

# Data Analysis In Social Sciences: Comparison between Quantitative and Qualitative Research

R. Venkatesh Aravindh<sup>#1</sup>, S. Thirupathi<sup>\*2</sup>

<sup>1,2</sup>Doctoral Research Scholar, Department of Journalism and Mass Communication,  
Periyar University, Salem, Tamil Nadu, India

**Abstract** — Quantitative research as the name suggests is about quantities i.e. numbers. Qualitative research is about relating to quality or kind. Surveys, questionnaires are some of the popular quantitative research approaches. Film analysis, pictorial analysis are some of the popular qualitative research approaches. There are rigid methods under which quantitative research studies are confined to and mostly do not venture into other branches of studies. Qualitative research have more scope and depth when venturing into other areas such as semiotics, iconography, designing etc. The researcher can venture and get a much deeper understanding in areas more in qualitative research than in quantitative research. This research paper is envisioned to establish a comparison between quantitative and qualitative research in the stream of social sciences.

**Keywords** — Data Analysis; Social Sciences; Comparison; Quantitative Research; Qualitative Research.

## 1. Introduction

According to Robson C. (2011) quantitative analysis requires the researcher numbers into meaningful data. According to Thorne S. (2000) qualitative data analysis is the process of examining data to derive an explanation for a specific phenomenon. Qualitative data analysis gives an understanding of the research objective by revealing patterns and themes present in the data.

## 2. Review of Literature

As far as quantitative research studies are concerned, literature review findings conducted at the earlier stages of the research process need to be referred to in order to reflect the viewpoints of other authors. Qualitative Analysis is employed when the researcher has to analyze data that are subjective in nature. (Nedha, 2011).

## 3. Methodology

The current research study looks at the comparison between quantitative and qualitative research approaches in social science research with regards to data analysis.

## 4. Analysis and Findings

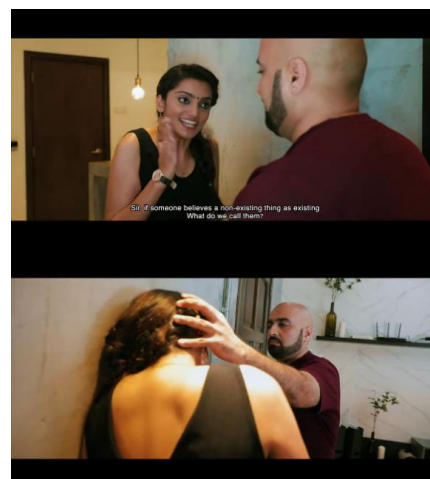
**Table 1: Distribution of respondents based on their Educational Qualification**

Particulars	Frequency	Percent
Under Graduate	30	10
Post Graduate	231	77
M.Phil.	27	9
Ph. D.	12	4
Total	300	100

Table 1 and Figure 1 shows the educational qualification of respondents. Majority respondents were post graduates with 77%. Ph.D scholars were the least with 4%.



**Fig.1: Distribution of respondents based on their Educational Qualification**



**Fig.2: ICON 1 & 2  
Courtesy: You Tube**



**Fig.3: ICON 3 & 4**  
*Courtesy: You Tube*

The above sequences portrays the antagonist to be attacking the female lead in a psychological short film when she tries to leave the antagonist's house. She then diverts the antagonist and retaliates to escape after recovering herself. (Icons 1 to 4). Table 1 is an example for data analysis on the part of quantitative research approach. The table and the chart accompanying it merely gives a description of the data which is quantifiable in nature.

Icons 1 to 4 happens to be a scene from a psychological short film titled 121. The scene depicts the antagonist who has psychological problems yet has feelings for the female lead and invites her to his place for dinner. Upon reaching the place he behaves differently and attacks her and renders her unconscious. Upon recovering, she diverts her attention and attacks him and escapes from his house.

The icons and their portrayal are example of qualitative data analysis where data and information is analysed differently. The same sequence can also be explained by means of iconography. The use of brute force by the antagonist, the usage of the object by the female lead and the reactions by both the characters can be analysed by iconography which is another form of qualitative analysis. This aspect of multiple methodological usage is possible in qualitative data analysis over quantitative data analysis.

## 5. Conclusion

The current research was envisioned to compare the data analysis methods between quantitative research methods and qualitative data methods. Various methods of data analysis in both quantitative as well as qualitative research approaches were analysed. It is concluded that the streams have their own distinctive approaches to help the researchers to meet the research objective. Qualitative research approaches have an edge over quantitative data analysis method with the level of clarity and depth that they offer.

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