

Forensic Statement Analysis to Determine Personality Traits-A Case Study

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Abstract:

Written statement contains a wealth of information far beyond what the suspect or victim intends to communicate. The technique of Forensic Statement Analysis is an effective strategy in trait-based approaches for personality assessment utilized by various Forensic Investigators or Experts. Investigators examine and analyse the words within the written statement to get information about the writer. This technique is also useful to detect deception or truthfulness in the written statements, sometimes provided unintentionally by the writer, which are independent of case facts. Statement analysis provides investigators with vital background data or details about writer in terms of personality, relationships with others, motives or goals, attitude, behaviour. It can also determine whether the intent of the statement is to convey or convince. The present study describes a case consisting of several diaries of a deceased lady which were submitted in the Laboratory by investigating agency with a request to expedite opinion on multiple queries with respect to her mindset, past life, relationships, conflicts, any future plans, job, and religious belief. After thorough scientific examination and analysis of the contents or statements executed in the diaries, a conclusive opinion was expressed by Forensic Experts regarding her personality traits.

Keywords: Forensic Statement Analysis, Personality Assessment, diaries, content.

Introduction

Writing is means of communication with the outside world through which we introduce to each other; therefore, handwriting is an expressive behaviour. What we write comes from the conscious mind and how we write comes from the sub-conscious mind. It is also called 'Psychology of Handwriting'. Any written specimen portrays personality descriptions and behaviour predictions. The human brain is a complex system which governs automatic and willed behaviours, multimodal perception, emotion, and restorative functions. Various researches are being conducted to understand how the complex regions of the brain such as the cortical and sub-cortical regions manage hand movements leading to multifarious applications ranging from medicine, surgery to psychology. They may also provide empirical data for the legal and scientific communities to understand how diseases, medications, drugs, behaviour and the age process affect handwriting. The brain sends the order through the nervous system to the arm, hand and fingers, where together they manipulate the writing tool. In this way, the intent to write forms deep within the creative processes of the mind and makes expressive gesture representative of the mind behind the pen. Handwriting is an individual characteristic and unique for every person. Scientific

analysis of handwriting helps to understand the writer's personality in a way which reveals his/her behaviour, motivations, desires, fears, emotional outlays and many other aspects such as health issues, morality, past experiences, mental problems and hidden talents of the writer. Graphology involves the scientific methods of identification, evaluation and understanding of anyone's personality from handwriting. Here, the script written is considered as body language of an individual. A graphological analysis is an interpretation of complete elements in a writer's life and calls for a high level of talent and training in analysing expression as well as knowledge of personality theories.

In Forensics, graphology plays important role in studying handwriting especially that found in ransom notes; poison pen letters or blackmail demands and gives indication about the person's state of mind at the time of producing a particular document. Forensic Graphologists study the personality traits, behavioural aspects, motives of the writer and criminal profiling through handwriting. Graphology is used in criminology in order to determine the personality of criminals, changes in the psyche that affect writing, to confirm the truthfulness of testimonies provided by suspects. The experts work in cooperation with law enforcement agencies, attorneys or anyone interested in determining officially who wrote what, where and under what conditions, with what motive or intention and help to determine guilt or innocence of the defendant.

Diaries are usually considered to be a medium of expression and a record of fact as seen by the writer. This is a very important factor as to why people write in diaries as the writer feels that he or she can trust the diary and will reveal information not otherwise revealed or it can serve as a barometer for their self-esteem by reflecting changes (Hymer, 1991). Kawaura, Kawakami, and Yamashita (1998) classified diaries into four types: memories (records of fact oriented toward the self); journals (records of fact oriented toward the reader); narrowly defined diaries (expressions of sentiment oriented toward the self); and open diaries (expressions of sentiment oriented toward a reader). The analysis of contents of the diaries can provide exquisite details about the author's experiences on a daily basis for a specific period of time. The diaries also have evidentiary value to reveal how the writer thinks, feels and behaves. It shows the motivation that lies behind actions and outlines, the writer's propensity to behave in ways that may not be expected. When words are examined, traits of extraversion and neuroticism in relation to words used that are associated with positive or negative emotions can be observed (Hirsh & Peterson, 2009; Pennebaker & King, 1999).

Brief History of Case

The diary writing can be used as a tool for reflection, self-improvement, emotional-release, preserving family history, and recording milestones or events and as a mechanism for coping with the need to adjust to hardships, freedom, and challenges. A case was received in the Laboratory in which the exhibits consisted of several diaries of a deceased lady. The nature of examination requested by the investigating agency was Forensic Statement Analysis to expedite opinion on multiple queries with respect to her mindset, past life, relationships, conflicts, any future plans, job, and religious belief. The case was taken up for scientific analysis by the Forensic experts to get conclusive result.

Forensic Statement Analysis

Forensic statement analysis is a method involving analysis of words that are used by an individual, which are not influenced by the interviewer, in order to determine precisely what is actually being said. Forensic statement analysis is basically a two-step process which includes determination of the norm, and then analysis of deviations from the norm. A truthful statement always contrasts from a statement that is fabricated. By applying the technique of Statement Analysis, the investigator uses the individual's written or verbal responses to search for cues in an effort to detect concealed or missing information and whether the information provided by the writer is true or false. The evaluation entails critically examination of the statement of an individual for word choice, structure, and substance instead of simply concentrating on the facts that are stated, in an effort to ascertain whether the person is honest or misleading; truthful or deceptive.

Forensic Statement Analysis does not require the individual being interviewed to be physically present as a condition for determining if the answers are truthful or deceptive; which make this technique distinct from other investigative communication techniques. It can be as effective like speaking to someone on the telephone, or examining the individual's written statement which are being provided with the examiner. The content of the statement is also helpful to understand the psychology of an individual which reveals his/her personality. The written notes provide information about the writer whether he/ she is available for interview or not.

The Forensic Experts analyses the content of the diaries executed by the person and focus on the elements such as type of language used; the complexity and phrases of the construction; use of grammar rules, writing style; type of vocabulary used; positioning of the text on writing surface; size of the paragraphs and their alignment; spacing; fractions of emotions used; sentiments in language; use of powerful words.

Observations

The forensic statement analysis has been used to gauge changes in attitude as they occur within a person with the passage of time. The analysis of content in the written statement was mainly focused on the type of language used (to determine the level of culture of the author); the complexity and phrases of the construction; use of grammar rules, writing style; type of vocabulary used; punctuation marks; positioning on the writing surface; size of the paragraphs and their alignment; spacing; location or position of signature and date on the paper. It is generally accepted that large handwriting indicates extrovert personality while the small one implies the personality of being introvert.

Forensic statement analysis relies on parts of speech as a basis to evaluate what a person is actually saying; thus, a close study of pronouns, nouns, and verbs is essential. In statement analysis, Investigators examine four components of statement– parts of speech (pronouns, nouns, and verbs), extraneous information, lack of conviction, and the balance of the statement and analyse the words within the written statement to determine the personality traits of the writer.

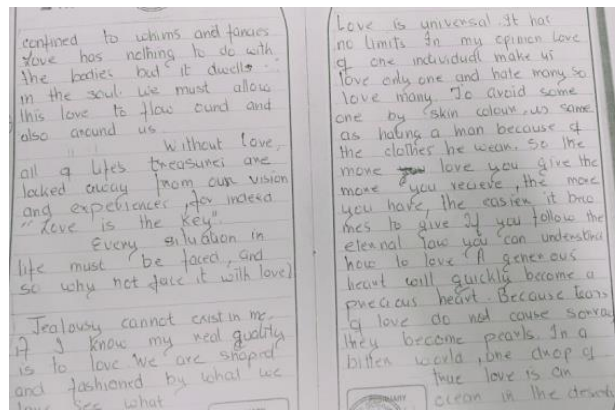


IMAGE-1

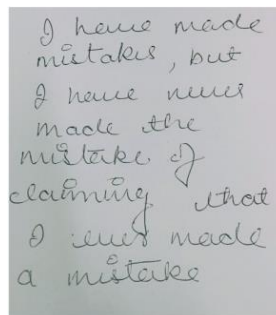


IMAGE-2

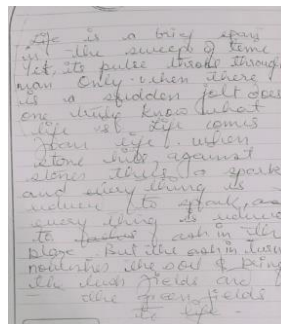


IMAGE-3

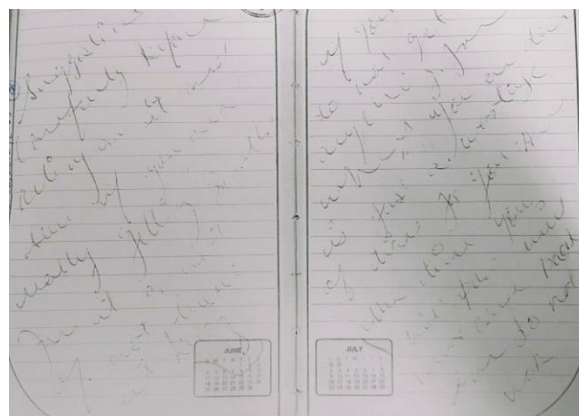


IMAGE-4

Images 1-4: Content of the Diaries of the deceased lady

Through analysis of the content which was executed in the diaries by the deceased lady, following observations were made:

- Initially, the handwriting of the lady was legible and skilled (Image 1) but with the passage of time it started deteriorating and became illegible at the last (Image 4) resulting in increase in width and height of letters, deviation from the baseline which may be due to some psychological issues which had bad impact on her psychology.
- The deceased was confident, creative, energetic, religious, determined about her work and ambitious, believed in love but she lost her love, her trust was broken and she started facing depression which was observed in the content of her diaries.
- She was happy with her job but due to depression she started facing hurdles in her professional life and was not able to achieve her goal and fed up with all problems as observed in the content of her diaries.

Conclusions

Our physiological and psychological functions are revealed in our handwriting and our act of writing contains spontaneous actions for the purpose of communicating our ideas. There is consistency of script features in our handwriting with their graphometric measurements which are repeatable and reliable. Therefore, our writing is an expressive behaviour and communicates our personality characteristics. Graphology is the study of all graphic movements which gives insight into the physical, mental and emotional states of the writer or artist. Handwriting is a kind of projective test. When we write, we spontaneously construct random parts in the form of strokes, to form known patterns which are letters, in order to communicate our ideas in the form of words. Thus, the words written as a sentence has an imposed organization which conveys a creative purpose which is a message.

Analysis of contents in the writing helps to understand the writer's personality in a way which reveals his/her behaviour, motivations, desires, fears, emotional outlays and many other aspects. It reveals how the writer thinks, feels and behaves and shows the motivation that lies behind actions and outlines, the writer's propensity to behave in ways that may not be expected and it tells us about one's nature, positive and negative traits, and behavior. There are many factors which affect the act of writing, such as psychological mood, health of an individual, physical condition. These factors lead to changes in handwriting such as regular writing, irregular writing, bad writing, style of expression etc. Statement analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. The experts quantify and analyse the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts, the writer(s).

Conflict Of Interest

The authors declare that there are no conflicts of interest.

Acknowledgement

The authors are thankful to the authorities of the Central Forensic Science Laboratory, New Delhi.

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