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Research Methods in the Social Sciences: Choosing Between Qualitative, Quantitative, and Mixed Approaches

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Abstract: *The determination of research methodology is a formidable issue in the social sciences and other educative fields. In these disciplines where the accuracy of the study design dictates conclusively on the quality of subsequent effects, lies primarily on the pedagogical policies and practices. The paper attempts to present a detailed guide to the novice researcher by comparing three major methodological methods in a systematic fashion, namely, qualitative, quantitative and mixed methodology, on the basis of a critical review of twelve education research articles. In the field of the social sciences, the qualitative method has always been effective in addressing the specifics of human activity and deep-seated visions, for example research on the importance of parents in the pandemic or the use of the triangulation approach in understanding the best practices of STEM. On the other hand, quantitative methods in education will help measure a large-scale social phenomenon objectively, such as the analysis of the demand in early childhood services on a demographic basis or the development of a valid scale to determine the quality of educational centers. Mixed methods, in this regard, provide a pragmatic blend that aims at addressing complex social problems, such as the correlation of teacher well-being profiles with the precursors of occupational attrition. In conclusion, this paper emphasized that the efficiency of any social science research does not lie in the innate superiority of one particular method but in the similarity between that particular method and the research questions it is attempting to answer. The study is useful as it offers systematic conceptual advice in the choice of qualitative, quantitative and mixed methods research methods in the social sciences. This research aids the researchers in making better methodological justifications by a reasoned and thoughtful approach to discuss the strengths, limitations and suitability of each approach depending on the objectives and research questions, a factor that enhances the quality and rigor of social science research designs.*

Keywords: Educational Research, Qualitative, Quantitative, Mixed Methods, Social Sciences, Researcher's Guide

1. Introduction

Research design is a critical aspect which defines the methodological quality of academic investigation, as demonstrated by the literature in the past (Bhattacherjee, 2012; Creswell & Creswell, 2018; De Vaus, 2001; Kumar, 2019; Saunders et al., 2019). It serves not only as a

procedural requirement but also as a guideline in the direction that the whole academic undertaking is going to take. Within research context, the design is often associated with a blueprint of a building by an architect; without a careful design, the final building is prone to instability and weakness. When researchers are able to lay down the proper methodological framework early on, it is important to note that all of their data acquisition will be internally consistent with the goals that were spelled out at the very beginning. This involves the alignment of the epistemological position of the researcher, the tools to be used, and the analytical methods that are to be employed hence creating a congruent and consistent investigative ecosystem. A strong design improves the validity and the credibility of the study results (Maxwell, 2012; Shadish et al., 2002; Yin, 2018) in the evaluation by peer reviewers. Besides, it gives the researcher a sense of increased confidence that every procedural step is based on sound scientific arguments and not speculations.

Regardless of the large amount of literature on qualitative, quantitative, and mixed-methods research, methodological literature in education and social sciences generally is disjointed, adhering to particular paradigms, and mostly procedural. They provide a sparse integrative and example-based instructions to the researchers (Bryman, 2016; Creswell and Plano Clark, 2018). One of the most common problems that researchers face, particularly novice and post graduate researchers, is the desire to select a methodology before having a clear substantive research question. This is commonly referred to as the method-first dilemma (Johnson et al., 2007; Maxwell, 2012), and in this case, scholars commonly choose to use questionnaire-based quantitative designs because it seems more convenient or efficient. These decisions are seldom made with a prudent thought on whether the research problem needs further qualitative investigation or a combination of the methods. Early choice of methodology may result in a methodologically faultless but intellectually shallow study that does not deal with the essence of the phenomenon in any meaningful way. Filling such significant gap, the current paper answers the need to have model-driven, example-based methodological guides. It puts the research introduction as the pivotal point of the methodological reasoning. The paper presents a step-by-step and thoughtful teaching that follows intellectual interest and the establishment of the problem to the justification of the most appropriate methodological framework. By doing so, it helps the researchers to come up with studies which are not only good methodologically, but also add to the field, both theoretically and empirically.

2. Literature Review

Understanding Research Paradigms: The Intellectual Compass of Researchers

According to Figure 1 below, it depicts the operation of a research paradigm (Crotty, 1998; Guba & Lincoln, 1996; Kuhn, 1970). It can present as abstract and intimidating to new researchers entering the field. Nevertheless, when comparing the opinions of scholars, a paradigm may be regarded as a methodological prism. It does not impose a strict philosophical line on researchers, but helps them view, frame, and study the reality. Paradigms alter the way we perceive reality like a blue filter that transforms the colours that we perceive. They determine what we are interested in and the way we explore it. There is consensus among scholars that ontological assumptions, beliefs concerning what reality is, make up paradigms, and that epistemological positions comprise the manner in which we produce knowledge. The difference in the way these assumptions direct the research exists. Indicatively, positivism considers the existence of one objective reality which can be measured and generalized, which falls under the quantitative approach. Interpretivism on the contrary, gives focus to numerous socially created realities and values sense making using qualitative methodologies. Pragmatism

is in the middle. It disputes the rigid correspondence between method and paradigm and emphasizes the usefulness of methods in addressing problems. This usually makes pragmatists combine qualitative and quantitative methods in mixed methods designs. This analogy reveals that paradigms do not simply refer to the methods; they provide a direction of the way researchers think and work.

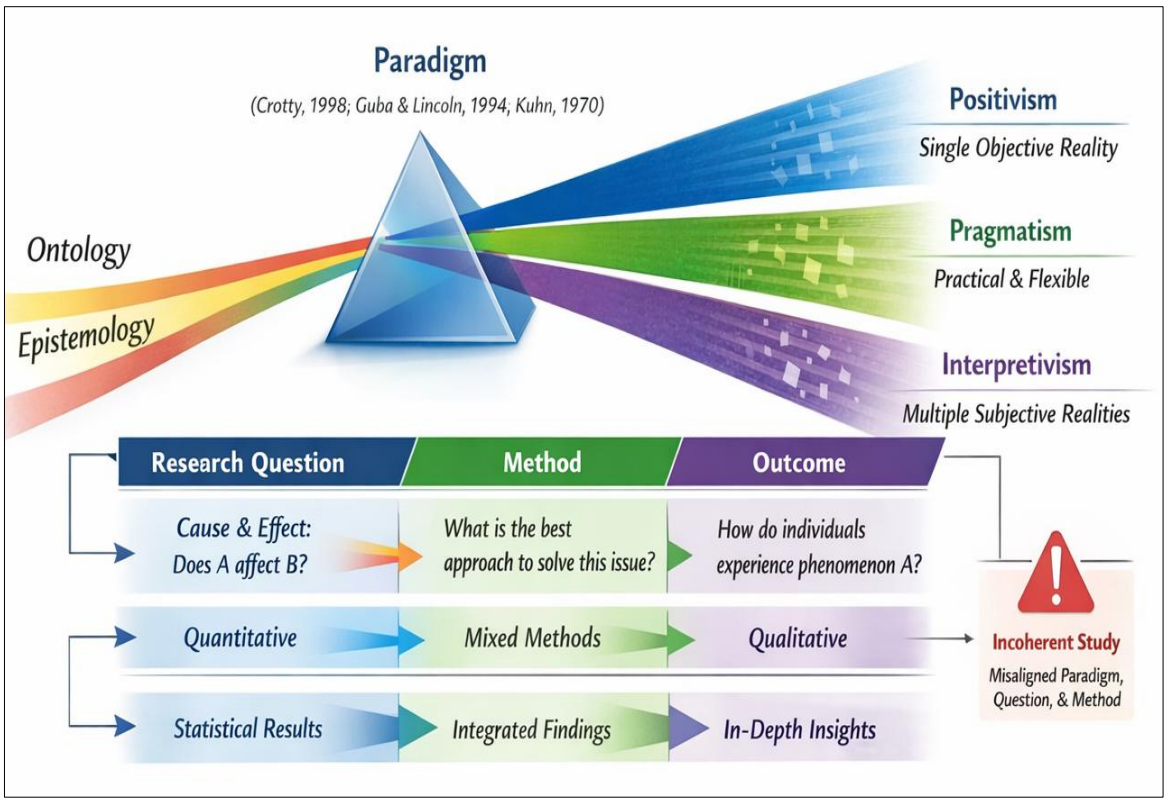

Figure 1: Understanding Research Paradigm

The synthesis of this paper is further developed in Figure 1 and reveals that the paradigm, research question, and method relationship is not linear, but rather hierarchical. The paradigm in fact is the intellectual point of departure in the research design and according to scholars, methodology should not precede the selection of the chosen paradigm. This is one of the least understood among many scholars as methods are treated as technical or procedural steps. As an illustration, a positivist orientation generates questions regarding a causal relationship and quantifiable consequences, such as how much variable A affects B. An interpretivist position generates questions of lived experience, meaning and interpretation of phenomena. This opposition demonstrates the fact that the research questions are tied to the paradigm and cannot be detached of the assumptions. Figure 1 indicates that discrepancy between paradigm, question, and method undermines the coherence of a study. This renders the research design theoretically weak and prone to peer review or even thesis defence. Therefore, it is necessary to comprehend this alignment so that it is methodologically rigorous and creates research that can be conceptually defensible and intellectually persuasive.

Qualitative Research: Exploring The Meaning Behind Real Phenomena

Qualitative research (Denzin & Lincoln, 2011; Flick, 2018; Holloway & Galvin, 2017; Merriam & Tisdell, 2016; Patton, 2015; Silverman, 2013) is a method of comprehending human and social life events that prefigures the research of meanings, experiences, and perceptions of individuals in detail. It is opposed to quantitative research which shrinks the

world to statistical indices and numerical aggregates by focusing on questions of how and why phenomena occur in their natural environment. Qualitative research in the field of education can be viewed through the prism of epistemology as a method that transcends sets of statements; it is a methodical attempt to capture the meanings and experiences that cannot be described in a numerical way. It is defined as a paradigm of methodology that explores social phenomena in a given context, thus maintaining contextual wholeness. Consider an example, whereas a quantitative study may tell that 80% of students feel stressed, a qualitative study will plunge into the environments to describe how students experience the stress phenomenologically and explain how the environments influence their affective moods. The given methodological approach is best applicable to a situation where researchers desire to investigate a multifaceted, delicate, or immature phenomenon with inadequate theoretical basis. Qualitative approaches in the context of education allow the researcher to record the voice of teachers in the context of curricular issues or to shed light on the interactional life in the rural setting among learners. The methods of in-depth interviews, participant observation and documentary analysis, involving reflective journals and student artefacts are used to accomplish these objectives.

Among the key strengths of qualitative inquiry, one may note the quality of descriptive and detailed data that gives researchers an opportunity to describe several stakeholder perspectives in a holistic way. However, qualitative research has limitations, which should be identified; results of the research are normally not supposed to be generalised to the whole population but instead they are underscored to be transferable to the similar situations. As an example, qualitative research questions that are qualitative in nature usually start with the word How or Why, such as: How do primary school teachers view the introduction of project-based learning in the subject of a Science? or why do students in minority groups avoid taking the science stream when offered the choice between literature and the science stream? By focusing on the quality rather than quantity of information, researchers can reveal multiple layers of educational reality that, more often than not, statistical data hides, thus making the study look more humanised and with high-impact narrative.

Quantitative Research: Measuring Reality Through Data and Statistics

The concepts of objectivity and precise measurements form the basis of quantitative research is recorded in the literature (Field, 2018; Muijs, 2011; Neuman, 2014). The methodology converts social phenomena into numbers and thus, it becomes easy to determine patterns, relationships, or impact of data. Unlike qualitative inquiry (where deeper meaning is to be found) quantitative research has the testing of the hypothesis and the production of a generalizable result can be applied to a wider populations as its primary goals. The method is especially appropriate in studies that require the measurement of the sizes of effects, listing the number of occurrences or the identification of statistically significant between-variable relationships. An example of such a way of conducting research can be found in the educational sphere, when researchers compare the relative efficiency of digital teaching tools with traditional pedagogical approaches. Popular designs include large-scale survey designs that use structured questionnaires to conduct surveys of hundreds of participants and also experimental designs such as pre- and post-intervention designs to test the effect of certain educational interventions on student performance. The role of statistical analysis is the integrative process of transforming a mass of raw data into coherent information, which by permitting the scholar to derive empirically based behavioural or achievement patterns also isolates it against personal bias.

The main advantage of this methodological solution is that it is reliable, and it can produce findings that can be applicable to various populations, hence making it very effective in informing national educational policies or other policy structures that are relevant. However, the quantitative paradigm has some shortcomings, in particular, its relative rigidity and sometimes failure to understand the sophisticated or contextual differences behind the numerical figures. Therefore, this can be an indication that test scores are rising, but it does not clarify the nature of emotions or cognition that students go through during the answers to the assessment items. Examples of common quantitative research questions used, in the education sector, include such questions as: (1) Does an important relationship exist between the levels of self-motivation and academic achievement of fifth-grade students? and (2) To what degree does the level of use of Gamification application influence the interest of students in studying History? Quantitative researchers can develop a sound argument by using validated measures and rigorous test to form a solid and objective argument which is often used to lead to substantive changes in the instruction system and school organization.

Mixed Methods Research: Integrating Quantitative and Qualitative Strands

Mixed-method research (Fetters et al., 2013; Greene, 2007; Tashakkori & Teddlie, 2010) in other hand is a vibrant third way within the social sciences, and it allows researchers to combine the advantages of quantitative and qualitative data to gain a more holistic view of the phenomenon of education. The main rationale of such a synthesis is the complementary character of the corresponding strategies; quantitative data provides a macro-view on trends, and qualitative data clarify micro-specifics and situational peculiarities. Three major designs are commonly used, namely Explanatory Sequential (where it starts with quantitative investigation and then interprets the result in a qualitative manner), Exploratory Sequential (where it starts with a qualitative investigation in developing the instruments, and then quantitatively testing the instruments), and Convergent (where it collects and analyzes both types of data simultaneously to draw comparisons). In the multifaceted sphere of education, mixed-methods methodologies are especially indispensable when statistical evidence is simply not enough to answer such causal questions like why a trend exists, or where qualitative research is limited, and high-quality empirical support is needed to base the policy recommendations on a more solid ground.

The mixed methods research provides a very diverse account of the research story, however it has a great variety of challenges, such as time-related issues, high cost, and the need that a researcher should develop the skills in statistical and interpretive methods of analysis. Scientists need to be strategic in the management of logistical challenges of simultaneously having two studies. Hence, the benefits are significant since the drawbacks of single methods can be overcome through mixed methods. As an example, such educational mixed methods research questions often take the form of an integrative approach, as would be the question: To what extent does the introduction of the self-study module improve the math score of students (quantitative)? and: How does the learning experience influence student confidence levels in solving complex problems (qualitative)? The combination of these dimensions increases scholastic rigor of the work and its relevance to the educational practice on the school system and college/university level.

3. Methodology

The methodology used in the study is a qualitative comparative analysis (Schneider & Wagemann, 2012) in order to assess the advantages, uniqueness and appropriateness of

quantitative, qualitative and mixed methods research. The research studies targeted by a comparative analysis were chosen using a purposive sampling strategy (Palinkas et al., 2015), the subject of which was early childhood education. Credible academic databases were used to retrieve some articles in order to attract different views, research methods, and territories. Selection criteria were made so that emphasis was put on the studies that directly answered the research questions, provided insights and were methodologically sound. A total of twelve articles were selected, which gives a sufficient but manageable sample of qualitative review. This strategy allowed narrowing the synthesis of the literature but addressing major methodological issues without conducting a comprehensive systematic review.

4. Findings

Comparing Three Approaches: General Knowledge Researcher Starter Need to Know

Choosing the right method of research (see Table 1) is a prerequisite to the academics just starting in the field, and it guarantees the validity and reliability of the empirical findings in the educational sphere. In general, there are three major paradigms: qualitative, quantitative, and mixed methods; they are used to accomplish different goals depending on the aim of the research: to investigate deeply on the perceptions of STEM best-practice, to quantify the current tendencies in the demand of educational services on the scale, or synthesis on the findings of empirical research to explain the complex phenomenon such as teacher wellbeing. In this paper, the essential differences among these three methodologies are going to be outlined, based on the methodological design, data-analytic techniques, and sample-size issues, which will provide an overall picture of how each of the approaches can be used to advance knowledge development within the early childhood education ecosystem.

Table 1: Comparing Three Approaches in Educational Research

ART. NO.	ART. TITLE / AUTHOR / YEAR	PURPOSE OF THE STUDY	RESEARCH METHOD	TYPE OF INST.	TYPE OF DATA	SAMPLE SIZE	OUTPUT FINDINGS
ART1 (Jarvie, 2012)	Qualitative Research in ECEC Implementation / Jarvie (2012)	To advocate for the value of qualitative research in designing ECEC policy.	Qualitative	Literature review and meta-studies.	Records of participant views and behaviors.	Cross-disciplinary implementation cases.	Hard evidence for ground-level policy is limited; requires "Implementation Science" to understand parent behavior.
ART2 (Dereli & Türk Kurtça, 2022)	Parent Engagement in ECE: Pandemic Period / Dereli & Türk Kurtça (2022)	To examine teacher opinions on parent engagement during COVID-19.		Semi-structured interview form.	Inductive and comparative analysis of transcripts.	53 preschool teachers.	Parents acted as "proxy teachers"; engagement became mandatory for educational continuity.
ART3 (Ghazali & Yusof, 2022)	Achieving Quality Learning Through STEM... / Ghazali & Yusof (2022)	To explore teacher perceptions of the importance of STEM.		Interview protocol (16 questions).	Qualitative NVIVO software analysis.	4 kindergarten teachers.	Outdoor activities and integrated STEM elements foster superior holistic learning.
ART4 (Ghazali et al., 2024)	Best Practices in STEM Education... / Ghazali et al. (2024)	To explore best practices in Early Science, Math, Engineering		Triangulation (Interviews, observations, document analysis).	Descriptive analysis with ATLAS.ti coding.	4 teachers and 39 children.	Identified nine STEM best practices; play-based learning was the most frequent strategy.

		, and Technology.					
ART5 (Peng et al., 2022)	A Quantitative Study of ECCE... (Part 1 - Demand) / Peng et al. (2022)	To evaluate family demand for ECCE services for children under age three.	Quantitative	Large-scale population sample survey.	Quantitative percentages and demographic ratios.	40,087 families.	57.13% demand services; 82.78% prefer public institutions due to professionalism.
ART6 (Wong et al., 2019)	Development of Quality ECCE (QECCE) Scale / Wong et al. (2019)	To design and evaluate a psychometric scale for ECCE quality.		22-item survey scale (QECCE).	Exploratory (EFA) and Confirmatory (CFA) factor analysis.	2,464 teachers/admins.	The scale explained 63.25% of variance; Centre Management is a valid quality predictor.
ART7 (Bano et al., 2021)	A Study Of Early Childhood Education… / Bano et al. (2021)	To understand the impact of school environment on child growth.		Questionnaire with open and closed questions.	Quantitative data analyzed via SPSS.	120 teachers from 20 primary schools.	ECE builds discipline and literacy; visual tools and "home-like" environments ensure success.
ART8 (Peng et al., 2022)	A Quantitative Study of ECCE... (Part 2 - Supply) / Peng et al. (2022)	To evaluate institutional supply of ECCE services in Sichuan.		Institutional census data collection.	Quantitative enrollment and supply counts.	6,883 ECCE institutions.	Significant supply-demand mismatch (1 million demand vs. 271,420 available places).
ART9 (Beatson et al., 2022)	ECEC Participation... / Beatson et al. (2022)	To investigate barriers and facilitators of ECEC participation.	Mixed Methods	Online questionnaires and semi-structured interviews.	Parallel quantitative (stats) and qualitative (thematic) analysis.	108 (Quant); 37 (Qual) participants.	Costs are primary barriers; providers often underestimate maternal role beliefs.
ART10 (Walter et al., 2023)	Educators' Well-being... / Walter et al. (2023)	To explore teacher well-being and its influence on burnout and attrition.		76-item survey and semi-structured interviews.	Explanatory sequential data; Latent Class Analysis (LCA).	131 (Quant); 13 (Qual) teachers.	Positive student relationships drive retention, whereas poor administration triggers burnout.
ART11 (Dilek & İlhan, 2022)	Pedagogical Competency Profile... / Dilek & İlhan (2022)	To examine pedagogical competency profiles and influencing factors.		Competency Assessment Rubric (ECTCAR) and interviews.	Cluster analysis and inductive content analysis.	290 (Quant); 15 (Qual) teachers.	Teachers grouped into three competence levels; deficiencies noted in instructional technology.
ART12 (Ghazali et al., 2024)	Effectiveness of TPBL... / Ghazali et al. (2024)	To evaluate the TPBL Module in enhancing creative thinking skills.		Pre/post-tests (CTSA) and interviews.	Quantitative (T-tests) and qualitative (thematic) analysis.	2 teachers and 50 preschool children.	Significant increase in creativity scores; collaborative decision-making was highly impactful.

Qualitative studies within the education field aim to explore phenomenon by describing the views of the participants in detail. Based on ART1 to ART4, this approach to methodology often makes use of data gathering tools of semi structuring interview protocols and systematic observation to accumulate narrative rich empirical data. As an example, the studies that have been reported in ART4 have performed a data triangulation to identify best practices in STEM teaching, and the findings were analysed through descriptive analysis using such software packages as ATLAS.ti and NVivo. A notable benefit of the method is its ability to explain the

motivations and processes underlying visible actions, such as how the parents are represented as a proxy teacher under the conditions of the pandemic, but it tends to have small sample sizes, limiting the generalizability of the obtained findings.

Unlike qualitative methods, quantitative studies focus on objective testing and intensive statistical investigation to test empirically theoretical propositions or study the market demand. Based on the results of ART5 and ART8, when it comes to identifying macro-level trends, i.e., demand and supply gaps, in relation to the early childhood care and education (ECCE) services, large-scale questionnaires (e.g. a survey conducted on 40,087 families) can be used. Analytical tools such as frequency distribution, percentage break-down and factor analysis (exploratory and confirmatory factor analysis) are also used to justify psychometric tools, as is the case with the creation of the QECCE scale in the context of ART6. Whereas this methodology will provide high reliability because of the quantitative data and statistical analysis like the SPSS, it often fails to capture the emotional nuances and individual backgrounds the information is based on.

Mixed-methods research became an integrative step between the two paradigms, the two strengths, in a single empirical study. Empirical studies identified ART9 to ART12 illustrated the usage of sequential or parallel design structure to provide a more holistic view. In the case of the ART10 study, quantitative survey data were used to establish the profile of the well-being of the teachers, and qualitative interviews enquired into the etiological factors underlying stress. Mixed-method usage was especially effective with regards to assessing the influence of instructional modules, as the pre-post statistical analysis of the changes in the creative abilities quantified the increase in the levels of the latter. At the same time, the interview data helped to understand the processes of the interaction that led to the change. The main difficulty related to this strategy was the necessary expertise of the researchers in the field of qualitative and quantitative data analysis methods, a requirement that, in turn, escalated time and resource requirements.

Finally, it is not because one method is better than the other, it is simply a question of whether the method applied fits the study goals better. To novice scholars, it is important to note that qualitative methodologies are most effective in exploration of perceptions or when coming up with new theoretical frameworks. On the other hand, in a case where we want to test hypothesised relationships between variables or generalise results to a larger population, quantitative methods offer more accuracy. A mixed-methods design is however the most effective in solving complicated problems that require validation of such in both numerical data and accounts. Fine-tuning of the sample-size factors, between the few number (as few as four participants) to the large scale (as many as forty thousand), and of the variety of analytical methods, between thematic coding and inferential statistics, is a cornerstone to any scholar starting their academic career.

5. Discussion and Implications

Common Misconceptions About Research Methods

To develop a professional identity as an effective researcher, it is essential to clear up and dispel various common misconceptions that in most cases hinder the intellectual operations of students and novice researchers. The first question, which is frequently raised, is whether qualitative research should be considered scientific (Johansson et al., 2003) because it is often considered to lack the necessary rigor just because it is subject-oriented research. Even though

qualitative research has its own methodology rigor, software such as NVIVO or ATLAS.ti is implemented to protect the validity of the research results.

On the same note, the myth of quantitative methods being automatically more powerful than the qualitative methods is inaccurate. In fact, the suitability of a methodological approach should be determined primarily by the adequacy of the research question. Even large statistical data sets cannot in themselves provide answers to the more profound question of why a phenomenon takes place without the additional explanatory power of qualitative data. Lastly, it is a fallacy that mixed-method research is to deploy all the instruments available (Tanoamchard, 2023) but in reality, mixed-method research is a deliberate combination to be chosen to explain the quantitative results with qualitative narrative or the other way round. Being aware of the fact that these two approaches to methodology have the same scientific worth in their place of application, researchers can avoid methodological bias, which will lead them to make more significant scholarly contributions.

Implications for Students, Educators, and Early-Career Researchers

The consequences of such a complete and wholesome understanding of research methods have a significant impact on a wide variety of stakeholders in the academic ecosystem. In the case of postgraduate students, the ability to master sound methodology helps them create cohesive research designs. As an example, is that it helps them to ensure that the survey instruments are psychometrically sound enough before they start collecting data. In the case of lecturers and supervisors, they play a central role in guiding the students on how to avoid methodological biases and instilling the use of the most relevant methods in addressing the research question which could involve the application of mixed-methods methods in the attempt to unravel complicated phenomena like educator burnout. The quality of such research forms a fundamental part of policy making to policy researchers and practitioners. In this case, the availability of sound institutional census data is an invaluable factor to resolving supply demand imbalance in the educational services. Finally, in the modern environment of artificial intelligence (AI) and big data (Davenport & Kalakota, 2019; European Parliament, 2020; IBM, n.d.), the skills of researchers to interpret large amounts of data, i.e. surveys including tens of thousands of respondents, are becoming increasingly relevant. However, the so-called human touch delivered by qualitative inquiry is needed to convert quantitative data into the stories that can be enjoyed by the larger audience.

Implications for Research Training and Supervision Practices

The findings of this study have significant implications on research training and supervision practices in the social sciences to novice and post graduate researchers. They demonstrate the close connections of research paradigms, questions, and methodological choices. This important point can be emphasized through the efforts of supervisors that can assist trainees in becoming more reflective and systematic in the research design used. They ought not to regard methods as habitual choices but rather look at the suitability of paradigm and method. The training programs must be provided with structured exercises that would make the students think about the appropriateness of qualitative, quantitative, and mixed methods to answer particular research questions. The practice creates epistemological awareness, and methodological literacy (Bryman, 2016; Denzin & Lincoln, 2018). Moreover, the integrative framework of this study can be utilized by supervisors to initiate the discussion of the outcomes of the incompatibility between paradigm and method. These discussions may enhance the quality, coherence and dependability of research projects by the students. Finally, incorporating these practices into research training enhances the intellectual rigor of the upcoming scholars.

It also helps them to make methodologically sound and theoretically significant contributions to the field.

6. Conclusion

As a summary, the effectiveness of research is not so much related to the complexity of the programs used to conduct the analysis but rather to the accuracy with which research questions are defined. Researchers should also admit that the methodological approaches have their own specific advantages. Qualitative approaches can help researchers learn more about the deep-hearted experiences of teachers working in the STEM fields, quantitative approaches allow mapping the supply-demand statistics on a national scale, and mixed approaches can help researchers to comprehensively evaluate the efficiency of education modules. As a result, the flexibility of methods according to the contextual conditions and the purpose of the research overcomes a strict approach to the implementation of one paradigm. In this regard, it is recommended that inexperienced researchers thoroughly reflect and determine clearly what is needed in terms of data before adopting an approach to the research, as the worthiness of knowledge is not determined by the sophistication of the mathematical expression, but rather the ability of the adopted approach to address the stated epistemic gap. The paper also creates its contribution to the field of study as it provides a systematic decision-making guide, which combines research paradigms, questions and methodological decisions as well. It helps researchers (particularly beginner ones) adopt rigorous, thoughtful and consistent methodology by offering a clear guide to the evaluation of qualitative, quantitative and mixed methods methodologies, and improve the rigor and effectiveness of the social science research.

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Conflict of Interest Statement
This study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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