



Ethical Research Practices in Educational Institutions: A Literature Review

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ABSTRACT: Research is one of the tri-focal functions of a university. The educational institution is the first home and 'engine' of scientific studies. Educational institutions infinitely embrace research as humans continuously thirst for knowledge to improve our quality of life. Thus, ethical research practice has always been an issue and matter of academic concern in schools. This article aims to review evidence of ethical research practices in educational institutions. The references and sources of this literature review came from known research databases such as Google Scholar, Open Access Directory Journals, and prominent University Websites with specific sections on Research and Ethics. Furthermore, this provides a better understanding and a general picture of research ethical practices in schools that led to the development of a conceptual framework that illustrates the supposed-to-be ethical research practices and standards for schools that lead to the crafting of quality studies that are worth publishing and disseminating. Research ethical considerations and principles guide research designs and implementations. These include the universal standard and norm of ensuring the voluntary participation of and obtaining informed consent from research participants (Bhandari, 2022; Felzmann, 2009; & Resnik, 2020). Furthermore, this review also led to the researchers' assumption that research ethical practices and principles are associated with the level of personal ethics and moral values of a researcher and that there is a difference in the degree of practice and consideration of research ethics with respect to the nature, purpose, and design of research. Lastly, this article illustrated in its framework that the assumptions and the primary principles of research ethics (Resnik, 2020; & Smith, 2003) are inputs to ethical considerations in research. Hence, these concepts strongly underpin the significant roles of the technical review boards (TRBs) and the research ethics committees (RECs) in educational institutions to ensure that academic and scientific research done in the school setting is of quality and with academic integrity, credibility, trustworthiness, and rigor (Bhandari, 2022).

KEYWORDS: Ethical Research Practices, Educational Institutions, Literature Review, Research Ethics.

INTRODUCTION

Ethical considerations in research are a set of principles that guide research designs and practices. These considerations, practices, and principles include voluntary participation, informed consent, anonymity, confidentiality, potential harm, and results communication (Bhandari, 2022). Research ethics also provides guidelines for responsible and trustworthy research conduct. Moreover, it teaches and ensures that scientists doing research will maintain a high ethical standard in research (Resnik, 2020). The same author also suggests that there are multiple ways of defining 'ethics'. Such definitions focus on the disciplines that study standards of conduct, such as philosophy, theology, law, psychology, or sociology (i.e., a medical ethicist, who studies ethical standards in medicine, defines research ethics in the context of medical or health research).



Mejorada, et.al., (2023) stressed that educational institutions and all others who are concerned with constantly conducting research are commonly faced with ethical issues and concerns as regards the integrity of research. Most commonly, the issue on plagiarism and crimes against intellectual property rights in schools are some of the top cases. Not all educational institutions have research committees that manage and ensure that research processes and designs are of quality and credibility before the dissemination, therefore, research practices and designs are prone to unethical characteristics and issues. In higher education, students are taught to be responsible when using information in an ethical manner for the conduct of research. Responsible students must endure in searching and using ideas owned by other people to help distinguish between their own ideas and those written by others.

It is the aim of this literature review therefore to postulate a general introduction to ethical research practices in educational institutions or schools by looking into the concept of ethical issues in student research that takes place in the school setting. Academic research is not an emphasized topic in the research ethics arena, even though most of the students' research takes place in the school, and some of the students who participate in research do so in school settings. Felzmann (2009) stressed that the lack of interest in school-based research and the general lack of educational representation on Research Ethics Committees might be related to the perception that academic research is practically risk-free and therefore not worthy of ethical attention. However, academic research is always faced with ethical challenges of significant difficulty.

OBJECTIVE of the STUDY

This article aims to review evidence of ethical research practices in educational institutions. Furthermore, this provides a better understanding and a general picture of research ethical practices in schools in order to develop a conceptual framework that illustrates the ethical research practices and standards for schools. This also includes investigating or examining ethical issues in the conduct of academic research commonly encountered in educational institutions.

METHODOLOGY

This review's inquiry as stated in the research objective is described, summarized, and critically evaluated in the literature review. A literature review is organized, and it combines summary and synthesis, usually within specific conceptual categories. A summary is a narration of a source's major arguments and points. A synthesis on the other hand is a reorganization or rearrangement of information to inform how to examine a research problem. (Pascua, et.al., 2022; Fink, A., 2005; Hart, C., 1998; Jesson, J., 2011; Knopf, J., 2006; Ridley, D., 2012). In literature reviews, both Pascua et.al. (2022) and Fink (2014) explained that references and sources come from scholarly books and articles from known research databases such as Google Scholar, Open Access Directory Journals, and prominent University Websites with specific sections on Research and Ethics. All these did survey the topics covered by the different disciplines or areas.

Bloomsburg University of Pennsylvania (2023) explained that a literature review is a comprehensive summary or synthesis of previous research on a particular topic. This surveys scholarly articles, books, and other sources relevant to a specific area of research. The review should enumerate, describe, summarize, evaluate, and elucidate related previous research. Reviews should give a theoretical base for the research and help the author determine the nature of one's research. The literature review acknowledges the academic work of previous researchers assuring the readers that the works of the authors of the cited literature have been well regarded. It is by mentioning a previous work in the research study, that the author has read, evaluated, and assimilated such particular academic work into the work at hand.

Although a literature review is a simpler piece of academic writing compared to full-blown research, but this still allows the illustration of knowledge and understanding of the academic literature on a specific topic put into context. This form of academic writing may not have or include a stringent methodology for doing research, but it includes a critical evaluation of academic material, hence called a literature review and not a literature report (The University of Edinburgh, 2022).

It is emphasized by Georgia State University Library (2020) that a good literature review is not simply a list describing or summarizing several articles, but a literature review is discursive prose that proceeds to a conclusion by reason or argument. A good



literature review shows signs of synthesis and understanding of the topic. There should be strong evidence of analytical thinking shown through the connections you make between the literature being reviewed. (Lacaba & Abadiano, 2022).

In order to craft a literature review that is utilizable, there are three major ways to organize a Literature Review as presented on the website of the University of Southern California Library (2020) and Georgia State University Library (2020): (1) Chronological Presentation; (2) Thematic Presentation or Conceptual Categories; and (3) Methodological Presentation. In this study, the researchers employed the thematic approach in conducting and presenting the review of related literature and studies. Lacaba & Abadiano (2022) explained that thematic reviews of the literature are organized around a topic or issue, rather than a progression of time. Organizing by theme puts all sources with a similar focus together, making it very easy to see where differences in perspectives emerge.

Furthermore, this review gathered and selected relevant literature and studies that described and examined the role of ethical research practices in educational institutions and the ethical issues in the conduct of academic or school-based research commonly encountered. Although this literature review did not require a very stringent method or approach in searching articles and other sources, technically, the literature review started with a systematic search of related studies and literature on 'research ethics', ethical research practices in schools', 'ethical considerations', and 'research ethics principles'. Note that this article followed and employed an algorithmic approach in searching for related studies and relevant concepts in search engines online by emphasizing the words and phrases involved in the review title. Words and phrase emphases allowed the breaking and trimming down of search counts in the internet from over a million search results down to almost below a thousand only because of this technique. The search engine algorithms recognize separator symbols such as quotation marks (""), commas (,), colons and semi-colons (: and ;), dash (-), and arrowheads (< and >).

RESULTS AND DISCUSSIONS

Research Ethics

Research ethics was more concerned and stronger with scientific studies that involve human and animal lives. According to Bhandari (2022), human research aims often include understanding and explaining real-life phenomena, pursuing effective treatments, examining behaviors, and improving lives in various ways. Ethical considerations are involved in how we decide and conduct research. These considerations work to (1) protect the rights of research participants, (2) enhance research validity, and (3) maintain scientific or academic integrity.

Bhandari (2022) further emphasized why research ethics matter. According to him, Research ethics matters for scientific integrity, human rights and dignity, and collaboration between science and society. These philosophies ensure that participation in studies and research is voluntary, informed, and safe for research subjects. Researchers will be able to balance implementing significant research objectives with using ethical research methods and procedures. Preventing permanent or excessive harm to participants, whether inadvertent or not, is imperative. Deviating away from research ethics will inevitably lower the credibility of one's research because it's hard for readers and researchers to trust the data if the methods are morally questionable. Although a research idea is valuable to society, violating the human rights or dignity of the research participants is not justifiable.

Research Ethics is also defined to be the ethics of the planning, implementing or conducting, and sharing of research. This should include the protection of human and animal subjects. However, not all researchers use living subjects, nor are the ethical considerations of research exclusively limited to the provision of protection for the subjects. Other challenges on ethics are rooted in other research dimensions, such as (1) Collection, use, and interpretation of research data; (2) Methods for reporting and reviewing research plans or findings; (3) Relationships among researchers with one another; (4) Relationships between researchers and those that will be affected by their research; (5) Means for responding to misunderstandings, disputes, or misconduct; and (6) Options for promoting ethical conduct in research. The domain of research ethics is intended to include nothing less than the promotion of research that safeguards public interests, research subjects, and the researchers themselves (Kalichman, 2010).



The University of Stirling (2023) also defined Research ethics as a principle in research that involves the use of basic ethical principles to research practices which involve the research implementation and design, respect towards the community or society and others, the use of resources and outputs of research, and the scientific misconduct and the guideline of research. This definition is supported by the description by Resnik (2020) that research ethics provides sets of standards for a responsible research conduct. It teaches and checks scientists to ensure a high ethical standard when conducting research or scientific studies.

Chenneville & Gardy (2022) emphasized that research ethics are significant for fostering scientific excellence and trust building. To give an advantage to society, research such as in mental health must be trustworthy. Sadly, past examples of research misconduct led to scientific mistrust over the years. However, codes of ethics, standards, and parameters have been established to ensure responsible research conduct that would include the protection of the participants. Most importantly, ethics is especially significant when research is conducted involving vulnerable populations. Special precautions must be considered when conducting scientific studies involving people living with or at risk. This is supported very well by the emphasis made by the National Institutes of Environmental Health Science (2020) as cited by Resnik (2020) that when conducting research on human participants, researchers should mitigate risks and all forms of harm and instead boost benefits; respect dignity, autonomy, and confidentiality; implement major precautions with vulnerable populations; and endeavor to dispense both the burdens and benefits of research impartially.

Distinctions and Approaches in Teaching Academic Research and Ethics in Schools

Kalichman (2010) discussed the ethical distinctions academicians or researchers should mindfully consider in tackling research ethics. As ethical research mentors, it is imperative not to complicate moral claims and be confused about how people should behave with descriptive claims about how they do behave. From the fact that gift or honorary authorship or signing off on un-reviewed data may be a "common practice" in many settings, it doesn't mean that they are morally or professionally acceptable and justified. Similarly, morality should not be confused with the ethical codes or moral beliefs that a group holds. In other words, a belief system is not immediately justified morally just because it is widely accepted and practiced by a group of people or a given society.

Another important ethical distinction in teaching and discussing research ethics is that between the law and morality. The law may or may not follow or conform to the demands of ethics (Kagan, 1998). It is also beneficial to differentiate between two different levels of ethical questions: first-order or "ground-level" questions and second-order questions. First-order moral questions emphasize what we should do, while Second-order moral questions give stress in the nature and purpose of morality itself (Kalichman, 2010).

In terms of ethical approaches, these said approaches provide moral principles and ways of thinking about the responsibilities, duties, and obligations of moral life. One approach is the deontological ethics of Immanuel Kant (1785) which emphasizes that some acts are either right or wrong in themselves such as the act of lying or false promise. In the context of research, for instance, fraudulent acts, plagiarism, and falsification are regarded as morally wrong, and that is not just because they have bad consequences, but because they're morally wrong in themselves. Oppositions to principle-based or deontological ethics involve the struggle in employing highly general principles to specific cases depending on one's field of practice or belief. Lastly, Deontological ethics is commonly conflicted with consequentialist ethics. According to consequentialist approaches, the rightness or wrongness (morality) of an act depends on its consequences. A person should act and move in such a way that the act brings about the best outcome of undertakings, where the best outcome of undertakings may be understood in various ways and contexts (Honderich, 1995).

There's also 'virtue ethics' which centers on moral character rather than action and behavior considered in isolation. The principal to this is the question of "what ought we to be?" rather than "what we ought to do?". This approach has also greatly touched discussions on bioethical issues where a conventional emphasis on rights and other theoretical principles frequently leads to diverged and delayed discussions (Kalichman, 2010).



A Moral Psychologist named Gilligan (1993) developed in her work a concept of 'an ethics of care'. Gilligan said to discover a "different voice," a kind of moral thinking that is distinct from principle-based moral thinking. An ethics of care emphasizes compassion and empathetic understanding. This type of ethics mainly applies to traditional caregiving roles and contexts. Moreover, this ethics is specifically beneficial and applicable in discouraging human and animal subjects research, informed consent issues, and the treatment of vulnerable populations such as the ill ones, children, and the handicapped among others.

In the contemporary world, the case study approach is widely known in ethical discussions. These started with real or hypothetical cases. The goal is to determine the intuitively probable and reasonable principles that should be considered in resolving the issues at hand. Then, this approach proceeds to evaluate critically the principles. Another one is casuistry. This is a method for doing ethics rather than as itself an ethical theory (Kalichman, 2010). However, casuistry is not entirely separate from ethical theory (Steneck & Bulger, 2007).

Lastly, there is applied ethics. This is a division under normative ethics (Kagan, 1998). Applied Ethics deals with practical questions, particularly on the professions. Bioethics is the most widely known example of applied ethics. Bioethics deals with ethical questions in medicine and the biological sciences. In conclusion, learning about "research ethics" or the responsible conduct of research is one of the various forms of professional ethics that have come to importance since the 1960s. However, it is noteworthy that the concern with professional ethics is not new. There are already existing ancient or old ethical codes such as the Hippocratic Oath and guild standards (Singer, 1993).

Ethical Issues and Considerations in Academic or School-based Research

School-based Research entails an ethically challenging phenomenon that deserves strong attention. Researchers and Research Ethics Committee members need to be aware of the particular concerns that arise in schools in relation to the essential considerations of informed consent, confidentiality, and risk and benefits management. Specific attention needs to be given to the implications of the presence of multiple stakeholders. Similarly, particular attention should be given to the insinuations of the effect of professional roles and expectations on the ethical administration of the academic or scientific research process. Ethical issues in the school setting touch on three main areas of ethical concern: the informed consent process, confidentiality, and harm and benefit. Informed consent in educational institutions is illustrated by the involvement of various stakeholders, including researchers, parents and individual students, academic heads, teachers, and learners' peers. The added difficulty of the environment has implications for the administration of the informed consent process, including the decision at what point and in which approach every group of stakeholders needs to be involved in the process. The existence and divergent roles of these various stakeholders in the educational institution also have implications for addressing issues of confidentiality, especially due to the group environment in which participants are involved in the conduct of research and role anticipations within educational institutions. Harm and benefit in academic research are of non-physical and tangible nature; significant areas of concern relate primarily to the potential for psychological and social damage, the realistic presentation of likely benefits from research, and the issue of rewards and incentives for research participation (Felzmann, 2009).

Plagiarism Issue versus Student's Knowledge in Citing Sources in Universities

Ideas are considered intellectual or academic property, and there are severe repercussions if one fails to acknowledge where one got ideas from. Plagiarism is rampant and a common issue in academic writing because of the lack of knowledge about citing sources (Mejorada, et.al., 2021). Academicians who write for professional purposes may take citing, like other common behaviors, for granted (Neville, 2012 cited by Mejorada, et.al., 2023). Every researcher is responsible for adequately acknowledging their sources. Citing sources can help scholars and academicians discover original references for their research. Citing sources improves the credibility and trustworthiness of a research paper or an academic output. If one does not give credit for the ideas he or she used in a study, then he or she is not a responsible scholar and may be described to be committing a serious crime on intellectual property.

Citing sources is one of the indicators of good research ethics practice but takes time because it needs close attention especially as we follow the American Psychological Association (APA) 7th edition citation style standard. According to Neville



(2008), plagiarism has always been a major concern for higher education practitioners, students, and academicians in general, especially in writing research. Research writing is a multifaceted undertaking and so researchers must be responsible while 'adopting' other people's ideas. This is done by giving them what is due to them as researchers cite them in their intellectual efforts. Citing sources helps researchers become better scholars and authors.

Today, citing sources has become increasingly difficult because of the widespread availability of internet materials and the proliferation of new types of content (Mejorada, et.al., 2023; Greer & McCann, 2018). Kargbo (2010) discovered in his study that 62.1 percent of undergraduate students were not confident in properly citing sources and that even those who considered themselves confident often commit inconsistent referencing. In higher educational institutions, students must be responsible when using the information in an ethical respect. Responsible students should have perseverance in citing the ideas of others to help distinguish between their own ideas and those of others that have been written by others (Mejorada, et.al., 2023).

Citing sources can solidify claims and make a research paper credible. Failing to credit the ideas of others is a form of plagiarism, which was a common problem among students in the past until today. A study by Mejorada, et.al., (2023) on students' knowledge of citing sources in a University revealed that students were proficient in both in-text citations and referencing assessments. Thus, the students have gained learning and knowledge in the activities conducted by the University's Library and Research departments pertaining to how to cite sources correctly following the APA 7th edition style. The library and information science practitioners must sustain initiatives that enhance the student's knowledge in crediting sources by orienting and training them about APA 7th edition style. Also, the collaboration between the library and research departments of Universities improves students' citation and referencing skills. The outcome of this collaboration would reduce errors in proper citations and instead promote respect for others' intellectual contributions. Practitioners should also integrate the basic concepts of crediting sources into formal classroom instructions to ensure that students understand the significance of acknowledging academic outputs and work as they support and fortify their own ideas (Mejorada, et.al., 2023).

Voluntary Participation and Possible Benefits in Research

Voluntary participation as an ethical issue and consideration for the conduct of research means that all research subjects, respondents, or participants are unrestricted to decide to participate and be involved in the study without any presence of pressure or coercion. With voluntary participation, the participants are free to withdraw from, or leave, the research at any moment without feeling any obligation to continue. The subjects, respondents, or participants do not need to explain or give a reason for leaving the study if ever. Also, it is necessary to be clear to the participants that there are no negative consequences or effects once they opt to refuse in participating. The research participants would normally spend their time helping in the research process, so a researcher should respect their decisions without trying to convince or change their minds any further. Voluntary participation is a research ethical principle and consideration covered by international law and many codes of scientific conduct. Researchers must ensure that there's no pressure on subjects when they're working with vulnerable groups of individuals (Bhandari, 2022).

Yale University (2023) also stressed that voluntary participation is a right of a research participant. Participation in a research study should be totally voluntary and a participant has the right to decline to participate for any reason that he or she needs not to disclose. Participants may also stop participating at any time or refuse to give answers or information regarding any individual questions. Even after being able to sign a consent form, a participant can stop at any time from participating. Should a participant decide to decline or refuse in participating, this decision will in no way affect any perks to which a participant is otherwise entitled.

There are several key concepts that describe the system of research ethics practices the modern social and medical research institutions have established in order to try protecting better the rights of research participants. The voluntary participation in research principle warrants that people should not be forced into participating in studies. This is especially applicable and relevant previously to research that involves 'captive audiences' for their subjects such as prisoners, university personnel, and patients among others (Trochim, 2023).



Informed Consent as an Ethical Standard in Research

Very close to the principle of voluntary participation is the concept of requiring ‘informed consent’ from research participants. Basically, informed consent requiring means that research participants must be fully aware of the procedures and risks involved in or entailed by conducting research where they must give their consent to participate. Ethical ideals also compel researchers not to put their participants in risky situations where they might be prone to harm because of their participation. Harm may either be physical or psychological (Trochim, 2023).

Informed consent is a setting in which all prospective participants receive and understand all the information they need to decide whether they want to participate. This includes data about the research’s risks, funding, benefits, and approval. Usually, you’ll provide participants with a text for them to read and ask them if they have any questions. If they agree to participate, they can sign or initial the consent form. Note that this may not be sufficient for informed consent when you work with particularly vulnerable groups of people. When gathering data from participants with low literacy, researchers should ensure to explain the content and context of the consent form verbally or orally to them before they approve to participate. For participants with very limited language proficiency, researchers should always translate the research materials or if not, one should consider having an interpreter to obtain information in their mother language. In studies with children, researchers will need informed permission for their participation from the parents or direct guardians. Although children cannot give informed consent, it’s preferable to also ask for their agreement to join considering their age and maturity (Bhandari, 2022).

The ethical consideration of achieving informed consent from participants is also true to research in school settings just as in other research fields. A notable problem in the school setting is the involvement of multiple stakeholders, which adds further complication to the management of the decision-making process. Research involving children must meet the ethical and legal standards and requirements of acquiring assent not just from the children involved, but also from a legally recognized surrogate decision-maker such as the parents or immediate guardian. Consent practices are based on the idea that the decision-making capacity of children is not fully equivalent to that of adults. Children can only give assent because they cannot give binding consent. Assent is the informed agreement to participate in research on the basis of information that is appropriate to the child’s level of cognitive and emotional development. Assent conveys acceptable authority, but needs to be supplemented by informed consent, usually by the child’s parents, to be fully binding (Felzmann, 2009).

Moreover, school principals, teachers, or even the board management officials in some cases are considered additional stakeholders. They add complication, especially to the process of informed consent. Normally, the school head, president, or principal is the primary gatekeeper that decides on the researcher’s access to the campus for data gathering, while teachers have significant involvement in the expedition of children’s assent (Felzmann, 2009).

Yale University (2023) also emphasized informed consent as a right of a research participant. Research participants are expected to be shown an informed consent form signifying approval of the research by the institutional review board or IRB. This is intended to give the relevant information necessary to decide whether a participant would want to be involved or not. Informed consent forms are normally coupled with a research discussion. Commonly, informed consent includes: a description of an explication of the research purpose; a description of what participants will be asked to do and how long it will take should they participate, and whether or not they will be compensated for their time; a description of any risks possibly involved in joining wherein these risks could be physical, emotional, psychological, or social and the steps taken to minimize these risks be described; a description of any benefit to a participant or to the general society; the degree of information confidentiality; whom to contact should a participant has questions about the study or about his or her rights as a participant; and a statement that they are free not to join and can just stop participating anytime. In the end, the participants should not sign the form agreeing to the research until all of their queries have been answered to their own satisfaction. Most importantly, signing the informed form does not waive any of a participant’s legal rights or alter his or her ability to stop participating later. The participants should be given a copy of the form to take with them in case they have queries later.



An important aspect of informed consents and voluntary participation in research is the ability to withdraw from an ongoing study at a later time. From this viewpoint, the voluntariness notion in relation to academic research has a temporal dimension including the likelihood of changing one's mind. Volunteering for research as implied by the informed consent signifies a dynamic engagement with the researchers – an engagement that may include a decision to retract after initially assenting to participate in a study (Marshall, et.al., 2014).

Anonymity of Research Participants or Subjects

Anonymity means that a researcher or the readers do not know who the participants are, and no one can link any individual participant to the presented research data. One can only ensure anonymity by not collecting any personally identifying information including but not limited to the participants' names, home addresses, phone numbers, email addresses, physical characteristics, hobbies and favorites, photos, and videos. In many cases, anonymizing data collection could be difficult truly. There are data collected that cannot be considered fully anonymous because some personal profiles (course, year level, or age) are impossible to hide and could be included as major variables in the study (Bhandari, 2023).

Furthermore, Bhandari (2022) also emphasized that researchers will also need to gather some identifying information if they give the participants the option to withdraw or exclude their data eventually at a later time. Data pseudonymization is an alternative approach where researchers can replace identifying information about participants with pseudonymous identifiers. The information can still be linked to participants, but it would be harder to do so this time because the researchers separate personal information from the research information or study data.

The principle of anonymity, as a stringent research standard and consideration, essentially means that the research participant will remain unknown throughout the study. Clearly, this is a stronger warrant of privacy yet difficult to accomplish sometimes, especially in instances where subjects must be assessed at multiple time points in the case of experimental or cross-sectional designs (Trochim, 2023).

Confidentiality of Information

Confidentiality means that a researcher knows who the study subjects are but opts to exclude all identifying information from the research report. All participants have a right to privacy, so a researcher should protect their personal data at all costs. Even when a researcher cannot collect data anonymously, he or she should secure confidentiality whenever possible, at all times (Bhandari, 2022). Some research designs are not favorable to the principle of confidentiality, but it is relevant to implement all attempts and enlighten the participants about the risks involved.

To help protect the privacy of research participants, research warrants the participants' confidentiality wherein these participants are assured that giving and declaring information will not be made available to anyone who is indirectly involved in the research (Trochim, 2023).

Confidentiality compels the researchers not to disclose information from research activities without the express approval of the research participant. In children's research, for instance, child protection legislation may oblige researchers to breach confidentiality, due to mandatory research reporting standards for suspicions of child abuse. Child protection can become an issue in any research setting; however, in school-based research, the likelihood is imminent. It needs to be addressed in the informed consent process with all relevant stakeholders and this is by mentioning the reporting requirement and likely actions coming from abuse suspicions. Researchers need to be cautious to address these matters in a proper manner that conveys their responsibilities without appearing unduly alarming. The group aspect in which academic research is conducted also has insinuations for confidentiality. In the researcher-participant dyad, only the researchers' commitment to confidentiality needs to be safeguarded. However, if the information is shared in a group context, then the quantity of those in possession of this information multiplies, while their commitment to confidentiality becomes questionable. Researchers need to be cognizant that sensitive information is



normally shared during the use of participatory approaches or focus groups, and it is their accountability to ensure that participating youth are aware of these confidentiality limitations (Felzmann, 2009).

Potential Harm and Risks in Participating in Research and Scientific Studies

As researchers, they must consider all possible sources and forms of harm to the research participants. Harm can come in many different forms. One is psychological harm which pertains to sensitive questions or tasks that may trigger negative emotions such as anxiety, shame, and even trauma. Another is social harm where participation can involve social risks, public embarrassment, or even stigma. Physical harm refers to pain or injury that can lead from the implemented study procedures. Legal harm pertains to reporting sensitive information that could lead to legal risks or a breach of personal privacy. In the end, it's best to consider every possible source of harm in one's study as well as concrete ways to lessen them. For institutions, it is best to involve a supervisor to tackle steps for harm mitigation. In order to get informed consent, researchers should ensure to divulge all possible risks of harm to participants before the conduct of the study. Once there is a risk of harm, researchers should prepare to give participants with resources or counseling, or medical services if needed (Bhandari, 2022).

Research in educational institutions is in most cases lacking significant physical risk, but is quite prone to psychological and social risks. Possible psychological risks include emotional distress or weakening, and in exceptional situations emotional fatigue or dependency. Most significant among these is the risk of emotional distress or upset which could be triggered by confrontation with particularly emotionally haunting material; confrontation with age-inappropriate material; confrontation with sensitive topics and concepts; confrontation with topics related to personal difficulties or bad life experiences; and triggering traumatic recalls. On the other hand, social risks may include being singled out; being embarrassed in front of people; a change of image or personality within the peer group; or loss of status within the peer group. Social risks are particularly relevant in contexts where research is conducted within an established peer group, and they are increased by a choice of research methodology that depends on intensified social interaction among a peer group (Felzmann, 2009).

Awareness of the Participants in the Communication and Sharing of Research Results

The way researchers communicate their research outcomes and results also involves ethical issues. Scientific Results communication and reporting are reliable, honest, and credible, hence fostering academic integrity. It's best to make research outcomes and results as transparent as possible. Researchers should take measures to avoid plagiarism and misconduct at all costs (Bhandari, 2022).

Ethical Principles in Research

In relation to the ethical issues and considerations in research particularly on results sharing and communication, research ethics is a must for scientific and academic integrity, human rights and dignity, and collaboration between the society and field of science. These principles ensure that participation in research is voluntary and generally safe for research subjects or participants. An ethical researcher balances the pursuit of significant research objectives with the use of ethical research methods and processes. It's always imperative to prevent permanent or undue harm to participants, whether unintentional or not. Resisting research ethics will lower the credibility and integrity of one's research. It will be very hard for others to trust data if the methods employed are morally doubtful. In the end, even though most research ideas are valuable to the general society, this does not guarantee the allowable violation of human rights and dignity (Bhandari, 2022).

To ensure the ethical process of the research conducted in schools, a researcher realizes the need to submit research proposals and manuscripts to the institutional review board (IRB) before starting data-gathering procedures. An IRB is a committee that checks the ethical acceptability of the research aims and research design and whether these follow the institution's code of ethics, research agenda, and moral norms. If successful, IRB approves the research proposal which then allows a researcher to begin gathering data according to the approved approaches. Once there are changes in the procedures or materials, the researcher will need to apply for a modification to the IRB. If unsuccessful, the researcher may be asked to re-submit the proposal with modifications or



worst is that the proposal may be totally rejected. To secure approval from IRB, it's important to clearly explain how ethical issues will be tackled that may arise in the study being proposed (Bhandari, 2022).

The following research ethical principles are widely available online and are acknowledged, practiced, and accepted by scientists and researchers all over the world:

Table 1. Comparative Matrix of Ethical Principles in Research by Resnik (2020) and Smith (2003)

Research Ethical Principles	
Resnik's (2020) Research Ethics Principles <i>(Source: https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm)</i>	Smith's (2003) Five Principles for Research Ethics as cited by APA <i>(Source: https://www.apa.org/monitor/jan03/principles)</i>
<ul style="list-style-type: none"> • <i>Honesty</i> • <i>Objectivity</i> • <i>Integrity</i> • <i>Carefulness</i> • <i>Openness</i> • <i>Accountability</i> • <i>Intellectual Property</i> • <i>Confidentiality</i> • <i>Responsible Mentoring</i> • <i>Respect colleagues</i> • <i>Social Responsibility</i> • <i>Non-discrimination</i> • <i>Competence</i> • <i>Legality</i> • <i>Animal Care</i> • <i>Human subjects' protection</i> 	<ul style="list-style-type: none"> • <i>Discuss Intellectual Property Frankly.</i> • <i>Be Conscious of Multiple Roles.</i> • <i>Follow informed consent rules.</i> • <i>Respect confidentiality and privacy.</i> • <i>Tap into ethics resources.</i>

Resnik's (2020) Research Ethics Principles:

Resnik (2020) stressed the following commonly experienced and evident ethical principles in all kinds and designs of research that various codes of conduct and academic philosophies address and follow:

Honesty in reporting data, results, methods, and publication standing. Fabrication, falsification, or misrepresentation of data is a mortal sin. Researchers should not deceive colleagues, sponsors, or readers in society;

Objectivity allows researchers to strive to avoid bias in experimental design, data analysis and interpretation, the peer review process, decisions, and other aspects of research where objectivity is expected or required. Researchers should avoid bias or self-deception and they should divulge personal or financial interests that may affect research;

Keeping promises and agreements must be observed as an act of **Integrity** with sincerity, and consistency of thought and action;

Carefulness allows researchers to avoid careless errors and negligence. Researchers must carefully and critically examine their own work and the outputs of their peers. They should keep relevant records of research activities, such as data collection evidence, research design, and correspondence with entities or journals;



Openness lets researchers share data, results, ideas, tools, and resources. They should be open to criticism and constructive ideas; *Transparency* compels the divulging of research methods, assumptions, analyses, and other data needed to evaluate the research;

Also, Researchers should take *Accountability* for their own part in research and be prepared to be responsible for it all the time;

An ethical researcher with respect to *Intellectual Property* knows how to honor patents, copyrights, and other forms of intellectual property. They should not use even unpublished data, methods, or even results without permission and approval. Ethical researchers should give proper acknowledgment or credit to all contributors to the research;

As a basic ethical consideration, *Confidentiality* allows researchers to protect private communications or information, such as papers or grants submitted for publication, human records, trade or military secrets, patient records, and other forms of classified data;

Researchers are also called responsible educators. *Responsible Mentoring* helps to educate and advise students and seekers of truth. Researchers and educators promote welfare and allow mentees to bring about their own decisions;

Respect colleagues and treat them fairly;

Social Responsibility lets researchers strive to promote social good and lessen social harm through research education;

Non-discrimination against colleagues or advisees on the basis of age, sex, ethnicity, culture, race, or other factors not related to academic competence and integrity must be ensured;

Competence helps maintain and improve a researcher's own professional competence and expertise through lifelong education and learning and this is by taking steps to promote competence in the field of science in general;

Legality lets researchers know and obey relevant laws and policies;

Ethical researchers foster *Animal Care* by showing proper respect and care for animals when using them in research. Researchers should not conduct unnecessary or poorly designed animal experiments; and

Ethical and humane researchers ensure *Human subjects' protection*. When conducting research on human subjects, mitigate harms and risks and instead maximize benefits. Respect human dignity, privacy, and autonomy and take special precautions with vulnerable groups of subjects, and then strive to deliver the benefits and incumbrances of research fairly.

Smith's (2003) Five Principles for Research Ethics

Following the Universal Standard carved by the American Psychological Association (APA) on research and ethical practices, Smith (2003) wrote five research ethical principles recommended by APA's Science Directorate that help researchers steer clear of ethical predicaments:

Discuss Intellectual Property Frankly. Educational Institutions' "publish-or-perish" mentality can be a formula for trouble later when talking about who gets credit for authorship. The best way to avoid disagreements about this and in what order of authorship to consider is to agree on these issues at the beginning of work and writing of research. Sometimes, it is almost like talking about money and people do not want to appear they are being greedy or presumptuous. The APA's Ethics Code offers some



guidance on this. The said code specifies that "*faculty advisors discuss publication credit with students as early as feasible and throughout the research and publication process as appropriate.*" When researchers and students put this understanding into writing, they have a seamless instrument to discuss and evaluate contributions continually as the study progresses.

Be Conscious of Multiple Roles. APA's Ethics Code explains that scientists or researchers should avoid relationships or connections that could significantly impair their professional performance or could exploit others. However, it also explained that many kinds of multiple relationships are not really unethical, as long as they are not rationally expected to have adversative effects. Nonetheless, scientists should think carefully before venturing into multiple relationships with any individual or group, such as enlisting students or clients as subjects or participants in research and studies or examining the effectiveness of a product of a company where they are the owners or stockholders.

Follow informed consent rules. The consent process, when properly done, ensures that person or groups are voluntarily participating in the research with full knowledge of relevant risks and benefits. The standard is that the person or groups must be completely informed about anything that might significantly influence their willingness to participate without manipulation in a form that they can comprehend. The consent should be covering the possibility, extent, and period of harm or benefit if one is to participate, emphasizing that their participation is voluntary.

Respect confidentiality and privacy. Safeguarding one's rights to confidentiality and privacy is a primary principle of every researcher's work. However, privacy issues are eccentric to the research population, writes Susan Folkman, PhD, in "Ethics in Research with Human Participants" (APA, 2000). Researchers need to create ways how to ask whether subjects are willing to talk about sensitive topics without placing them in awkward situations. This means that researchers should provide sets of detailed interview questions so that subjects can stop if they feel uncomfortable. And since research subjects have the freedom to choose how much information about themselves will they divulge and under what scenarios, researchers should be careful when enlisting subjects for research.

Tap into ethics resources. One best way a researcher can prevent and resolve ethical predicaments is to be aware of both their ethical obligations and the resources available to them. Researchers can help themselves make ethical issues striking by reminding themselves of the basic foundations of research and professional ethics.

Research Hypotheses

This section highlights the hypothesis and why the researchers arrived at it.

The University of Stirling (2023) explained that ethics are a personal moral code of conduct based on respect for oneself, others, and the environment. This is governed by the principles or assumptions supporting the way individuals or organizations ought to dispose of themselves (Bhandari, 2022; & Resnik, 2020). Research ethics involves the application of basic ethical principles to research activities which involve the structure and implementation of research, respect towards people and society, the use of resources and research outcomes, scientific misconduct, and the regulation of academic studies (University of Stirling, 2023; Bhandari, 2022; Resnik, 2020; & Kalichman, 2010).

Although ethical codes, policies, standards, and principles are very significant and beneficial, like any set of rules, they do not scope all kinds of scenarios. They often oppose and they need acceptable interpretation (Chenneville & Gardy, 2022; & Kalichman, 2010). It is therefore important for researchers, especially in educational institutions, to acquire knowledge and be aware of how to interpret, assess, and apply various research codes and rules including how to arrive at decisions and to ethically act in various circumstances (Resnik, 2020; Mejjorada, 2023; Chenneville & Gardy, 2022; & Kalichman, 2010). By these assumptions, the researchers hypothesize that:

H_{a1}: Research ethical practices and principles are associated with the level of personal ethics and moral values of a researcher.



Defining the term 'ethics' centers on the fields that study standards of conduct and action, such as theology, law, philosophy, psychology, or sociology. For example, "medical ethicists" study ethical standards in the field of medicine. One may also define ethics as an approach, method, or perspective for deciding how to act and for analyzing difficult issues and complex problems. For example, in considering a complex issue like global warming, one may take an economic, political, or ecological perspective on the issue while an economist might evaluate the cost and benefits of various policies related to global warming, an environmental ethicist could investigate the ethical values and principles involved (Resnik, 2020). In connection to this, Smith (2003) of the American Psychological Association (APA) made emphasis that one best way a researcher can prevent and resolve ethical predicaments is to be aware of both their ethical obligations and the resources available to them and these should be clear in the research process and design (Smith, 2003; Kalichman, 2010; Resnik, 2020; & Chenneville & Gardy, 2022). Also, the American Psychology Association (APA, 2000) emphasized that ethical research practice also varies or depends on the type of research, the method and design, and the nature and purpose. By these assumptions, the researchers hypothesize that:

H_{a2}: There is a difference in the degree of practice and consideration of research ethics with respect to the nature, purpose, and design of research.

SYNTHESIS of the LITERATURE REVIEW

This literature review aims to explain and emphasize the ideal and standard ethical research practices of students and academicians in educational institutions. The researchers were interested in further posing an assumption that research ethical practices and principles are associated with the level of personal ethics and moral values of a researcher. Also, the researchers interestingly established the idea that there is a difference in the degree of practice and consideration of research ethics with respect to the nature, purpose, and design of the research being conducted.

Multiple studies even not limited to the literature and studies reviewed in this paper emphasized the role of research ethics committees (RECs) and institutional technical review boards (IRBs or TRBs) in ensuring the ethical conduct of scientific and academic research particularly within the scope of the institution. This aims to protect the human rights and dignity of the researchers, participants or subjects, and society in general as scientific studies are conducted. School's institutional research departments should adhere to the ethical standards and requirements upon making and conducting research in and out of the institution.

Moreover, the reviewed literature and studies illustrate the universal standard of research ethical practice. Although it is assumed that there is a significant level of implementing research ethical practices and principles according to the research design, methods, nature, and purpose, the universal norm and standard on research ethics dictate all researchers to always safeguard human rights and dignity and protect intellectual property rights while ensuring academic integrity and research credibility, trustworthiness, and reliability.

Basically, the entire idea of research ethics is circled by the common practice and assurance of safety and morality through the ensuring of voluntary participation and informed consent. Other ethical considerations in research seem to fall under the aspect of principles in research and ethics. In the end, the outcome of research does not only focus on the actual output or result of the research process but also the assurance that all involved stakeholders of the school, the community, the subjects, and the researchers themselves are equally protected with their rights and welfare not compromised. Seeking a successful research process should not jeopardize everyone and should not be at the expense of others. In conclusion, this literature review brings us to its core outcome and hence gives an avenue for the establishment of a framework for ethical research practices in educational institutions.

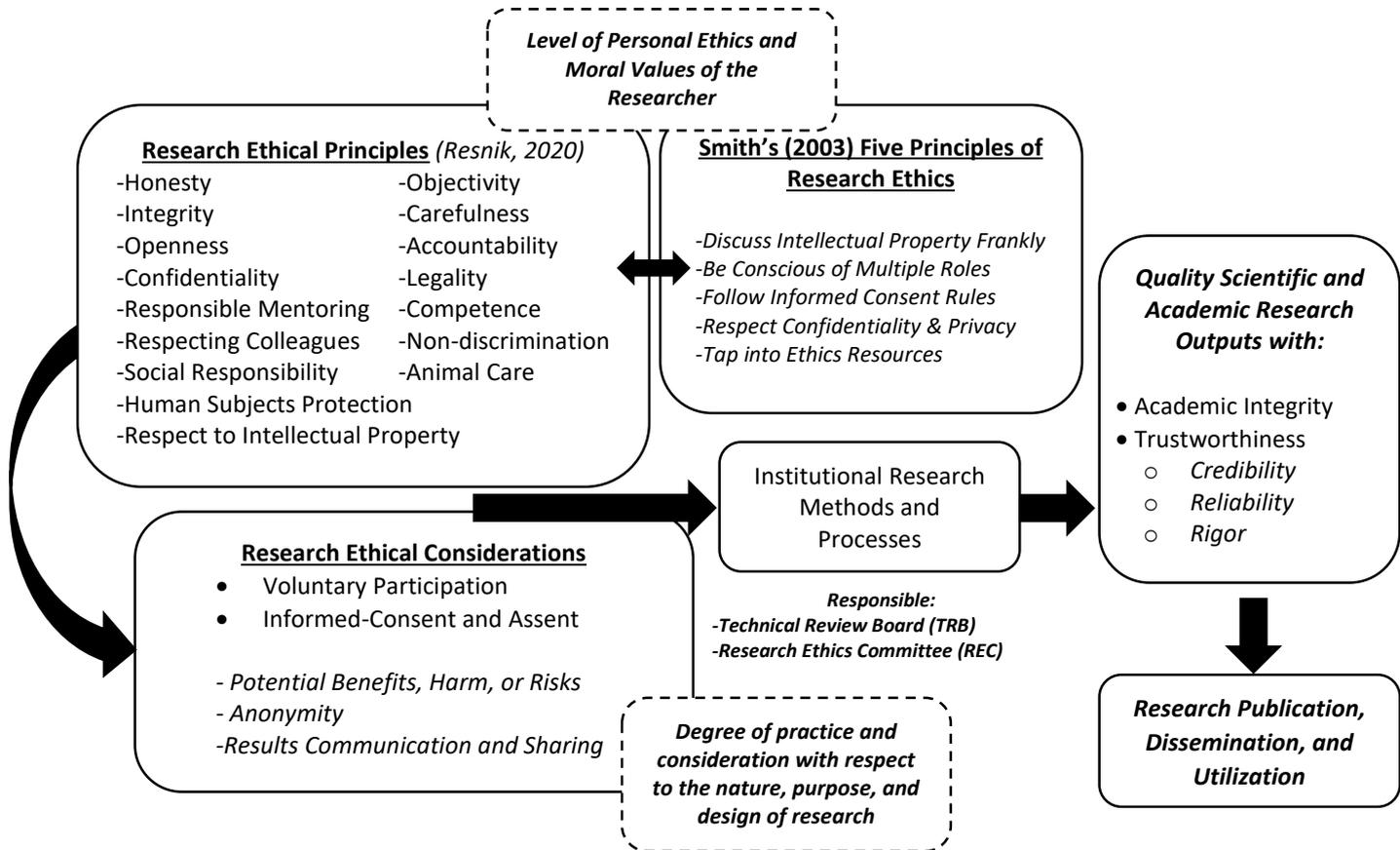


Figure 1. Conceptual Framework of the Ethical Research Practices in Educational Institutions

Figure 1 Framework of the Ethical Research Practices in Educational Institutions illustrates the researchers' realization that research education and institutional research conduct and practice in the school entail the ensuring application and integration of research ethical principles and considerations to the institutional methods and processes with the Technical Review Board and Research Ethics Committee as ensuring bodies. Also, this framework also shows the researchers' assumptions that research ethical practices and principles are associated with the level of personal ethics and moral values of a researcher and that there is a difference in the degree of practice and consideration of research ethics with respect to the nature, purpose, and design of research. All these integrated and realized yield an outcome of having quality scientific and academic research outputs. Such exemplar academic outputs are characterized by academic integrity, credibility, trustworthiness, reliability, and rigor (Bhandari, 2022; Neville 2012 as cited by Mejorada, 2023). Research and Scientific outputs that are of quality are deemed worth publishing and disseminating to contribute to the body of knowledge as this is the desired and ideal purpose of research. Publications through reputable journals make academic writings and scientific discoveries publicly available allowing the academic audience and regular readers in the community to assess the quality and impact of research. Scholarly Journals, Trade or Professional Publications, and General Interest Magazines are just among the types of various publications.

FUTURE RESEARCH DIRECTION AND IMPLICATIONS

It is always the goal of research to contribute to the general welfare of the academic community and to generally create measurable information or data that will eventually add to the increase of human knowledge. In connection with this, Science and research particularly in the field of education have turned out to be increasingly concerned with the aptness of ethics and so there is a need for generally satisfactory codes of ethics. This awareness stems from various analyses relating to research methodologies



that are currently embraced, and the fear that they might be at odds with the principles of ethics. This has then resulted in the validity and integrity of contemporary research approaches. Since schools are embracing research as a way of life, ethical research practices imply that educational institutions should educate the community about research that entails the general norm and principle that knowledge and truth should be sought, revealed, disseminated, and used not at the expense of others.

Based on the analysis conducted by the researchers in this literature review, it is desired as a future direction of this research to support the establishment of research-based and literature-supported Technical Review Boards (TRBs) and Research Ethics Committees (RECs) in educational institutions to ensure that the research ethics principles are followed and integrated into the research & development endeavors of the academic communities of schools.

REFERENCES

1. Bhandari, P. (2022). Ethical considerations in research | Types & examples. Scribbr. Retrieved from: <https://www.scribbr.com/methodology/research-ethics/>
2. Chenneville, T., Gardy, S. (2022). Ethics in mental health research. Reference Module in Neuroscience and Biobehavioral Psychology. Retrieved from: <https://www.sciencedirect.com/topics/nursing-and-health-professions/research-ethics>
3. Felzmann, H. (2009). Ethical issues in school-based research. The Association of Research Ethics Committees – Research Ethics Review. 5(3), 104-109. Presented at AREC conference ‘Vulnerable groups – ethical dimensions and dilemmas’ Birmingham, 19 March 2009.
4. Fink, A. (2005). Conducting research literature reviews: From the internet to paper. 2nd ed. Thousand Oaks, CA: Sage Publications
5. Fink, A. (2014). Conducting research literature reviews: From the internet to paper. Fourth edition. Thousand Oaks
6. Georgia State University Library. (2020, July 7). Literature Reviews: Introduction. RESEARCH GUIDES. <https://research.library.gsu.edu/c.php?g=115595>
7. Gilligan C (1993): In a different voice: Psychological theory and women's development. Cambridge: Harvard University Press.
8. Honderich, T. (1995). The Oxford companion to philosophy. Oxford and New York: Oxford University Press.
9. Kagan S (1998): Normative ethics. Westview Press.
10. Kalichman, M. (2010). Introduction: What is research ethics? Resources for Research Ethics Education. Online Ethics Center. Retrieved from: <https://onlineethics.org/cases/resources-research-ethics-education/introduction-what-research-ethics>
11. Kant I (1785): Groundwork of the metaphysics of morals.
12. Lacaba, M., & Abadiano, M. (2022). Learning modules for research writing. Quezon City: Wiseman’s Book Trading, Inc.
13. Marshall P.A., Adebamowo C.A., Adeyemo A.A., Ogundiran T.O., Strenski T., Zhou J., Rotimi C.N. (2014). Voluntary participation and comprehension of informed consent in a genetic epidemiological study of breast cancer in Nigeria. BMC Med Ethics. 2014 May 13;15:38. doi: 10.1186/1472-6939-15-38. PMID: 24885380; PMCID: PMC4032563.
14. Mejrada, E., Doong, J., Retorta, M.A., Curayag, C.M., Lonzon, W., Ederio, N., & Calaca, N. (2023). Students’ Knowledge in Citing Sources at St. Paul University Surigao. International Journal of Current Science Research and Review, 6(1), 207-213. doi: <https://doi.org/10.47191/ijcsrr/V6-i1-21>
15. Resnik, D. (2020). What is ethics in research & why is it Important? National Institute of Environmental Health Sciences. Retrieved from: <https://www.niehs.nih.gov/research/resources/bioethics/whatis/>
16. Singer P (1993): Practical Ethics, 2nd ed. Cambridge University Press.
17. Smith, D. (2003). Five principles for research ethics. American Psychology Association (APA) Website. 34(1): 56. <https://www.apa.org/monitor/jan03/principles>
18. Sutton, A. (2016). Systematic approaches to a successful literature review. Los Angeles, Ca: Sage.
19. Steneck NH, Bulger RE (2007): The history, purpose, and future of instruction in the responsible conduct of research. Academic Medicine. 82(9):829-834.



20. The University of Edinburgh Website. <https://www.ed.ac.uk/institute-academic-development/study-hub/learning-resources/literature-review>
21. Trochim, W.M.K. (2023). Research methods knowledge base: Ethics in research. Conjointly. Retrieved from: <https://conjointly.com/kb/ethics-in-research/>
22. University of South Carolina. (2020). LibGuides: Conducting a Literature Review: Home. Home- Conducting a Literature Review- LibGuides at University of North Florida. <https://libguides.unf.edu/c.php?g=177129>.
23. University of Stirling Website (2023). <https://www.stir.ac.uk/research/research-ethics-and-integrity/understanding-ethics/>
24. Website of the Bloomsburg University of Pennsylvania. <https://guides.library.bloomu.edu/litreview>
25. Yale University Website (2023). <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participant>

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