



(REVIEW ARTICLE)



Ethical integrity in doctoral research: A focus on classroom remediation

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World Journal of Advanced Research and Reviews, 2024, 21(02), 1190–1194

Publication history: Received on 11 January 2024; revised on 18 February 2024; accepted on 20 February 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.21.2.0584>

Abstract

This article delves into the paramount importance of upholding ethical integrity in doctoral research, particularly focusing on classroom remediation within secondary education contexts. It provides a comprehensive framework delineating ethical guidelines crucial for maintaining integrity throughout the research process. Key areas of focus include risk assessment, informed consent, privacy and confidentiality, data handling and reporting, and strategies for mitigating mistakes and negligence. Drawing from existing literature and ethical standards, this article underscores the need for meticulous planning and adherence to ethical principles to safeguard the well-being of research participants and ensure the validity and reliability of research outcomes. By prioritising ethical considerations, researchers can navigate complex ethical dilemmas and contribute meaningfully to scientific knowledge while upholding the integrity of their work.

Keywords: Ethical integrity; Doctoral research; Classroom remediation; Risk assessment; Informed consent; Confidentiality

1. Introduction

Maintaining the highest standards of ethical integrity is crucial when pursuing in-depth PhD or DEd research on classroom remediation in the context of secondary education. This paper provides a thorough framework outlining the stages and ethical guidelines that must be followed during the whole research process. It draws attention to risk assessment, informed consent, data handling and reporting, privacy and confidentiality, and error and carelessness control.

1.1. Risk Assessment

It is essential to carry out a comprehensive risk assessment during the research process. Discussing risk considerations with the research mentor or supervisor is crucial in avoiding adverse effects on the study outputs. Liability and related risks that may emerge throughout the study process are the shared responsibility of sponsors and researchers [1]. Through these conversations, the objective will be to recognise hazards and investigate suitable approaches for alleviation in compliance with ethical standards. The National Academies Press will guide the application of risk assessment and mitigation techniques during the research process.

In the research context, risk refers to the potential for harm that could compromise the integrity and advancement of the investigation [1]. Prioritising the reduction of potential harm is crucial to ensure that the dissertation research participants do not suffer any harmful effects. Planning carefully is essential to reduce potential negative consequences in situations where ambiguities may occur and cause discomfort or jeopardise the participants' well-being [2]. Projects in international development frequently come with various difficulties, which can expose participants to a range of harm. Physical pain, psychological distress, social disadvantage, financial consequences, invasion of privacy, and

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compromising of participants' identity are only some of these possible harms [3]. Responsible researchers must consider these possible hazards and take appropriate action to reduce them.

In the context of the study - classroom remediation- assessing the possible benefits and risks involved, since these factors directly impact the subjects' way of life and living circumstances is essential. The thesis or dissertation will comprehensively evaluate all potential hazards associated with the study participants. Furthermore, a comprehensive cost-benefit analysis will evaluate the research's overall effects. Prompt attention will be given to any flaws that may constitute a hazard to the subjects. Implementing these safeguards is necessary to mitigate potential risks and guarantee the integrity and reliability of the obtained outcomes.

To protect the participant's safety and well-being, a thorough risk assessment is thus essential. A thorough examination of the possible risks—emotional, psychological, and physical—related to the study activities will be part of this approach [4]. Furthermore, considering the weaknesses in the secondary school setting, the evaluation will be expanded to include any possible hazards related to student involvement and participation in the research.

1.2. Informed Consent

Several researchers expend much energy maintaining a greater degree of deference for those who can give informed consent [5]. Understanding the research goals by both parties is contingent upon informed consent, which is the procedure by which a researcher gets someone's agreement before beginning research [5]. Still, other variables, such as stress levels, mental health conditions, and disabilities, might make getting informed consent more complex and result in unexpected consequences. It is recommended that researchers obtain informed consent from duly authorised representatives on behalf of the affected individuals in order to uphold ethical research standards in such circumstances [6].

Competency is a necessary condition that governs informed consent. Three main factors influence the validity of informed consent: disclosure, capacity, and free will [7]. Disclosure means that the participant will receive full disclosure about the research from the researcher, and the information will be communicated in a manner that the participant can easily understand [8]. In addition, the investigator needs to gauge the participants' comprehension level. Another critical factor affecting the legality of consent is capacity. It includes the participants' capacity to comprehend the information given and draw logical conclusions about the possible outcomes of their participation [7].

In order to maintain ethical standards, the researcher needs to ensure that subjects choose to participate in the study voluntarily and without being subjected to coercion or exploitation [9]. Constant observation and commitment to ethical research guidelines can help prevent the mistreatment of vulnerable individuals and groups [10]. In order to reduce theft and protect participant privacy, consent can be obtained for a thesis or dissertation using paper-based consent forms that are safely held under a unique security code. The researcher will only ask participants to fill out a questionnaire if they provide their agreement to participate in the study. In order to emphasise that participation is entirely voluntary and that participants are free to change their minds at any point during the process, the researcher will additionally permit participants to supply their names and phone numbers after the questionnaire.

Ensuring the preservation of participants' rights and autonomy is paramount; therefore, acquiring informed consent is crucial [11]. In order to guarantee the ethical conduct of the study, a thorough informed consent document will be created. This document will include detailed information on the study's aims, methods, possible risks and benefits and emphasise the voluntary nature of participation. Comprehensive information will be made available to all relevant parties, including students, parents, and instructors, to facilitate their ability to make well-informed decisions about their respective engagements. The consent form will conform to the principles set out by the British Educational Research Association (BERA) [12].

1.3. Privacy and Confidentiality

A key component of research ethics is protecting participants' anonymity and confidentiality since people are more willing to divulge sensitive and private information when given that assurance [13]. The researcher must ensure the confidentiality of participant data to avoid any possible injury or discomfort resulting from its exposure. Therefore, it is highly recommended that the researcher take the required steps to guarantee the confidentiality of participant information, promoting a safer and stress-free research environment.

Maintaining ethical standards requires protecting the participants' anonymity and privacy [13]. The research will closely follow data protection standards to guarantee that all information is kept private and used only for the study. To preserve

participant anonymity, data will be anonymised, and only approved research staff will be able to access it. There will be digital and physical data storage safeguards, like encryption and password security.

It might be challenging to balance the need to safeguard participant anonymity and confidentiality and the researcher's needs [14]. The thesis suggests adding a disclaimer at the start of the questionnaire to emphasise the commitment to protecting participants' privacy and confidentiality throughout the research process to allay this worry.

Below is an illustration of how the sample questionnaire might show the dedication to protecting confidentiality and anonymity:

"Will you kindly help me finish this questionnaire so my research project can be completed successfully? You may be sure that every piece of data will be treated with the highest discretion and privacy, used just for this research. Your collaboration is much valued. Thank you." [4]

1.4. Data Handling and Reporting

The researcher must ensure that any data gathered throughout the research process is securely stored, disposed of, or placed both during and after the study is concluded [15]. The researcher is obligated to formulate guidelines for managing electronic devices and other materials, including but not restricted to laptops, video cassettes, diskettes, CDs, DVDs, and memory cards [15]. Also, printed files, lab notes, and journals are examples of non-electronic resources employed in the research process.

This procedure is fundamental because it safeguards data integrity, particularly concerning private materials. This guarantees the security and protection of research materials, particularly those used to gather sensitive data, and the preservation and security of materials used during the research process to guarantee the safety of the storage [16]. Safety in storage is a direct result of material planning and arrangement. Actions must be taken to ensure that stored data is safeguarded, not corrupted, deleted, or lost and that only authorised users can access the information regarding data recovery and disposal if the data collected is electronic.

A strict data handling procedure will guarantee accuracy, transparency, and dependability in data collection, analysis, and reporting. The methodology and instruments employed for data collection have been confirmed, guaranteeing the accuracy of the results [17]. To prevent prejudice or misrepresentation, transparent data reporting will present positive and negative results [18]. Maintaining the rigour and credibility of the data analysis process will depend heavily on deploying proper statistical analyses and tools.

1.5. Mistakes and Negligence

Mistakes and negligence are frequent in the study process and frequently appear out of the blue at different phases, including data collecting or analysis [19]. Many safety measures will be adopted in the research to reduce the possibility of mistakes. This will entail a critical evaluation of the theoretical frameworks used to ensure their appropriateness and a comprehensive study of the methodology to ensure its acceptability for the particular research environment [20]. Regularly proofreading and revising the research stages will also be essential to prevent unintentional errors. Using reliable secondary data sources will also be a top priority to support and enhance the accuracy of the study findings [21].

Should errors or carelessness arise throughout the research process, a protocol for swift recognition and correction shall be followed [22]. A precise method for reporting inaccuracies and a plan for prompt rectification will be established as part of this policy. Furthermore, a methodical approach to evaluating the research protocols and outcomes will be implemented to detect any possible deficiencies or prejudices that have emerged throughout the investigation.

2. Conclusion

In conclusion, to protect the welfare of everyone impacted by their work, ethical scientific researchers are compelled to respect the standards of their profession. Every stakeholder in the research process is subject to the strict ethical guidelines that form its foundation, from the participants who voluntarily donate their time and experiences to the mentors, advisors, and supporters who lead and inspire the research journey. It is our duty and requirement to uphold these values since any departure could jeopardise the validity and dependability of the research findings. The research project's future course is inextricably linked to the current dedication to ethical integrity, guaranteeing that the study's findings contribute constructively to scientific knowledge.

Compliance with ethical standards

Disclosure of conflict of interest

The author discloses that there is no conflict of interest to declare.

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