RESEARCH METHODOLOGY CONFUSION AMONG NOVICE SOCIAL SCIENCES AND HUMANITIES RESEARCHERS

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Abstract. Research methodology in the social sciences and humanities entails a methodical approach to studying social phenomena, context, and human behaviour using qualitative, quantitative, or hybrid research techniques. However, the intricate nature of research methods in the social sciences and humanities often poses substantial difficulties for inexperienced researchers and may result in perplexity and mistakes. The objective of this study is to review the research methodology confusion among novice researchers in the social sciences and humanities. This study entails a content analysis approach to discovering pertinent material on the difficulties faced by inexperienced researchers in comprehending research methodology. This study has identified several points of research methodology confusion among novice researchers in the social sciences and humanities, namely: (a) normality tests and validity/reliability tests; (b) parametric and non-parametric tests; (c) sampling determination between experiments and social research; (d) literature review and manuscript analysis; (e) a review and an original qualitative paper; (f) specific terminology of research paper types; and (g) independent and dependent of sample and variable. In conclusion, this study reveals the widespread lack of clarity among inexperienced researchers in the social sciences and humanities when it comes to fundamental ideas, concepts, and research methods.

Keywords: research procedure; inexperienced researcher; methodology ambiguity; social research

Introduction

Research methodology in the social sciences and humanities entails a methodical approach to studying social phenomena, context, and human behaviour using qualitative, quantitative, or hybrid research techniques. The process entails the selection of a research topic and the formulation of research questions, followed by a thorough review of existing literature to establish a theoretical framework. Data is then collected and analysed using diverse methods such as surveys, interviews, observation, and archival research. Researchers subsequently interpret and present the findings in a lucid and succinct manner. Establishing ethical norms is of utmost importance in social sciences and humanities research to safeguard the well-being of human subjects, as well as to protect their privacy and maintain confidentiality throughout the process of data collection, analysis, and reporting. In order to build a research strategy that is sensitive to social and cultural settings and recognises the intricacies of social life, it is crucial to employ critical thinking, reflexivity, and various perspectives. Establishing a robust methodology is a fundamental element that promotes high-quality and influential research in the fields of social sciences and humanities.

However, the intricate nature of research methods in the social sciences and humanities often poses substantial difficulties for inexperienced researchers and may result in perplexity and mistakes. Despite receiving training and supervision, numerous inexperienced researchers continue to face difficulties in comprehending the fundamental principles that underlie research methods in the fields of social sciences and humanities. Typical causes of perplexity may involve the choice of research methodologies, the creation of suitable research tools, and the interpretation of the
gathered data. Inexperienced researchers may have difficulties generating high-quality research output and impede their professional growth if they lack a thorough understanding of research technique. Hence, it is imperative to offer efficient instruction and direction to inexperienced researchers in order to guarantee their comprehensive comprehension of research methods and to cultivate an atmosphere of heightened productivity and superior research outcomes.

The objective of this study is to review the research methodology confusion among novice researchers in the social sciences and humanities. A review of the confusion around research methods among novice researchers in the fields of social sciences and humanities is valuable since it can pinpoint the specific areas where these researchers commonly encounter difficulties. This review can function as a point of reference for scholars and academic institutions to gain a deeper comprehension of the difficulties faced by inexperienced researchers and create more efficient training and mentorship initiatives. Additionally, it can contribute to the creation of more extensive resources for inexperienced researchers, such as papers, training modules, and recommendations. The review can have a crucial impact on tackling the difficulties related to the confusion of research methods among inexperienced researchers and ultimately contribute to improving the quality of research in the social sciences and humanities.

**Review of literature**

Recent studies have brought attention to the difficulties encountered by inexperienced researchers in the fields of social sciences and humanities, specifically in comprehending and implementing research procedures. Both Madden (2022) and Haydam and Steenkamp (2020) underscore the importance of practical findings and well-defined frameworks to steer research. Ardi et al. (2021) and Van der Walt (2020) highlight the intricacies of interpretivism-constructivism and data classification, respectively, while Janinović et al. (2020) and McSweeney and Faust (2019) endorse inventive approaches and unconventional procedures. Dhobi (2022) and Muhaise et al. (2020) emphasise the significance of comprehending philosophical methodologies and research frameworks. These studies emphasise the necessity for explicit, pragmatic instructions and the significance of comprehending the fundamental philosophical and methodological concepts in research.

Research output in the social sciences and humanities has had a substantial surge in the past five years, since 2019, with Vietnamese universities, in particular, witnessing a notable growth (Nguyen et al., 2020). The expansion has been accompanied by a concentration on philosophical approaches, namely highlighting qualitative research methodologies (Dhobi, 2022). Researchers have examined data-driven research approaches from computer science, including a case study in communication science (Weichselbraun et al., 2021). The evaluation of research impact has been a central area of concentration, prompting a demand for dedicated instruments for assessing impact (Pedersen et al., 2020). A textbook has been written to discuss the history, philosophy, and methodology of the social sciences and humanities, with a particular focus on cultivating research abilities (Orehov et al., 2024). Wolhuter and Chigisheva (2020) designated the BRICS countries as a novel subject of research with a specific theme and methodology. Bozkurt and Öztürk (2022) emphasised the prevalence of qualitative research in North America and Europe, namely in the field of medical sciences.

This study contributes to the identification of challenges in comprehending research methods among inexperienced researchers, based on previous research. Possible
inquiries may involve determining whether the perplexity arises from the intricacy of
the research methodology, the absence of adequate advice and instruction from
academic institutions, or the limited past experience of beginner researchers in
conducting research. The discussion should also consider various solutions to tackle this
difficulty, such as integrating practical research exercises, implementing mentorship
programmes, or creating specialised training modules. The debate can function as a
platform for sharing ideas and experiences aimed at enhancing the research
methodological abilities of novice researchers. This, in turn, can lead to more impactful
research outcomes that contribute to the progress of knowledge in the fields of social
sciences and humanities.

Materials and Methods

This study entails a content analysis approach to discovering pertinent material on
the difficulties faced by inexperienced researchers in comprehending research
methodology. The assessment should also encompass the identification of the precise
causes of perplexity that inexperienced researchers encounter when carrying out
research in the fields of social sciences and humanities. An in-depth examination of the
literature will uncover deficiencies in the existing knowledge and prospects for further
investigation. The study should conclude with a thorough integration of the existing
literature, advocating for efficient interventions to tackle the difficulties faced by
inexperienced researchers in the fields of social sciences and humanities. The technique
should encompass a meticulous exploration of pertinent literature and a discerning
evaluation of the study samples and their pertinence to the research topic, along with a
meticulous examination of the principal themes and patterns arising from the literature.

Results and Discussion

This study has identified several points of research methodology confusion among
novice researchers in the social sciences and humanities, namely: (a) normality tests and
validity/reliability tests; (b) parametric and non-parametric tests; (c) sampling
determination between experiments and social research; (d) literature review and
manuscript analysis; (e) a review and an original qualitative paper; (f) specific
terminology of research paper types; and (g) independent and dependent of sample and
variable.

Normality test and validity/reliability test

The problem of confusion in differentiating between normality and validity tests
among novice researchers in the social sciences, arts, and humanities is a matter of great
importance (Taherdoost, 2016; Bolarinwa, 2015; Drost, 2011). These tests are
significant in guaranteeing the precision and uniformity of research instruments,
emphasizing the necessity for a profound comprehension of validity in social scientific
research (Drost, 2011). Nevertheless, the use of normality tests to identify non-normal
data is a subject of controversy, as certain research indicates that these tests may have
limited sensitivity (Keselman et al., 2014; 2013). The concept of normality is intricate,
with its definition differing in various settings (Horwitz, 2008). Notwithstanding these
difficulties, the importance of employing appropriate statistical analysis techniques,
such as normality tests, is emphasised, especially in the field of clinical research (Kwak and Park, 2019).

The literature highlights a notable concern regarding the validity of measures employed in social, arts, and humanities research, characterised by a substantial occurrence of concealed invalidity (Hussey and Hughes, 2020). The heterogeneity in failure rates observed among different metrics and thresholds in performance validity testing further exacerbates this concern (Royle et al., 2019). Kwak and Park (2019) emphasise the need to use consistent methodologies and avoid inaccurate statistical conclusions while doing normalcy testing. The study also assesses the effectiveness of various normalcy tests, determining that the Bonett and Seier test is the most suitable option for slightly skewed alternatives (Islam, 2019). These findings emphasise the necessity for increased awareness and comprehension of validity and normality testing among inexperienced researchers in these disciplines.

**Parametric and non-parametric test**

The decision between parametric and non-parametric tests is of utmost importance for researchers, especially in the domains of social sciences, arts, and humanities (Harwell, 1988). Researchers commonly prefer non-parametric tests due to their flexibility and reduced assumptions. However, it is important to note that these tests may necessitate a larger sample size in order to achieve the same level of statistical power as parametric tests (Stojoanovic et al., 2018). A comparison of parametric and non-parametric methods can be applied to a Likert scale, depending on specific regulations (Miricioiu and Atkinson, 2017). The utilisation of parametric design models is currently being investigated in the field of urban art (Leung, 2019). Although non-parametric tests offer certain benefits, some researchers have warned against their excessive usage, especially in the field of psychological research (Gaio, 1959). Researchers must consider the particular study setting and the nature of the data being examined to determine whether to use parametric or non-parametric tests (Oliver and Mahon, 2005).

The lack of distinction between parametric and non-parametric methods among inexperienced researchers in the social sciences, arts, and humanities is a notable problem (Gerald and Patson, 2021; Khalefa and Selian, 2021; McSweeney and Faust, 2019). In the realm of art-related studies, researchers often misconstrue non-random sampling, as they commonly use random sampling techniques that are ill-suited for diverse groups (Khalefa and Selian, 2021). The situation is made more complex by the utilisation of non-conventional qualitative approaches, which are supported in leisure studies but may be unfamiliar to inexperienced researchers (McSweeney and Faust, 2019). A prevalent issue in the field of statistics is the failure to account for assumptions when employing parametric and non-parametric tests (Gerald and Patson, 2021). These concerns emphasise the necessity for enhanced education and training in research methodologies and statistical analysis for inexperienced researchers in these domains.

**Sampling determination between experiment and social research**

The difficulty of determining sample methods in experimental and social research can be perplexing for novice researchers in the social, arts, and humanities fields. Khalefa and Selian (2021) and Hooghe et al. (2010) both emphasise the difficulties associated with non-random sampling in studies connected to art and social science,
respectively. Wells and Windschitl (1999) and Rahman et al. (2022) highlight the significance of stimulus sampling and the necessity for a comprehensive comprehension of probability sampling approaches. Gergen (1978) offers a critical evaluation of experimentation in social psychology, while Dooley (2001) provides a comprehensive examination of social research methods. Annandale (1993) emphasises the significance of selecting a suitable sample in non-experimental research. These studies emphasise the need for a detailed comprehension of sampling strategies and their utilisation in both experimental and social research.

The lack of clarity in distinguishing between sampling methods in experimental and social research is a notable concern among inexperienced researchers in the social, arts, and humanities fields, as emphasised by numerous studies. Khalefa and Selian (2021) highlight the necessity of using a sample that accurately represents the population in research related to art, while Adekeye and Apeh (2019) emphasise the significance of comprehending and employing suitable sampling methods in the field of social sciences. Li et al. (2023) highlight prevalent misunderstandings among social science students, such as the absence of lucidity in sampling procedures and random assignment in experimental research. Ardi et al. (2021) elaborate on the consequences of errors in establishing criteria and categories in social science research, underscoring the necessity of a comprehensive comprehension of these notions. These studies emphasise the necessity of enhancing education and training in research methods to tackle the uncertainty in determining sampling among inexperienced researchers.

**Literature review and manuscript analysis**

The lack of distinction between literature review and manuscript analysis is a notable problem among novice researchers in the social sciences, arts, and humanities (Butchard et al., 2018). The difficulties encountered by students in writing literature reviews (Pickering et al., 2015), the necessity of adopting a comprehensive approach to literature reviews in the social sciences, and the intricate and unpredictable nature of literature review procedures (Boell and Cecez-Kecmanovic, 2010) have posed challenges in establishing a methodical approach that incorporates insights from both senior and junior researchers in the field (Saur-Amaral, 2014). Nevertheless, there is a dearth of precise studies on the confusion between literature review and manuscript analysis, signifying an evident void in the existing body of knowledge.

The confusion between literature review and manuscript analysis among inexperienced researchers in the social, arts, and humanities fields is a noteworthy problem, as emphasised by Daniels and Torto (2022). The source of this misconception frequently stems from an inadequate comprehension of the objective and methodology of a literature review, as underscored by Ouimet and Bédard (2021). Schirmer (2021) and Dodgson (2021) offer practical advice on how to perform a literature review. Schirmer’s focus is on the process of synthesising material, while Dodgson highlights the significance of critical analysis. These results emphasise the necessity for more explicit teaching and advice about the differentiation between literature review and manuscript analysis in these disciplines.

**A review and an original qualitative paper**

Novice social, arts, and humanities scholars face a multifaceted problem driven by a multitude of circumstances when they try to distinguish between a review and an
original qualitative study. LaRossa (2012) and Guetzkow et al. (2004) emphasise the multifaceted character of qualitative research and the expansive interpretation of novelty within the fields of humanities and social sciences. Jacob (1989) underscores the importance of comprehending the many qualitative research traditions, but Burton (2009) questions the notion of reviews as unoriginal endeavours. Fossey et al. (2002) and Padgett (2009) offer practical advice on assessing and carrying out qualitative research, with the latter emphasising the significance of meticulous documentation. Baškarada and Koronios (2018) and Siler and Strang (2017) examine the philosophical foundations of various research methodologies and the significance of peer review in ensuring scholarly novelty.

Kyakuwa (2019) and Peterson (2019) offer helpful ideas for aspiring scholars in the social, arts, and humanities disciplines. Kyakuwa (2019) provides a thorough examination of the essential design considerations in qualitative research, whereas Peterson (2019) concentrates on the crucial components that reviewers seek in qualitative articles. Roberts et al. (2020) and Staller (2022) add to this conversation by talking about common problems in qualitative research, like how different types of questions can be unclear and how important it is to have a clear, strong reason for writing a manuscript. These studies emphasise the significance of comprehending the unique characteristics of a review and an original qualitative study and offer practical advice for inexperienced researchers to negotiate these difficulties.

**Specific terminology of research paper types**

Novice researchers in the fields of social sciences, arts, and humanities have a multitude of difficulties when it comes to comprehending and implementing research procedures and terminology. Casanave and Li (2015) and Ellis and Levy (2009) emphasise the challenges associated with formulating theoretical frameworks and comprehending research methodologies. Gualandi et al. (2023) and Sansom (2019) examine the ambiguity around the term "data" and the many categories of peer-reviewed articles. Ochsner et al. (2012) and Carstens (2008) delineate the many categories of research and the genres that are preferred within these disciplines. Pariser (1999) highlights the significance of crafting research inquiries. These findings emphasise the necessity of providing more explicit instructions and assistance to inexperienced researchers in these fields.

The confusion of specific terminology in research paper classifications, such as full-length articles and original papers, is a prevalent problem among inexperienced researchers in the social, arts, and humanities fields. The confusion is apparent in the evaluation of novelty in scholarly investigations (Șuteu, 2022), the application of structural frameworks in social science research (Luo and Lim, 2021), the correlation between paradigm, methodology, design, and method in research (Okesina, 2020), and the comprehension of various categories of peer-reviewed articles (Sansom, 2019). These studies emphasise the importance of providing precise definitions and explanations of this terminology to assist in the growth of inexperienced researchers in these disciplines.

**Independent and dependent of sample and variable**

A prevalent problem among inexperienced social, arts, and humanities researchers is the lack of clarity regarding the distinction between independent and dependent
samples, as well as independent and dependent variables. An independent sample refers to a situation where the individuals in one sample have no connection to or impact on the people in another sample. Individuals in a dependent sample are interdependent or influenced by individuals in another sample. Researchers can manipulate or modify an independent variable, which in turn influences the dependent variable. It is crucial for researchers to make a clear distinction between these notions in order to guarantee the accuracy and dependability of their study findings.

The lack of clarity about independent and dependent samples and variables among inexperienced researchers in the social, arts, and humanities fields is a notable problem, as emphasised by Khalefa and Selian (2021) which underscores the need of utilising a representative sample in research pertaining to art, namely in the curation of artists, artworks, and art enthusiasts. To prevent the usual error of sampling on the dependent variable, as explained by Cole (2021) in the context of displacement study, this is of utmost importance. Zhafyarov (2022) enhances this discourse by introducing a criterion for examining interrelated and separate samples in the realm of education, with potential applicability to other domains of social, artistic, and humanistic inquiry. These studies emphasise the significance of comprehending and accurately implementing these concepts in study design and analysis.

**Conclusion**

In conclusion, this study reveals the widespread lack of clarity among inexperienced researchers in the social sciences and humanities when it comes to fundamental ideas, concepts, and research methods. The review indicates that inexperienced researchers would benefit from extensive instruction, mentorship, and direction during their initial years to minimise the likelihood of research ambiguity and enhance the overall calibre of their work. In order to preserve the credibility of research in the social sciences and humanities, it is crucial to provide robust support systems, training initiatives, and supervision that foster a comprehensive comprehension of the research process from the very beginning of one's academic pursuit. Ultimately, it is imperative to ensure that rookie researchers possess a comprehensive understanding of the fundamental principles of research. This is a crucial prerequisite for establishing a robust research framework and generating significant contributions in the fields of the social sciences and humanities.

Furthermore, this study reveals the widespread lack of clarity among inexperienced researchers in the social sciences and humanities when it comes to fundamental ideas, concepts, and research methods. The review indicates that inexperienced researchers would benefit from extensive instruction, mentorship, and direction during their initial years to minimise the likelihood of research ambiguity and enhance the overall calibre of their work. In order to preserve the credibility of research in the social sciences and humanities, it is crucial to provide robust support systems, training initiatives, and supervision that foster a comprehensive comprehension of the research process from the very beginning of one's academic pursuit. Ultimately, it is imperative to ensure that rookie researchers possess a comprehensive understanding of the fundamental principles of research. This is a crucial prerequisite for establishing a robust research framework and generating significant contributions in the fields of the social sciences and humanities.
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Conflict of interest

The author confirms that there is no conflict of interest involved with any parties in this research study.

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