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## QUALITATIVE VS QUANTITATIVE: THE DIFFERENCE IN THE KEY SECTIONS OF DOCTORAL DISSERTATIONS – A COMPARATIVE ANALYSIS AND A SUMMARY OF FINDINGS

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### ABSTRACT

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Aim/Purpose	The aim is to conduct a comparative analysis and summarize findings on the difference between the key sections of quantitative doctoral dissertations versus qualitative doctoral dissertations. A summary of the findings will be presented in a tabulated format with bullet points to help clarify the differences between the two approaches.
Background	Doctoral students often face challenges in selecting a qualitative or quantitative doctoral approach for writing their dissertation documents. The challenge is usually faced at the outset of the process. Students contemplate which approach and the difference between them. The students also may not know the specific requirements for each section of the dissertation for each approach. Conducting a comparative analysis and providing a tabulated summary of the difference between the two approaches is deemed to be helpful to the students.
Methodology	First, this research is an attempt to investigate and analyze the existing literature to establish a contextual framework for a structured and logical dissertation process applicable to both qualitative and quantitative research

**The full paper has been published as the following and is being presented at this conference:**

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## Difference in the Key Sections of Doctoral Dissertations

	<p>approaches. Second, the paper applies the framework to both approaches to guide doctoral students in the completion of the dissertation process. Unlike many other studies, this study provides doctoral students with a foundation to develop and build a research identity, leading to quality doctoral dissertations. This study is significant for doctoral students' preparedness for the dissertation process as they move through different stages and apply appropriate pedagogical approaches to not only connect these stages but also scientifically and logically validate the relationships between these stages.</p>
Contribution	<p>Developing a tabulated summary of findings based on comparative analysis for the differences between the key sections of qualitative and quantitative to be used as a reference for doctoral mentors/advisors as they guide their students on the choice between qualitative or quantitative dissertation approaches. This study is different from other studies published on the same topic for two reasons. First, this paper focuses on specific sections of the doctoral dissertation, namely seven sections that are considered "key" sections of the dissertation document. Second, the study provides a tabulated summary at the end. The one-page summary of keywords suggests what is included in each approach (qualitative vs quantitative). The summary of keywords could also initiate further discussion and research on the same topics.</p>
Findings	<p>The outcome of this study is the presentation of a tabulated summary of findings on the difference in the key sections of qualitative doctoral dissertations versus quantitative doctoral dissertations. The findings of this research aim to help doctoral mentors/advisors guide students when contemplating the selection of research approach and doctoral students who are conflicted between the two approaches.</p>
Recommendations for Practitioners	<p>Performing comparative analysis and presenting the findings in a tabulated summary to doctoral students is deemed helpful. It helps address the challenges the students face at the beginning of their dissertation writing when they contemplate the selection between the two study approaches.</p>
Recommendations for Researchers	<p>More research is needed to give examples of the differences between qualitative and quantitative dissertations.</p>
Impact on Society	<p>The findings of this research aim to help doctoral mentors/advisors guide students when contemplating the selection of research approach and doctoral students who are conflicted between the two approaches.</p>
Keywords	<p>doctoral dissertations, qualitative vs quantitative dissertations, comparative analysis, qualitative vs quantitative research</p>

## AUTHORS

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**Azad Ali, D.Sc.**, Professor of Information Technology, has more than 35 years of combined experience in the areas of financial and information systems. He holds a bachelor's degree in Business Administration from the University of Baghdad, an MBA from Indiana University of Pennsylvania, an MPA from the University of Pittsburgh, and a Doctorate of Science in Communications and Information Systems from Robert Morris University. Dr. Ali's research interests include service-learning projects, web design tools, dealing with writing doctoral dissertations, and curriculum development. Azad has been involved in mentoring doctoral students to complete their doctoral dissertations and has so far mentored more than ten students to complete and defend their dissertations.



**Umesh C. Varma, D.I.A.** Dr. Varma has more than 35 years of teaching experience in higher education at undergraduate, graduate, and doctoral levels in Information Technology, Computer Information Systems, Computer Science, Cyber Security, and Information Assurance. He has designed, developed, and implemented several academic programs in various institutions of higher learning. He has worked with several institutions for program accreditation, outcome assessment, and institutional research. Currently, he serves as a President of the University of Fairfax. He also served as a Dean of IT programs at American National University. He has conducted several webinars on Cyber Security. Dr. Varma holds undergraduate degrees in General Science, Business Administration; Master's in Computer Science; and Doctorate in Information Assurance/Cyber Security from India, U.K., and the United States respectively. His research interests are Cyber Security Intelligence analytics, anti-forensics, covert channel analysis, query optimization, Cloud architecture, AI/ML, and complex data structures.



**Shardul Y. Pandya, Ph.D.** Dr. Pandya retired from Capella University, where he served as Core Faculty and Sr. Doctoral Dissertation Advisor with the School of Business, Technology, and Healthcare Administration. He has a Bachelor's degree in Industrial and Production Engineering (dual major) from the BMS College of Engineering at Bangalore University, a Master of Science degree in Mechanical Engineering from the College of Engineering at the Colorado State University at Fort Collins, CO, and a Ph.D. in Engineering Management from the College of Engineering at Old Dominion University in Norfolk, VA. Over the years, he has worked and consulted at various manufacturing organizations, as well as in the areas of Data Mining and Database Marketing. He has taught university-level courses at all levels, and approximately 20 doctoral students have successfully defended their dissertations under his supervision. His public LinkedIn profile is at <https://www.linkedin.com/in/shardulpandya/>