and testing the proposed hypothesis by Chi-square test. The results were discussed on cluster wise. A set of conclusions increased the further curiosity.

**Keywords: Personality identification, Handwriting Analysis, Personality Traits,
Numerology, Zodiac Sign Analysis.**

INTRODUCTION

Prediction of personality by handwriting analysis, Zodiac sign and Numerology of somebody is exceptionally inquisitive thing. Each individual have distinctive style of composing, as his/her cerebrum have various approaches to show what's happening in his/her psyche, so we went over with a plan to make this examination theme.

Human personality acknowledgment is turning out to be increasingly more significant in the cutting edge world. It encourages human to improve their occupations and take care of progressively regular issues. Hand composing analysis is otherwise called graphology which is a technique for distinguishing the traits identified with a person. It helps in understanding personality traits through the strokes and examples uncovered by handwriting. There are two methodologies in graphology for example graphical analysis of the basic kind of composing and analysis of the sort of image or letter.

Every individual's zodiac signs is controlled by the date of his introduction to the world. As is known, dynamic planetary cooperations when an individual is conceived give him explicit character traits, personality, demeanor, and even the destiny of what has been known since vestige. For a long time, individuals attempted to relate wonders happening in space, attributes of an individual's character, his life, and hence, because of this genuinely titanic and difficult hundreds of years old work, the spellbinding qualities of every one of the twelve zodiac signs have been assembled. Subsequently, zodiac sign isn't only a heavenly body under which an individual is conceived; it includes every one of those complex inestimable procedures and connections that are a natal graph of the improvement of an individual's personality and predetermination.

Zodiac signs, otherwise called sun signs, visionary signs or star signs is a hover of twelve 30 degree divisions of the heavenly longitude that are focused upon the ecliptic-the way of the Sun over the divine circle throughout a year. The term zodiac is gotten from the Greek expression zoidiakos, signifying 'hover of creatures'. This name is roused by the way that half of the signs of the exemplary Greek zodiac are spoken to as creatures, other than two fanciful crossovers.

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The request for the zodiac signs is Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius and Pisces.

The data about the different attributes of zodiac signs, Numerology and Handwriting can likewise be utilized to comprehend the nature and conduct of individuals of a specific zodiac sign, Numerology and Handwriting, giving an important indication in knowing them. In the comparable style, similarity between different zodiac signs is likewise investigated in soothsaying.

Data Collection Method:

The sampling method used is Convenient Sampling. The data used for our project is primary data.

Target Population

The population targeted in our project is respondents from New Arts Commerce and Science College, Ahmednagar.

Sampling Size

A total of 150 Questionnaires were distributed through offline.

Procedure

Subjects were booked in for a 20 minute experimental session. Students were allowed to sit comfortably at a desk. No instructions were given as to writing position. Subjects were required to write the paragraph with their dominant hand on blank unlined sheets of paper. A commercially available ball-point pen was used. Also the Questionnaire were distributed with this paragraph, related to personality traits.

METHODOLOGY

Cluster Analysis

Cluster analysis or **clustering** is the task of grouping a set of objects in such a way that objects in the same group (called a **cluster**) are more similar to each other than to those in other groups (**clusters**).

Cluster analysis classifies a set of observations into two or more mutually exclusive *unknown* groups based on combinations of interval variables. The purpose of cluster analysis is to discover a system of organizing observations, usually people, into groups. where members of the groups share properties in common. It is cognitively easier for people to predict behavior or properties of people or objects based on group membership, all of whom share.

Cluster analysis is an exploratory data **analysis** tool which aims at sorting different objects into groups in a way that the degree of association between two objects is maximal if they belong to the same group and minimal otherwise

The term cluster analysis encompasses a number of different algorithm and methods for grouping objects of similar kind into respective categories

Average Linkage

Average linkage (or Centroid Method) computes the distance between subgroups at each step as the average of the distances between the two subgroups.

Interpreting a Dendogram

A dendogram that clearly differentiates groups of objects will have small distances in the far branches of the tree and large differences in the near branches.

Correspondence Analysis

Correspondence Analysis (CA) is an extension of Principle component analysis (PCA) suited to analyze frequencies formed by the qualitative variables. (i.e. contingency table). CA uses

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frequency data. Correspondence analysis is dimension reduction technique similar to PCA & factor analysis but extends factor analysis in two counts- i) handling of categorical variables, particularly measured in nominal scale. ii) Developing perceptual maps of extracted components.

Correspondence Analysis deals with categorical data. Categorical data works with nominal or ordinal data.

Correspondence analysis is required for large contingency table . Correspondence analysis is dimension reduction method applied to contingency table. The information retained by each dimension is called as eigenvalues.

If there is attraction the corresponding row and column co-ordinates have the same sign on the axis. If there is repulsion the corresponding row and column co-ordinates have different signs on the axis. A high value indicates a strong attraction or repulsion.

(CA) is used to represent graphically the table of distances between row variables or between column variables.

Statistical Analysis and Conclusion**Chi-Square test for checking relation between Handwriting and Personality**

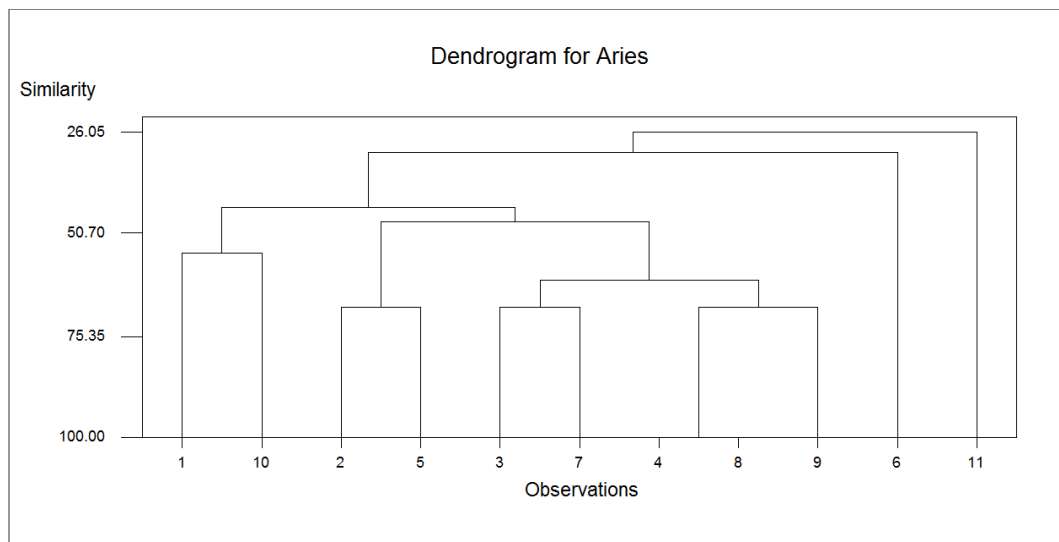
Sr. No.	Hypotheses	P Value	Interpretation
1	H ₀₁ : Handwriting and Family Attachment (i.e. Attached to family, Space maintained, Stay away, Stay near, Away but wants to come near) are independent H ₁₁ : Handwriting and Family Attachment are dependent	0.0034	Here P-Value <0.05. Therefore, We reject H ₀ , hence Handwriting and Family Attachment are related to each other.
2	H ₀₂ : Handwriting and Work Attitude (i.e. Risk taking, Fearful doesn't take risk,	0.0017	Here P-Value <0.05. Therefore, We reject H ₀ , hence Handwriting and Work

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	Leaving incomplete work) are independent		Attitude are related to each other.
3	H ₀₃ : Handwriting and Emotional intelligence(i.e. Self-control, Sensitive) are independent	0.0041	Here P-Value <0.05. Therefore, We reject H ₀ , hence Handwriting and Emotional intelligence are related to each other.
4	H ₀₄ : Handwriting and Emotionality level(i.e. Logical, Normal, Emotional) are independent	0.0024	Here P-Value <0.05. Therefore, We reject H ₀ , hence Handwriting and Emotionality are related to each other.

Interpretation: Here P-Value <0.05. Therefore, We reject H₀, therefore Individual Personalities are depends on their Handwriting.

Relation between Handwriting & Zodiac Sign observations



Conclusion: From the above dendrogram, If we consider the 10 variables then we get 100% similarity level between handwriting and zodiac sign(Aries) observation.

Also From the cluster analysis we get similarity level between Handwriting & Zodiac Sign for personality traits are following:

1. For Aries, Taurus, Leo, Virgo, Scorpio there is 100% similarity level.

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2. For Gemini & Capricorn there is 82.32% similarity level.
3. For Cancer there is 67.56% similarity level.
4. For Libra there is 81.10% similarity level.
5. For Sagittarius there is 75.75% similarity level.
6. For Aquarius there is 73.27% similarity level.
7. For Pisces there is 78.68% similarity level.

Interpretation of Numerology and Handwriting

Numerology Number	Conclusion	Interpretation
1	For Numerology no.1, we accept null hypothesis in case of all variables and reject in case of only X6 and X7	There is relationship between no. in numerology number 1 & Handwriting in case of Sensitivity and Emotionality.
2	For Numerology no.2, we accept null hypothesis in case of all variables and reject in case of only X2, X4, &X8	There is relation between numerology number 2 & Handwriting in case of Self and belief attitude towards others, Time management and imagination process.
3	For Numerology number 3, we accept null hypothesis in case of all variables and reject in case of X3,X7 and X8	There is relationship between numerology number 3& Handwriting in case of work attitude, emotionality and imagination process.
4	For Numerology no.4, we accept null hypothesis in case of all variables and reject in case of X5, X6, and X7	There is relationship between numerology number 4 & Handwriting in case of Self time and Sensitivity and Emotionality.
5	For Numerology no 5 . we accept null hypothesis in case of all variable and reject in case of X4, X7	There is relation between no. 5 and handwriting in case of time management and Emotionality.
6	For Numerology no.6, we reject null hypothesis in case of all variables	There is relationship between numerology number 6 & Handwriting.

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7	For Numerology no.7, we accept null hypothesis for variables X1,X3,X5,X6,X7, & X8 and reject for variables X2 & X4	There is relationship between numerology number 7 & Handwriting in case of self attitude towards others and Time management.
8	For Numerology no.8, we accept null hypothesis for variables X1, X2, X3, X4,X5,X6& X7 and reject for variable X8	There is relationship between numerology number 8 & Handwriting in case of imagination process.
9	For Numerology no.9, we accept null hypothesis for variables X1,X2,X3,X4,X5,X6& X7 and reject for variable X8	There is relationship between numerology number 9& Handwriting in case of imagination process.

Overall Conclusion

1. The expected nature to respective zodiac sign characteristics & the answer from questionnaire related to that particular zodiac sign are depend on each other.
2. From correspondence Analysis we conclude that, there is positive correlation between handwriting style & zodiac sign nature.
3. From the cluster analysis we get similarity level between Handwriting & Zodiac Sign for personality traits.
4. From the Numerological Analysis we get the relation between Handwriting and personality numbers.

From all over data we conclude that the handwriting reveals the persons nature, behaviour & there is relationship between handwriting, zodiac sign, Numerology& personality.

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