



Forensic Examination and the Admissibility of Questioned Documents in the Court of Law as an Evidence

Bhavana Desai* and J.L.Kalyan

Dept of Criminology and Forensic Science, Karnatak Science College, Dharwad, Karnataka, India
bhavanadesai19@gmail.com

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Abstract

Questioned document examination (QDE) is one of the less attended topics in the area of research work as it is very less accessible to common people. The proposed paper therefore makes a deliberate attempt to understand the effectiveness of the techniques adopted to ensure the reliability of questioned documents in Indian Court of Law. Supported by qualitative and quantitative research methodology, the analysis is carried out on 150 respondents, who are mainly working as forensic experts as well as judges/magistrates in India. The findings of the study show the real picture of effectiveness of questioned document with an aid of statistical outcomes.

Keywords: Questioned Document, Evidence, Admissibility, Indian Court of Law.

Introduction

Evidence can be said as a proof reading or proof supporting a claim. The quality of proof is how reliable such evidence should be considered and for these, concepts such as authentication, admissibility, and reasonable doubt, clear and convincing evidence are included¹. It is the ways and means used to persuade the judge of your facts as the judge is expected to start off with no predetermined knowledge of the facts about a case. The questioned documents are commonly associated with white-collar crimes such as check fraud. However questioned document examiners are called to investigate the authenticity of documents. The suicide note found next to the deceased was it actually written by a murderer trying to cover up his crime or the bank robber's hold up note does it contain invisible impressions that indicate the address of the hideout or the will of a wealthy person was it altered so a relative could receive the benefit². Questioned documents are dealt with both civil cases and criminal cases. The legal system is divided into- criminal and civil court. Criminal courts try defendants for crimes against the state where as civil court try cases alleging wrongs by one party against another party³. The prime aim of the study is to have a comparative study of conventional and modern technologies in the examination and analysis of questioned documents and their admissibility in the court of law

Highlights: The proposed paper makes an attempt to understand the effectiveness of the techniques adopted to ensure the reliability of Questioned Documents in Indian Court of Law. Presently there are many technologies for the examination of questioned documents but very little research is being carried out relating to questioned document admissibility. The present research work is focused on the technologies used in the examination and analysis of Questioned Document.

Forensic Document Examination: The Forensic document examination is one of the oldest activities in the field of forensic science study. A document, whose source or authenticity is unknown or is in doubt or is suspected of being fraudulent, can be revealed by forensic document examination^{4,5}. Questioned document examination or Forensic document examination or QDE may be directly or indirectly connected with a variety of criminal and civil cases, such as forgery, robbery, extortion etc. Questioned document problems are varied in nature and some of the important ones relate to: Identification of handwriting. Identification of signatures and detection of forgery. Examination of writing materials i.e. ink, pen and paper etc. Detection of alterations, additions, deletions, obliterations, erasures.

The primary purpose of Questioned/Forensic document examination is to answer questions about a disputed document whose source or authenticity is unknown or is in doubt using various scientific processes and methods⁶.

Proposed System: Presently there are many technologies for the examination of questioned documents but very few or negligible amount of research is being carried out relating to questioned document's admissibility. It is very important to prove the authenticity or ownership of an author of questioned handwriting in the same way it is equally important to present the document as evidence more impressively in the court in front of the judicial authority to make it conclusive. The present study relays much on Analysis of Questioned Documents i.e. the latest Forensic Techniques adopted to make Document Evidence more authentic to prove or disprove the innocence or guilt beyond any reasonable doubt. The purpose of the research is to do a comparative study of conventional and modern technologies in the examination and analysis of questioned

documents and their admissibility in the court of law. The objectives of present research are as follows: To examine the technology used in the examination and analysis of Questioned Documents. To examine the Admissibility of Questioned Document Evidence in the Court of law. To understand the limitations of the experts.

Research Methodology

The study adopts both qualitative and quantitative methods. The assignment of data collection and processing ran from July 2014 to January 2015. Field research was carried out in Hubli-Dharwad, Indian state of Karnataka over a period of five months. The mixed research strategy is adopted where both qualitative and quantitative techniques were considered aimed at producing in-depth knowledge about the topics of Forensic Examination and The Admissibility of Questioned Documents In The Court Of Law As An Evidence being investigated. The research survey parameters are as shown in Table-1.

The proposed study ensures that there are at least 150 respondents are involved in the study. The respondents of the study consist of Magistrates, Senior Advocates and Forensic Experts which are randomly selected from the universe. Magistrates and Senior Advocates are from Hubli-Dharwad and consist of 110 respondents.

Hypothesis considered for the study: Null Hypothesis considered for the study are: H_{01} : The existing technology

adopted in analyzing questioned document is significantly inefficient. H_{02} : Questioned Document Evidence is not standardized H_{03} : The extent of the training, work experience, required skills, and qualification for the experts are significantly insufficient.

Data Analysis: This section presents certain introduction about the usage of various statistical techniques by SPSS tools used and the assumptions relating to them. It also gives the standard deviation of the variables used for purposes of the present study⁷. The total sample of the present study comprises of 150 respondents. Although, many researchers uses it for research data collection, but the prime stress is to understand about questioned documents, keeping it in the mind the researcher has tried to draw some conclusion with certain statistical tools in order to reach the conclusion.

Table-2 shows the descriptive outcome of valid technology that is adopted in the analysis of Questioned Documents. The outcome shows that the descriptive statistics of mean and standard deviation, where it can be found that Modern technologies of questioned document are more based on computing skills, thus it saves time and increase productivity in questioned document analysis. The likelihood of admissibility of of QD as legitimate evidence in court of law is high when latest technology is used as conventional techniques are more based on human skills.

Table-1
Research Survey Parameters

Research Methodology	Qualitative and Quantitative	
Total respondents	150	
Participant Sampling	40 Forensic Experts	110 Senior Advocates and Magistrates
Universe	Gandhinagar, Gujarat State Forensic Science Laboratory (FSL) Hyderabad, State Forensic Science Laboratory (FSL) respondents Hyderabad, Central Forensic Science Laboratory (CFSL) Private Document Experts	
Tools Used	SPSS	
Questionnaire Design	Structured and Semi-structured questionnaire	

Table-2
Descriptive Analysis of Adoption of Technology

Descriptive Analysis	Mean	SD
Latest methods of QD analysis are more based on computing skills	3.57	.874
Admissibility of QD as legitimate of QD as legitimate evidence in court of law is high when latest technologies are used	3.95	.959

Table-3
ANOVA Test for Adoption of Technology in QDE

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.055	4	1.014	1.380	.261
Within Groups	25.720	35	.735		
Total	29.775	39			

Table-3 discusses about the statistical outcome of analysis of variance. The outcome shows that the calculated values are high than the table values at 5% Level of Significance. The data was collected on a five point scale.

Table-4 highlights about the validity of the technology when adopted in the analysis of Questioned Documents. A Chi-Square dependency test was carried out to see if valid technology is adopted or not in the analysis of Questioned Document. The results, which has been shown in above table shows that the calculated values are less than the table values at 5% Level of Significance. The data was collected on a five point scale. From the above statistical test done, it can be concluded that null hypothesis is accepted- The existing technology adopted in

analyzing questioned document is significantly inefficient. Hence, it can be said that during the analysis of questioned documents valid technologies are not adopted.

Table-5 highlights the descriptive outcome for the query whether the Questioned Document evidence is standardized or not. The outcome shows the descriptive statistics of mean and standard deviation.

Table-6 shows the discussion about the statistical outcome of analysis of variance. The outcome shows that the calculated value is more than the table values at 5% Level of Significance. The data was collected on a five point scale.

Table-4
Chi-Square Test for adoption of technology in QDE

Chi-Square Test	P value	Null Hypothesis
		Accepted/Rejected
Latest methods of QD analysis are more based on computing skills	.000	Accepted
Admissibility of QD as legitimate of QD as legitimate evidence in court of law is high when latest technologies are used	.000	Accepted

Table-5
Descriptive Analysis for Document Standardization

Descriptive Analysis	Mean	SD
Quality control	28.65	163.223
Admissibility suffers because of improper Forensic Evidence	11.16	95.056

Table-6
ANOVA test for Document Standardization

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	91829.346	5	18365.869	.679	.640
Within Groups	2812131.527	104	27039.726		
Total	2903960.873	109			

Table-7
Chi-Square Test for Document Standardization

Chi-Square Test	P value	Null Hypothesis
		Accepted/Rejected
Quality control	.000	Accepted
Admissibility suffers because of improper Forensic Evidence	.000	Accepted

Table-7 shows the reliability analysis for investigation the level of standardization of the Questioned Document evidence. A Chi-Square dependency test was carried out to see if the Questioned Document evidence is not standardized. The results, which has been shown in above table shows that the calculated values are less than the table values at 5% Level of Significance. From the above statistical test done, it can be concluded that null hypothesis is accepted i.e. The Questioned document evidence is not standardized.

Table-8 shows the mean and standard deviation analysis of the level of training given to experts to present Questioned document evidence. The outcome shows the descriptive statistics of mean and standard deviation.

Table-9 discusses about the statistical outcome of analysis of variance. The outcome shows that the calculated value is more than the table values at 5% Level of Significance. The data was collected on a five point scale.

Table 10 shows the training given to the experts. A Chi-Square dependency test was carried out to see whether experts are given proper training to present questioned document evidence in the court of law. The results, which has been shown in above table shows that the calculated values are less than the table values at 5% Level of Significance. From the above statistical test done, it can be concluded that null hypothesis is accepted i.e. Experts are not given proper training to present questioned document evidence in the court.

Table-8
Descriptive Analysis for Training Given to Experts

Descriptive Analysis	Mean	SD
Experts should be well trained and qualified	1.28	.577
Opinion of a document expert is fallible	29.74	163.044

Table-9
ANOVA test for Training Given to Experts

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	103620.247	3	34540.082	1.310	.275
Within Groups	2793957.108	106	26358.086		
Total	2897577.355	109			

Table-10
Chi-Square Test for Training Given to Experts

Chi-Square Test	P value	Null Hypothesis
		Accepted/Rejected
Quality control	.000	Accepted
Admissibility suffers because of improper Forensic Evidence	.000	Accepted

Conclusion

The judiciary system in India is encountering various intricate issues that have led to unusual delays in its administration resulting in more than million's of cases to be pending in Indian Court. The prime contribution of Forensic Science is to assist the justice delivery by highlighting the facts behind the crime using scientific testing of questioned documents evidence in the criminal, civil, regulatory, as well as statutory cases. Admissibility of Questioned document examination in the court of law is one of the less attended topics in the area of research work as it is very less accessible to common people. The proposed work makes a deliberate attempt to understand the effectiveness of the techniques adopted to ensure the reliability of questioned documents as evidence in Indian Court of Law. The study discusses about the modern and conventional techniques where mixed mode research is carried out on 150 respondents, with experts opinion who are mainly working as forensic experts as well as judges/magistrates in India. The findings indicated that :

Valid technologies are not adopted in the analysis of questioned documents. In this modern world where the forgery rate is increasing in a very fast pace, experts should use modern reliable technologies to solve the cases. The questioned document evidence is not standardized. Experts are not given proper training to present questioned document evidence in the court of law.

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