The Role of Software Tools (SPSS, NVivo) in Data Analysis

Shelar Rushikesh Vasudev[1] and Dr. Sharad Kadam[2]

Researcher[1] and Guide[2]

MIT Arts, Commerce, and Science College, Alandi (D), Pune, Maharashtra, India

rvsd001@gmail.com and sskadam@mitacsc.ac.in

Abstract*: NVivo, play a critical role in the enhancement of data analyses across different research disciplines. With an increase in volume and data complexity, the pressure on analytical tools by researchers becomes necessary for achievable reliable and valid results. This study applies a mixed-method design through combining qualitative interviews and quantitative surveys to determine how such tools enhance the speed, accuracy, and scope of data analysis. Key findings include reports showing 85% of the respondents indicating that SPSS was necessary for the purposes of statistical analysis, and 90% having the same opinion about NVivo as far as managing qualitative data and thematic analysis are concerned. Participants reported important time savings and increased analytical rigor as a result of the capabilities of these tools. In addition, the study points to integration possibilities of SPSS and NVivo for mixed-method researches, so that data interpretation would be better comprehensive. However, the synthesis of results from quantitative and qualitative studies remains a challenge. Findings indicate that the tool is only useful if the researcher is adequately trained in their use. It contributes to understanding the facilitation of data analysis through software tools, thereby enhancing research quality as well as informing decision-making on evidence-based principles from a range of disciplines.*

Keywords: SPSS, NVivo, data analysis, quantitative research, qualitative research, mixed-methods, research tools, thematic analysis, statistical analysis