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Philosophy, Methodology, and Methods: Understanding the Differences in Qualitative and Quantitative Approaches and Integrating a Mixed-Methods Strategy in Hospitality Research

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Abstract: The article examines specific philosophical and methodological challenges encountered in hospitality industry research. It asserts that adopting a mixed methodology rooted in pragmatism can furnish distinct advantages for researchers in this domain. The discourse delves into mixed methods approaches that amalgamate the strengths of positivist and phenomenological paradigms while mitigating their respective shortcomings. While qualitative and quantitative methodologies were historically viewed as contradictory, their convergence is increasingly observed across diverse fields. Yet, the incorporation of this blended methodology is not often used in research on the hospitality sector. The article explains the institutional and philosophical background of mixed methods approaches to understand their possible benefits in this context. The text examines cutting-edge scholarship that supports the use of mixed methods research design and its importance in hospitality research.

 $\textbf{Keywords:} \ \ Philosophy, methodology, methods, quantitative approach, qualitative approach, mixed-methods approach approach. The property of the propert$

1 Introduction

Selecting the appropriate methodology for a particular research endeavour can be very difficult. Selecting appropriate research methods requires careful consideration at every level and should be tailored to the subjects being studied and the type of research questions being addressed, among other considerations [1,2,3,4,5]. Sometimes the research questions may require a combo of multiple approaches [6,7,8]. The overall research framework, which is impacted by the research development, serves as a partial guidance for these decisions.

As noted by [9], committing to a certain the research model is akin to making a belief. Though tourism and hospitality study has traditionally been dominated by the positivist paradigm, phenomenological or more subjectivity-centered inquiry is becoming increasingly important. This acknowledgment is especially important in a field where the "human factor"—the emotional

commitment of clients and staff to the services offered—is what makes a business successful. The main points of the positivist and phenomenological research paradigms are discussed in this article, which also argues that research in the hospitality and tourism industry is best served by using a mixed-methods approach that combines the advantages of both paradigms.

2 Research Philosophy and Paradigms

Central to the discussion concerning methodologies in social science research are fundamental ontological and epistemological inquiries that impact our perspectives and convictions regarding the nature of humans [10]. Primarily, a research philosophy encompasses foundational presumptions concerning the essence of the world, as well as our capacity to comprehend or be acquainted with that world [6,8].

The field of scientific philosophy can be segmented into two primary domains. Ontology, also referred to as

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the study of existence, raises inquiries regarding 'what exists'—involving queries about the essence and substance of existence, encompassing societal and political reality, as well as the interactions that shape that reality in different ways [11]. Diverse epistemological methods have displayed significant divergence over the last fifty years within philosophical frameworks such as post-positivism (critical realism) [12], pragmatism (see references like [13]), and postmodernism (see [14]).

The two primary research paradigms, namely positivist and phenomenological methodologies, encompass diverse epistemological and ontological suppositions. To gain a more profound comprehension of the philosophical implications for researchers, delving deeper into these two approaches is valuable.

3 Phenomenology vs Positivism

The central idea of the positivist paradigm is that the social world is real on its own and that, rather than being inferred from feelings, thoughts, or intuition, its characteristics should be evaluated objectively [15]. From an ontological perspective, this viewpoint perceives the world as an external entity subject to investigation, detached from the researcher's subjective experiences. This implies a realist standpoint, where the researcher's objective is to acquire knowledge about an external reality. Consequently, positivism leans toward techniques like statistical analysis that minimize substantial subjective influence [15,16,17]. The epistemological consequence of this worldview is that, within positivism, knowledge is confined to phenomena that can be observed, measured, recorded, etc. [11,18,19,20].

Phenomenology employs a contrasting strategy, suggesting a perspective where reality is entirely shaped, personal, and communal. Anchored in the concept of social construction, which asserts that how we perceive reality and being is influenced by our individual actions and standpoint, rather than solely or primarily the reverse process, this approach involves an epistemology that pursues understanding by delving into the societal 'significance' of occurrences, rather than quantification [11,15,19].

Within the realm of 20th-century philosophy, the division between the 'analytic' and 'continental' academic streams, aligning with positivist and phenomenological emphases respectively, mirrors these identical concerns regarding the fundamental characteristics of reality and human understanding. As we will discover later, the philosophical field of pragmatism contains an attempt to bridge this divide.

Although these two methods may appear to be essentially at odds, actual use shows that subjectivity and the moral issues surrounding social interactions have an impact on even the most positivist study [21]. Disagreements among researchers about the most suitable paradigm have persisted for a long time—and even within

Table 1: The Main Features of the Phenomenological and Positivist Paradigms

	Positivist paradigm	Phenomenological paradigm
Basic Beliefs	The world is objective and external.	The world around us is shaped by social constructs and subjectivity
	Science is value-free	Science is motivated by human interests.
Researcher should	Observer is autonomous	An observer is a component of the observed.
	Pay attention to the facts	Pay attention to meanings
	Reduce phenomena to their most basic components.	Examine the situation.
	Examine the situation.	Try to comprehend the situation.
	Create theories and put them to	Develop ideas from induction
	the test.	from data
Preferred methods	Acquiring substantial samples	small samples that are thoroughly
include	Concepts are operationalized to enable measurement	examined or over time

each respective paradigm, philosophers' viewpoints can significantly differ, continually undergoing transformation and development [15]. However, increasingly, the contrast between these two approaches is being viewed as an oversimplified distinction, portraying two facets of the same issue rather than an insurmountable discord. In light of this, an increasing number of researchers are adopting a hybrid approach that aims to minimize the drawbacks of each methodology while maximizing its advantages.

4 Qualitative vs Quantitative Research

Typically, qualitative research techniques involve employing inductive reasoning [22], collecting data and reaching conclusions by considering various interpretations and viewpoints, originating from observation rather than relying on a solitary, definitive truth or rationality. This approach is commonly linked with qualitative research methods [22]. In contrast, quantitative methods predominantly follow deductive logic, commencing with established theories or assumptions and subjecting them to rational testing. While qualitative research typically focuses on subjective experiences, quantitative methodologies' scientific component is linked to an objective truth.

As implied by the term 'qualitative,' this kind of research is intimately linked with the richness of different individuals' (subjective) experiences—thus, it frequently involves incorporating personal stories and comparisons to illuminate the people and situations being examined. Its typical aim is to attain a deeper comprehension of a specific phenomenon, whereas quantitative methods prioritize the exploration of causal relationships between phenomena [23]. Quantitative approaches, on the other hand, are characterized by their reliance on numbers, statistics, and the abstraction of data from sample populations to draw insights about much larger groups [20]. This distinction can be succinctly summarized as follows:

"Qualitative researchers use ethnographic prose, historical narratives, first-person accounts, still photographs, life histories, fictionalized facts, and biographical and autobiographical materials, among



others. Quantitative researchers use mathematical models, statistical tables, and graphs" [20]

The distinction between quantitative and qualitative methods can also be grasped by considering their respective implications for external and internal validity. It has been disputed that quantitative research often facilitates easier development and validation, benefiting from a more generalized nature and strict confines of investigation, thereby granting increased external validity of these kinds of research [21,24]. Conversely, qualitative approaches provide researchers with significantly more adaptability, and the research's comprehensive focus implies heightened internal validity. Table 2 provides a thorough assessment of the approaches associated with each study style [23].

5 The Paradigm Wars

Throughout the majority of the previous century, quantitative methodologies have generally held a dominant position [25]. Within the domain of tourism and hospitality research, quantitative techniques continue to take precedence, partly due to the adoption of a management-oriented research perspective, It often entails substantial statistical research with big samples and tends towards a "natural scientific approach to organisational life" [26]. Tourism research has been impacted by disciplines like as psychology [27] and management and business studies [28], which also have a tendency to focus on quantitative methodologies. Nonetheless, Qualitative methods have progressively gaining acceptance in recent years, as noted by [23]. They alleviate some of the shortcomings of these instruments in understanding increasingly complex organisational systems and provide an alternative to research that is only focused on statistical and causal links.

As [29] have called the "paradigm wars," the social and behavioural sciences are still, to some extent, emerging from a persistent and occasionally intense debate among researchers regarding the merits and drawbacks of qualitative and quantitative methods in various contexts. Among researchers, there is a growing consensus that these two research approaches are not necessarily opposing, but rather complementary. The tools that are available and most suited for a certain study ultimately dictate the methods that are chosen [30]. As he

"Each data-gathering method has its own distinct advantages as well as disadvantages; however, when used in conjunction with another, the disadvantages of one method can generally be offset by the advantages of the other(s)." [31].

Within the sciences of social and behavioral, which encompass fields like tourism and hospitality research, field studies play a crucial role in delving into the human desires and motivations that underlie numerical data. Recently, there has been a significant body of work that

highlights the insignificance ofthe qualitative-quantitative debate for researchers engaged in field studies. This perspective instead underscores the array of tools accessible for gathering and analyzing data. Scholars such as [32,33,34,35,36,37] have contributed to this discourse.

In the present day, following the aftermath of the paradigm wars, a concept coined by [25] as the 'third methodological movement' has emerged—a practical approach that involves harnessing The advantages of both approaches. This methodology has been referred to using various terms, including 'combined,' 'mixed methods,' 'multimethod' and 'integrated,' research. This extremely practical research methodology is based on the principle of making use of all instruments that are suited for the particular task at hand.

As observed earlier, the philosophical frameworks supporting quantitative and qualitative positivist research—phenomenological and the perspectives outlined previously—initially seem to clash. Against this backdrop, an increasing cohort of academics (for example, [26,38]) have contended that embracing a philosophical stance rooted in pragmatism provides a robust foundation in terms of ontology and epistemology for conducting mixed methods research. This approach amalgamates the advantages of both methodologies within a single study. Before delving into a deeper exploration of this philosophical inclination, it is pertinent to outline some of the merits and drawbacks inherent in the design of mixed model research.

6 Choosing a Mixed Methods Design

Various techniques Research involves a range of strategies that integrate qualitative and quantitative methods, either consecutively or concurrently. [29,32, 39]. In fact, these two methods are frequently interwoven throughout the research process [29,40].

Understanding this approach is vital for contemporary researchers. As [34] emphasize:

"Regardless of the field of study, researchers should begin by securing for themselves a good introduction to the issues of mixed methods research'

Look at this definition that follows:

"A mixed methods study involves the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research." [32]

In straightforward terms, the fusion of qualitative and quantitative methods has the potential to produce results that are more effective and reliable, providing diverse viewpoints on a single phenomenon and thus enhancing the overall comprehension of the subject. There are two practical justifications that can be presented to endorse the utilization of joined methods:



"The first is to achieve cross-validation or triangulation - combining two or more theories or sources of data to study the same phenomenon in order to gain a more complete understanding of it. The second is to achieve complementary results by using the strengths of one method to enhance the other."

Similarly, mixed techniques have found favour in this field of study due to:

- -Can answer research questions that the other methodologies cannot.
- -Provides better (stronger) inferences.
- -Provides the opportunity for presenting a greater diversity of divergent views.

While it's true that mixed methods research is undeniably a methodology that is 'still in its teenage years', it presents captivating potentials that render it:

"a rich frontier that will allow science to explain a significant percentage of a given phenomenon, while also remaining open to discovering critical issues embedded in or surrounding that phenomenon" [32]

"Mixed techniques" refers to a variety of tactics. 'Sequential' or 'two-phase' studies, which are multi-stage investigations, are frequently used in social science research. Phenomenological or qualitative research is commonly used in the initial phase to explore and generate theories for further investigation. A research design that blends qualitative and quantitative approaches during the investigation is referred to as "mixed methodology." Creswell et al. (2003) provide a detailed explanation of categorization of mixed methods research that considers criteria including the order of data collection of each methodological approach's level of significance, and the study stage(s) where the two are combined [40].

Regrettably, the acceptance of mixed techniques research has been hindered so far by the enduring effects of the paradigm wars [32]. These types of research can also be highly resource-intensive, demanding a substantial commitment from researchers who need proficiency in both methodological approaches. Moreover, their length frequently makes them inappropriate for journal publication [2]. However, there are signs that mixed techniques will eventually become the accepted practice in the social and behavioural sciences [32]. Renowned scholars are promoting increased utilisation of mixed approaches, particularly in management and organisational studies [34]. The growing importance of this methodology is evidenced by the establishment of the quarterly SAGE magazine titled 'Journal of Mixed Methods Research,' which is devoted to presenting research studies using mixed methods.

Table 2: Advantages and Disadvantages of Mixed Research

Strengths	Weaknesses
(1) Words, images, and storytelling can enhance the significance of numerical data.	(1) A single researcher may find it challenging to do both qualitative and quantitative research simultaneously, especially when multiple approaches are involved, necessitating a research team.
(2) Numbers may enhance the accuracy of words, images, and storytelling.	(2) The researcher must familiarise themselves with various methods and approaches and comprehends how to combine them effectively.
(3) Can offer capabilities in both quantitative and qualitative research.	(3) Methodological purists argue that one should strictly adhere to either a qualitative or a quantitative paradigm.
(4) Researchers can develop and evaluate a grounded theory. (5) Can address a wider variety of	(4) Costlier.
research inquiries due to the researcher's ability to utilize many methods and approaches.	(5) Time-consuming.
(6) A researcher can leverage the advantages of one approach to compensate for the limitations of another method by including both within a research investigation.	(6) Some aspects of mixed research still need to be thoroughly addressed by research methodologists, such as issues related to combining paradigms, qualitative analysis of quantitative data, and interpreting contradicting results.
(7) Enhance the credibility of a conclusion by combining and confirming research findings. (8) Can provide additional perspectives and comprehension that may be overlooked when relying solely on one way.	wang and interpreting continueding festilis.
(9) Can enhance the generalizability of the findings.	
(10) Combining qualitative and quantitative research results	
in a more comprehensive understanding that is essential	
for informing both theory and practice.	

7 Mixed-Methods Research in the hospitality industry

As previously mentioned, the literature pertaining to the hospitality industry has been predominantly shaped by quantitative research. This inclination can be attributed in part to the managerial research perspective that is prevalent within this field. According to a study by [41], just 14% of papers that were published in the International Journal of Management between 1984 and 1990 used qualitative approaches, and only 4% used blended methodology. Similar worries about the paucity of qualitative methodologies in the context of hospitality research are voiced by [42]. They highlight that despite diverse scholarly publications documenting ethnographic investigations into various aspects of hospitality, most journals exclusively dedicated to the hospitality sector feature basic illustrations of this methodology. However, numerous scholarly works have presented ethnographic research exploring different aspects of hospitality, such as researchers from other fields employing this approach to investigate problems unique to the hospitality industry, including topics like pub workers' emotional labor and the usage patterns of older restaurant patrons. Given these circumstances, the authors caution against an ongoing emphasis on quantitative investigation within hospitality literature, fearing it could distance the field from the broader discourse among researchers in the realm of social sciences. The authors suggest that if this kind of research is not given equal importance in hospitality journals, it could potentially discourage researchers from sharing their work within the hospitality community,



ultimately leading to the marginalization of hospitality research [42].

Considering this perspective, Pansiri asserts that the examination of research philosophies concerning Tourism research is now essential and cannot be ignored [26]. Encouragingly, the present landscape of tourism research is witnessing a growing array of methodologies. Researchers are recognising the benefits of qualitative or 'soft' methodologies in understanding the complex human dynamics present in this industry.

The author's study project conducted by [43] utilized a two-phase mixed methods research methodology, notably a sequential exploratory strategy. This method was used to carry out a unique analysis of middle management training in worldwide hotel chains in Jordan. Given that the research subject had received limited attention, an initial qualitative stage involving focus groups was highly beneficial for collecting preliminary data and shaping the items to be used in the subsequent quantitative phase, which involved a questionnaire. This experience highlighted the value of using mixed techniques to gain a thorough grasp of a subject that has not been addressed before [29].

Given that a discipline like tourism studies draws upon an amalgamation of fields like psychology, geography, political science, and law, its inherent interdisciplinary nature often leads to a lack of philosophical coherence and, frequently, a deficiently articulated philosophical stance. Pansiri acknowledges, "very few authors have attempted to link the debate to philosophical issues." [26] The author argues that having a pragmatic philosophical stance is the best approach for solving the issues of tourist research. This orientation furnishes a robust ontological and epistemological basis for the application of a mixed-methods approach in this domain, a trend that is starting to gain recognition in other spheres of research.

Central to pragmatism lies the repudiation of the binary division between positivist scientism and anti-positivist subjectivism, often referred to as the 'positivist/functional' and 'interpretive' standpoints. In its place, pragmatism proposes an interpretation of 'truth' that is gauged by its efficacy in resolving real-world human issues—essentially, truth is synonymous with what proves effective. Consequently, truth is regarded as substantially shaped by societal factors, while still being open to empirical examination insofar as these findings demonstrate practical utility.

Pragmatism has garnered recognition as the most suitable framework for justifying the incorporation of mixed-methods research [20], given its emphasis on prioritizing the research question over both the method employed and the underlying paradigm [25,29]. Alathamneh and Al-Hawary assert that pragmatism, despite certain philosophical constraints, serves as a bridge between 'subjective' and 'objective' orientations, or qualitative and quantitative approaches [20]. Pragmatism rejects the idea that they are mutually

incompatible. Pragmatism disregards abstract concepts related to existence or knowledge and instead emphasises practical effectiveness.

Within the realm of hospitality industry research, where mixed methods strategies are progressively finding traction, a pragmatic philosophical framework could be exceptionally fitting. This is due to its capacity to enable researchers to explore the 'soft' dimensions of organizational advancement without compromising on scientific investigation.

8 Conclusion

Taking advantage of the strengths offered by both qualitative and quantitative approaches, mixed methods research is gaining traction across a wide range of academic disciplines. Despite being a relatively recent development, the current and potential forms of mixed method research design hold substantial promise in mitigating the enduring influence of paradigm wars. While positivism maintains its dominance in specific fields, integrating insights from a more phenomenological perspective could significantly enhance this approach. This is especially relevant in industries such as the hospitality sector, where positivist methodologies have primarily taken precedence, occasionally overshadowing comprehension of essential human factors contributing to an organization's achievements. Mixed methods research provides appealing opportunities to tailor study design to match the individual areas of investigation. In this context, mixed-methods research opens up a frequently overlooked avenue for researchers to explore the underlying ontological and epistemological foundations of their scholarly pursuits.

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