

Chapter 6: Ethics and Related Research Considerations for Postgraduate Students in the Humanities and Social Sciences

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Abstract

This chapter reconnoitres the issue of research ethics which is critical since academic research involves a shared and methodical search for new knowledge creation using diverse scientific methods according to prescribed codes of conduct that must be adhered to. In undertaking any research, it is vital to act ethically at all times and observe the ‘Golden Rule’ which states that one ought to ‘Do unto others as you would have them do unto you’. While it is apparent that most people accept that there are indeed some conventional ethical norms they may of course interpret and apply them in different ways based on their individual values and general life experiences. The standards of research must advance the aims of the research that is undertaken, including inter alia truth, knowledge, and the avoidance of malpractices. Research must thus always be undertaken and grounded on methodological norms, such as truthfulness, integrity, accuracy, transparency and accountability, and these are the prerequisites for ethical quality driven and reliable research. Research ethics is essential to apply in order to promote free, dependable, and responsible research. Research and ethics need to be intimately linked since good ethical research practices are non-negotiable. No research strategy for collecting personal data should be unsuitable for required ethical approval unless the possible benefits offset possible harms. Consequently, a researcher’s research design approach must be carefully considered. The researcher must effectively interpret, assess, and apply various research guidelines, make just decisions and act ethically when conducting their research which should essentially be of value since society relies on research as a basis of reliable knowledge. Research ethics pursues justice and is at the heart of the humanities and social sciences.

It concerns what and why one researches and not only how research is conducted. Thus, every researcher has a responsible for behaving ethically and responsibly.

Keywords: Research ethics, justice, guidelines, standards

Introduction

This chapter is envisioned to contribute to developing ethical judgement and reflection, by researchers and promote accountable research, and thus inhibit any type of misconduct. The chapter utilizes a qualitative literature study approach with secondary data sources in the form of academic journal articles, academic books and reports relating to ethical practices in research as well as other sources relevant to the area of research, and by so doing, it hopefully provides a better understanding of research ethics and its importance. It primarily focuses on the interpretivism paradigm and literature analysis.

In South Africa the core guiding principles of ethics on research include respect for human dignity, autonomy, informed consent, vulnerable persons, confidentiality, the principle of harm, maximum benefit, and justice. Generally, concerns relating to informed consent are of specific significance, as required in the Constitution of the Republic of South Africa 1997 (Bill of Rights, Chapter 2). Apart from South African Law, there are a range of other important sources speaking to the notion of ethical research. For example, the UN Declaration of Human Rights and the UN Convention on the Rights of Persons with Disabilities (UN CRPD). In addition, there are numerous policies and commonly accepted declarations that have codified the important principles of research ethics and the ethical treatment of all research participants. For example, the Nuremberg Code of 1947 promoted the notion that any physical and mental suffering and injury in research participants must be totally avoided (Weindling 2001).

The Helsinki Declaration of 1964, and subsequent declarations, are basically statements of ethical principles for medical research involving human subjects, but importantly include research on identifiable human material and data thus calling for anonymity to protect participants. The fundamental principle is respect for the individual and his or her right to self-determination and the right to make an informed decision regarding participation in any research, both to begin with and during the course of the research.

The Belmont Report of 1979 was based on extensive work by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (USA). It identified the basic ethical principles and guidelines that are needed to address ethical issues developing from the conduct of research using human subjects (The Belmont Report 1979). Each of these codes have been initiated in the biomedical field, and they incorporate the central principles that apply to all human research conduct and support the practice that institutional review boards (IRBs) must be established in order to safeguard that subjects of human research are treated with needed respect for persons, beneficence, and also justice.

Research should always be dependably organised and practiced, and research ethics is a tool for this purpose. 'Research is more than just an academic pursuit, but a dynamic force that pervades every aspect of our lives. The power of research to stimulate innovation, disrupt old paradigms, and provide evidence-based insights has resulted in revolutionary discoveries in a variety of sectors' (Islam 2023:2). Research is basically a methodical process of inquiring by a researcher that should lead to the generation of new knowledge, the validation of current knowledge and finding new applications for existing knowledge. In the process, very important social and moral values including one's social responsibility and the promotion of human rights are critical (Amon, Baral, Beyrer & Kass 2012), as are ensuring that the dignity, rights, and well-being of all participants are respected at all times (Australian Government 1999).

Research ethics denotes a diversity of desired values and norms in research and also a range of institutional provisions that are required to found and standardize all research activities.

Institutions have strict guidelines for research ethics, and they state the fundamental norms and values of the wider global research community and must thus be followed explicitly to mitigate unethical practices and conduct. Societal values such as freedom, confidentiality and honesty are to be upheld when dealing with participants and the benefits of conducting a study must be weighed up against the possible costs of harming participants. The researcher needs to obtain informed consent and protect the confidentiality of participants and make certain that none are negatively affected or manipulated (Vancley, Baines & Taylor 2013). When research is carried out ethically this generally assists in preserving the integrity and credibility of the research process and its findings. Different disciplines, institutions of higher learning, and also professions have set standards of expected behaviour aims and goals for

research that is undertaken by them. The standards generally serve to guide researchers to coordinate their procedures and conduct in research activities and this helps to establish public confidence in research that is undertaken. For example, no data should be manipulated, no plagiarism must be present, and there must be a total absence of any transgression that could compromise the quality and reliability of the undertaken research and its ultimate findings and recommendations. All research should conform to the commonly accepted global norms and values. Researchers are obliged to seek the truth and be guided by integrity and also objectivity (Anderson 2011).

Ethical research practices are vital as they safeguard that researchers are conscious of the potential consequences of their research, and they need to endeavour to contribute positively to society through their research endeavours (Carniel & Hickey 2023). When researchers are ethically grounded and orientated in their research practices, this invariably builds trust between them and the general public, and most importantly, the participants are far more likely to be contented and eager to share information, which is required for gathering accurate data. The supposed benefits of any research must never be morally questionable. Researchers need to follow ethical guidelines and adhere to them in order to safeguard compliance with laws and professional codes of conduct (Scott 2004; Douglas 2014). Adhering to ethical norms promotes the aims of research, such as promoting learning, integrity, and avoidance of errors. There must be no fabrication or misrepresentation of findings, neither any rigging of any research data, but always the promotion of the truth. The researcher must thus strive to eliminate or minimize any possible error. The researchers as well as the participants must be safeguarded from legal and ethical violations which could have devastating repercussions (Sivasubramaniam, Dlabolová, Kralikova *et al.* 2021).

Research integrity is non - negotiable and all researchers need to be cognisant of and apply best practices in their professional practice as scientists. All research that is undertaken should strive to promote fairness and justice by safeguarding that the benefits and burdens of their research are distributed equitably. This involves them being mindful of aspects such as avoiding exploitation, power dynamics, and safeguarding that vulnerable populations are not unduly affected by their research activities. In a nutshell, all research must be conducted in an ethical and responsible fashion. There is need for precise, sufficient and relevant knowledge and standards that regulate research and the researcher's relationship with participants and the society in which research is undertaken. These are some of the reasons why institutions are anticipated to

advance ethical guidelines in research that can preserve quality, integrity and transparency as they mitigate possible research misconduct (Flite & Harman 2013).

Professional Ethics

Every researcher has an obligation to seek truth which is implicitly a moral contract that is not negotiable (Brynard & Hanekom 2006). Ethics has diverse approaches but it essentially relates to the desired norms or standards of behaviour that guide the choices researchers make. When considered teleologically, the morality of the means to an end is invariably judged by the ends that are served by research. Thus, the benefits of research are weighed up against the costs of harming those involved in a study (The Belmont Report 1979). This means that the ends that are served may be ethically questionable (Blumberg, Cooper and Schindler 2014). In addition, if the respondents bear any costs and the researcher benefits this also ethically questionable. From a deontological vantage point, the ends never justify the use of means that are indeed questionable from an ethical perspective so deceiving any respondent is unethical conduct. The researcher is expected to seek a fair and just middle - ground between ethical relativism and codes of conduct in research (Blumberg, Cooper & Schindler 2014). However ethical and professional practice is far more than merely having a Code of Conduct for research activities. Baloy *et al.* (2016:6) emphasise that methodological decisions and approaches anticipated by researchers, the manner in which research participants are to be engaged in the conduct arising out of proposed research as well as the implications that extend from the outcomes of the research intervention are all critical considerations. When there is an ethics review it needs to intentionally align with the practical purpose of the appropriateness of a research project and its implications related to institutional processes and procedures.

All researchers need to be led by the principles of integrity and objectivity as they seek truth. This means that high standards must be maintained in the execution of research activity (WHO 2009). Where there are limitations and constraints these must be discussed. Research must be reliable and offer constancy of a measure in other words can the results be reproduced under the same circumstances. The research must also be valid which relates to the accuracy of a measure. The issue here is whether the results are truly representative of what they are presumed to measure (The Belmont Report 1979). There is great intrinsic value in research as a source of innovation and

insight, and it is important and valuable to society. The core set of scientific norms in research ethics have been globally established and institutionalised and truth norm is central to all types of research. This means that all scientific methods must be used in an accountable way (Willison & O'Regan 2007).

Institutions regulate research through norms, and this ensures that it is transparent, open, independent, collective, and critical. Research must be conducted in a way which allows others to have faith and confidence in the methods used and the findings (De Wet 2010). The work of any researcher reflects a research project, the researcher and additionally the institution from which it emanates (Merton 1973). Scientific practices in research must have always veracity and this is not a new aspect. In addition, researchers need to strive to construct solid academic research communities which are characterised by directness and veracity as fundamental ethical and scientific norms are upheld (Resnik 2020; Douglas 2014). Researchers have a collective responsibility for endorsing the values and norms of research ethics in their endeavours including teaching, supervision, dissemination, and publication of research. In addition, lecturers and supervisors have an important responsibility to lead post-graduate students to an enhanced understanding of the need for sound research ethics. In issues relating to research projects, both the institutional autonomy as well as individual academic freedom must be secured. This means that there must be openness in the relations between researchers, supervisors, participants in research and the institution involved.

Key Ethical Considerations and Universal Principles in Research

Informed Consent

At the outset it is critical to state that no individual is obliged to participate in any research. The researcher is duty-bound to explain why human participation in any planned study is required in the first instance. Any individual or a group of participants who consider participating in a research study must have a reasonable possibility of judging whether it is worthwhile taking the time to be involved at all and be making an effort to share information with a researcher (Guillemin & Gillam 2004). All information in a research project must be provided in a neutral manner in order to avert unacceptable pressure. All participants must be informed that their participation is voluntary, and information should be adapted where necessary in order to be comprehensible

to them. They need to be given general information in a language they are comfortable with concerning a proposed project including its intention, the methods to be applied, and all the practical and other consequences of their possible involvement. If need be, an interpreter should be used.

Researchers are obliged to exercise due diligence and demonstrate respect of persons in the research they conduct. They must clearly state their role and responsibilities in their research and in dissemination of the findings. The integrity, human dignity, well-being, safety and interests of participants and communities must always be secured. Any participant must make an informed choice to participate in a study (Oliver 2010). Researchers should thus conduct their research responsibly and be able to validate their methodological selections and evaluations. Researchers are legally required to comply with Chapter 7 of the Protection of Personal Information Act 4 of 2013 (POPI Act). This Act provides some conditions for responsible parties to legally manage the personal information of data subjects (including both natural and juristic persons). From a research vantage point, no researcher should force people to participate in research and the researcher needs to obtain informed consent from any participant to take part in any study. No person should be included against their own will. The objectives of any research and possible consequences and risks should be carefully explained to a participant or a group of participants (Parker, Holt, Turner & Broerse 2003). The researcher needs to provide proof that participants have been provided with needed information relating to a proposed study and have consented by signing a consent document to being involved in a study. Furthermore, they have understood the possible benefits of a study (Oliver 2010).

The research method as well as its purpose, risks and expected benefits, and also a statement offering participants the chance to ask any questions is required (Allen 2008). The participants also need to be aware that they are free to withdraw from a study at any time for whatever reason and need not explain why they are doing so. They also need to be informed that they not going to be induced or incentivised, financially or otherwise, to participate in any manner whatsoever and without any form of duress. Thus, all participants must voluntarily consent to be involved (Anderson 2011). The researcher needs to fully disclose the procedures to be followed in their proposed research design before asking participants to be involved. Once consent has been obtained from participants, the researcher is compelled to adhere to the research process outlined previously. A consent form must be signed for each participant. If a survey is conducted, the respondents need to know who the researcher is (name

and institution) and be given a short description of the topic being surveyed. The purpose of research must be clearly articulated as well as where and who the sponsor may be. The expected duration of the study is important to disclose as is the promise that confidentiality and anonymity are guaranteed. In addition, participation is totally voluntary and that it is acceptable for respondents not to respond to an item in a survey if they do not wish to do so. Finally, their permission must also be provided in writing (Blumberg, Cooper and Schindler 2014).

Researchers ought to also of necessity safeguard the integrity and interests of disadvantaged and vulnerable groups and they should in manner be subjected to exploitation and unethical research practice. Research ethics necessitates protecting the rights of all and the researcher must make certain that a participant has understood the information provided relating to the research conduct (Anderson 2011). When young children or people with mentally disabilities are required to participate, the consent of their legal caregiver is required so that they are not in any way abused. The researcher must always mitigate risks to the participants in any research project. In all research ethical clearance must of course also be provided by a researcher's institution and in writing, before it is commenced (Manti & Licari 2018). All research requires a formal ethical review before any data collection commences. The bottom line is that any and all anticipated consequences of any research should be comprehensively communicated to all individuals and groups that are likely to be affected by it (Brynard & Hanekom 2006).

Beneficence and Non-Maleficence

Research needs to be of benefit to society and must be devoid any possibility of harm. The purpose of all research is thus to ultimately locate new information that is valuable, and it should under no circumstances harm anyone or the environment. One should not pursue knowledge at the expense of other individuals. The benefits for all participants must be maximised and risks minimised. Whatever is considered to be undertaken in a research endeavour must be carefully considered in terms of its potential impact and the welfare of participants is a key point in case. A risk -benefit assessment analysis should be conducted prior to commencing on a research initiative so the benefits are clear and possible harms such as for example inter alia, psychological harm, comprising of safety that may arise are mitigated. Beneficence dictates that researchers must protect all participants from any form of exploitation and treat

all participants honestly and with a kind disposition and above all benevolence. In addition, information presented by participants through their involvement in study must be safeguarded. The researcher should endeavour to maximise the potential benefits of participants in the research process while minimising risks and adverse effects. There must always be informed consent as stated earlier, no deception, the maintaining of privacy which includes the confidentiality and anonymity of all participants. Non-maleficence maintains that no research should be conducted which is likely to cause harm. There must be no physical or mental distress imparted to participants, no complications in funded research, no scientific misconduct or deception, and solid scientific advocacy at all times (Bærøe, Kerasidou, Dunn *et al.* 2022).

Researchers should have no biases, or affiliations linked to a particular stance relating to their study, and especially no prejudices that might guide their study approach. The principle of justice fosters equitable representation in research in fairly distributing the risks and benefits of research. Researchers thus have a need to protect and defend the right of others, prevent possible harm, remove any conditions that are likely to cause maltreatment (CHE 2022).

Non-maleficence relates to the researcher's obligation to prevent causing economic, psycho-social, physical, cultural or any other form of harm to participants. Thus, in conceptualising research one is required to assess and evaluate possible unintended and undesirable consequences of the research that is undertaken. In addition, a researcher should also be exploring and identifying strategies for minimising adverse effects on the participants (CHE 2022).

Respect for Human Dignity is voiced through central principles including free and informed consent and respect for vulnerable individuals which are both echoed in the principle of respect for persons. Having respect for vulnerable individuals is also reflected in the principle of Justice (Steinmann 2016). Réaume (2003) defines dignity as being a moral matter – that is, it is to be treated as an intrinsic aspect of humanity so that people are treated as creatures of intrinsic, incomparable, and permanent worth, as human beings. In essence then dignity must be ascribed to human beings independently of any particular accomplishments or merits they may have. Their worth is not dependent on them being viewed as being useful, attractive, amiable or otherwise serving the ends of others. The upholding of human dignity thus constitutes the central value.

The autonomy of all participants must be considered so that when, for example, there is an individual who lacks the capacity to make an autonomous decision, they ought to be protected against harm (CHE 2022). This includes the

vulnerable, children under the age of consent, and all those who have lost their sense of ability for self-determination due to some or other disability, illness, or conditions that severely constrain their independence to make and take decisions (Bracken-Roche *et al.* 2017; Payne 2000). All ‘... persons are treated in an ethical manner not only by respecting their decisions and protecting them from harm, but also by making efforts to secure their well-being’ (The Belmont Report 1979). When nurturing beneficence in research the well-being of all subjects including those who are vulnerable, younger and older participants must be must secured (Szala-Meneok 2009).

Justice and Respect for Participants

The selection of all research participants should be equitable, meaning that all are treated fairly and equally. All participants in a research project must contribute voluntarily. There must be no discrimination in any shape or form for example, gender, race, social status, disability, nationality or any other characteristics (Bless, Higson-Smith & Kagee 2006). What is also essential is the non-exploitation of vulnerable people. Once again both the benefits and burdens which may arise out of a study need to be carefully interrogated prior to its commencement.

Participants must be treated with the same respect and concern and there should be no manipulation based on a participant’s easy accessibility or abusive power relations. Participants with limited decision-making capability require special attention and must be treated justly in the research (CHE 2022). The autonomy and dignity of all participants must be safeguarded at all times and the researcher is morally obligated to respect this. Participants must have the ability to deliberate about a decision and to act based on that deliberation and thus means giving due respect to a participant’s judgment and safeguarding that he or she is free to decide on an issue without interference (TCPS2 2014). It should also be stressed that indigenous people have collective rights, which must be respected at all times (UN 2007).

Integrity in Research Conduct

Researchers must be capable of trusting and building on the work of others. Society also needs to trust them when they provide their knowledge and demonstrate their scientific expertise. This necessitates that they should provide ethical, responsible, reliable and evidence-based research findings (UKRIO

Research Integrity Office 2024). The research culture should promote integrity, and it applies to all research endeavours and making certain that research environments and systems for research protect and augment moral research practices (De Wet 2010). Research integrity then relates to a range of factors that are fundamental to reliable research practices including honesty, transparency, accountability and rigour in research conduct, courtesy, fairness, care and respect for all participants, and good stewardship when conducting research for others (World Conference on Research Integrity 2010). These are all necessary in order to promote trust and confidence in the research process and its findings and recommendations. There should of necessity be due diligence and rigour and no distortion, falsification, fabrication of data, or plagiarism. All findings must be accurately stated with no manipulation thereof and there should be no conflicts of interest. In addition, any limitations need to be discussed. All research must be undertaken with strict adherence to relevant laws and regulations in all stages of a research process including collecting data, processing it, storing and using it (CHE 2022).

Plagiarism

Plagiarism in research ethics relates to the unethical practice of utilizing another person's work, thoughts, or phrases without properly attributing the work to them. It can take various forms, for example using of ideas, theories, premises, concepts, explanations, designs, illustrations, results etc of others and saying they are yours. There, different types of plagiarism. Global plagiarism which involves plagiarizing a complete text. Verbatim plagiarism involves copying text directly. Paraphrasing plagiarism is when ideas are paraphrased. Patchwork plagiarism is when a researcher links various sources and self-plagiarism when a researcher plagiarizes their own work (Streefkerk 2022). There is also AI-assisted plagiarism when a researcher passes off AI-generated text for example from virtual assistants such as ChatGPT or similar sites, as their own work (Streefkerk 2022).

These are all unacceptable and constitute a significant breach of recognised norms of research ethics. There are various forms of plagiarism (Perkins, Gezgin & Roe 2020). These include inter-alia unethical practices such as a researcher presenting the work of others as their own. Using expressions or concepts of others without attributing correctly or given them credit and failing to use quotation marks when needed. In addition, delivering incorrect information about the origin of a quotation that has been used or modifying the

words while copying the word order of a statement from another source without attributing the words to that source is plagiarism. Authors should never make the work of others look like theirs since this is highly unethical and must be avoided at all costs (Mulenga & Shilongo 2024).

No researcher should ever pass another's ideas off as their own and should cite all sources used. When using any source's exact wording always acknowledge this by putting the extracted information in single quotation marks and provide the source and the page number where it was found (Pelissier 2007). All academic endeavours should be honest and as thorough as possible. Institutions have a responsibility to improve the vetting process to determine if a student's work that is submitted before being approved for a study, is in fact their own. This means that plagiarism checks must be conducted on an ongoing basis. Students are required to generate work in the format that is acceptable for the university standards and the must have at least some basic knowledge of the field they wish to do future work in. They must get a grounding on general research methods and protocols, including the issue of plagiarism and read extensively on what they should and should not be doing.

Naturally, all universities have a duty to uphold stringent standards in research and they need to regularly critically examine their research policies and practices in order to recognise and mitigate possible breaches relating to research ethics. They need to play a key role in support of truly equitable research partnerships that respect the perspectives of all participants involved and meet impartiality requirements (CHE 2022).

Impact of Research

The impact of one's research on society is important to consider. Research is basically what drives humanity towards making needed advances in benefitting society. It is driven by a sense of wonder that makes a researcher ask important questions relating to particular issues, and then spurs them on to answer the questions they immerse themselves in. They learn more about a particular issue for example, towards solving problems in society. All scientific research needs to make some societal impact in a particular field of study. 'It serves as a systematic exploration aimed at uncovering new insights, challenging existing paradigms, and solving complex problems' (Islam 2023:1). Impactful research is thus that which ultimately benefits society and influences decisions on the reaching of desired societal outcomes. It is research that has an important effect on driving needed changes in society or benefits to an economy, the culture,

public policies or services, health, the environment or quality of life outside academia (UK Research and Innovation 2022).

Researching in Other Cultures

A researcher needs to communicate effectively when researching in other cultures. This requires that the researcher discusses the possibility of research with representatives of the culture being studied. For example, if a study is conducted in a rural area of Zululand, it would be necessary to discuss the proposed study with the tribal authority in a particular area. This requires a relatively good knowledge of local traditions and social structures that are prevalent.

Research with cross-cultural participants must never be reflective of any power imbalance that is entrenched in colonialism (Piquemal 2001). When conducting research in a culture that is alien to a researcher, the use of classifications or designations that allow for the making of unnecessary generalisations should be omitted. Ethical implications originate with the power aspects in the research relationship (Marshall & Batten 2004). Cross-cultural research requires careful consideration in order to be effective (Ember & Ember 2009). Researching in or on culturally specified groups, it is essential to respect them and first acquire useful information about the regional context and how social interactions are dealt with in a culture.

Broesch, Crittenden *et al.* (2020) argue that researchers should collaborate with field researchers who have a comparatively established, long-term relationships with communities since individuals with established ties to a particular community may be far more advantageous as guides for locally relevant materials, appropriate ethical and practical guidelines, and in addition they may have useful local contacts needed to prosecute the research. Furthermore, they state that when dealing with cross cultural communities, a researcher needs to reflect on how to effectively engage target communities and be able to design research protocols in culturally sensitive ways that will enable them to address some ethical and other challenges that could arise. Researchers are always responsible for conduct themselves dutifully.

The Supervisor – Student Relationship

Postgraduate study success by a student is predicated first and foremost on the relationship between the student and the supervisor. The world in which we live

is plagued by socioeconomic uncertainty and ever-changing higher education environments. In this milieu postgraduate supervision demands a rigorous, one-on-one academic connection between the supervisor and the student (Adedokun & Oyetunde-Joshua 2024). A student must be totally immersed in their study, but it is ultimately the supervisor who plays a huge role and encourages and enables the student's scholarly development to lead to the ultimate desired success. Research supervisors are presumed to possess relevant expertise when supervising postgraduate students. A harmonious supervisor–student relationship requires supervisors to promote and establish ethically sound education through their mentorship and they need to be caring and understanding towards their students (Keane 2016). The supervisor must be available and flexible, and needs to exhibit the proficiency to promote independence, a strong ethical mindset, and be able to inspire students. The supervisor must be trusted and provide the needed guidance and mentor the student and each needs to be and emotionally tuned in to the other and the study being conducted (Zhang, Wu & Zhang 2024).

Supervisors need to have at least some knowledge of the research area in which a student's study is undertaken, and a good understanding of their duties and responsibilities. They must have the skill to mentor, instruct, and support the student to complete the research study that is undertaken by them leading to the desired postgraduate degree. There is of course never an ideal match between a supervisor and a research student, which means that a great amount of communication between them, and at times negotiation may be needed failing which the interaction between the parties cannot be sustained over the duration of the period of study. A supervisor and a student must strive to work together respectfully. University policies relating to postgraduate study as well as research ethics, intellectual property rights and related aspects must be explained to the student by their supervisor. This means that a supervisor needs to be adequately informed of pertinent policies and regulations so that their postgraduate student complies fully with regulations.

It is the student's responsibility to meet all deadlines that are set by the supervisor and discuss the approach taken and the methodological procedures as advised by the supervisor and the institution in which the research is being conducted (Ren & Hagedorn 2012). They need to treat each other respectfully and the supervisor must never abuse their position in any way based on their perceived power and status. The student's integrity must never be violated, and holistic support must be provided to the student across the turbulent and emotional scholarly and professional academic spheres (Pather 2022;

Adedokun & Oyetunde-Joshua 2024). There is a need for reasonable and agreed upon expectations between the researcher and the supervisor. Such aspects are important to carefully navigate as they play a key role in the improvement of postgraduate quality research. Supervisors are essential go-betweens for students and faculty- student administrative organs, as well as the Head of Department, and Postgraduate and Ethics Committees of an institution.

Supervisors must be understanding of the students' cultural or religious backgrounds and try where possible to support by them in the areas of work-life balance, and economic and social needs where possible. The supervisor is charged with developing a culture of transparent communication with the student and providing useful high-quality comments relating to the work submitted by the student. The supervisor must always strive to assist the student and provide him or her with opportunities to broaden their academic horizons. For example, helping the student to access needed academic resources, and by encouraging the student to attend academic conferences in the relevant disciplinary field as well as institutional seminars on research practices. In cases where the student is not an English language native speaker, the supervisor must ensure that the student is able to access English language support in correcting any language issues which would compromise the student and continuously encourage the student to voice all research concerns during their research journey. Supervisors must thus endeavour to have effective and sound academic interactions with their students' and they have a duty to provide sound guidance on an ongoing basis and provide judicious feedback to students when they encounter problems in a proposed study, offering possible solutions. A key challenge faced by students is the lack of problem-solving skills which are key to academic success. The supervisor must guide the student to think more critically and must carefully monitor the students' outputs and be a caring and research savvy individual and encourage the student to excel, notwithstanding many challenges posed in modern life to both parties (Adedokun & Oyetunde-Joshua 2024). Students generally tend have a preference for supervisors who are not authoritarian but rather willing to help, even when discussing their personal problems. Supervisor should take an active interest in helping the student by finding ways to ensure the student is capable of doing their own work.

The student and supervisor must meet regularly to review the progress made and discuss concerns and expectations. This is critical as feedback to students contributes hugely to their desired academic development. Regular two-way feedback is non-negotiable in a strong collaborative operational atmosphere (Wood & Louw 2018). The supervisor needs to take the time get to

know students and carefully evaluate their needs while working with them so as to establish a strong theoretical edifice and a solid research plan. here a research topic cuts across disciplines, joint supervision may be desirable. At times, such as in inter or trans-disciplinary research, there may be additional supervision required which means there will be one principal supervisor, as well as co-supervisor or maybe even two co-supervisors. It is the duty of the principal supervisor to manage the relationship between the student and the co-supervisor/s.

In order to mitigate abstruseness, there must also be transparent standards and expectations around the roles and responsibilities of supervisors, their students and research committees. Augmented transparency around supervision policies and required procedures and timelines will serve to enable students to proactively oversee their academic progress (Bengtson & McAlpine 2022). Postgraduate students generally feel there is a lack of access to a community of scholars so it would be wise to consider having a Community of Practice (CPO) in which they can be involved and share ideas and gradually build good practices (Netshitangani, Machaisa & Roy 2021). The supervisor must make certain that the student is well trained in research ethics and needs to stress the responsibility and necessity for solid research ethics in all phases of a study. Supervisors need to take part in training on an ongoing basis and develop further skills so that they can augment their supervision activities and supervision style. The level of supervisor motivation is in most cases the highest personal attribute for student success from start to finish of their research study.

Issues such as research ethics in the conduct of a study, later possible co-authorship and data sharing as well as integrity issues all need sound thrashing out. Any possible ethical challenges that may arise in a study must be mitigated. Supervisors also need to develop an open and non-discriminatory culture where there is room for constructive critique, careful ethical deliberation and reasonable academic disagreement relating to a student's submissions. It is also important that students be afforded an opportunity to share their learning experiences with fellow postgraduate students. language and culture may affect the student-supervisor relationship as well as issues concerning knowledge gaps, supervisor attitude and supervisory style. The supervisor's role is to help, maintain and develop the cardinal qualities for student success during the different stages of their research involvement. It is therefore crucial to maintain student motivation and enthusiasm. Where there are at times disagreements with principal supervisors and co-supervisors, these should be dealt with rapidly to keep the student positive and on course for success.

Ethical Considerations Relating to the Use of AI in Postgraduate Research

The growing acceptance of the use of artificial intelligence (AI) among researchers requires careful consideration. It is evident that researchers are making great use of AI in their academic research. It is the case that there is much use of text that has been AI-driven which assist especially budding researchers to craft their manuscripts. In fact, the use of some or other automated reference management system to streamline the citation and references list creation process is a widespread practice in academia nowadays (Dang *et al.* 2022). AI tools are able to generate text that is really close to existing sources, leading to unintentional plagiarism. Students who are not cautious may also become ‘trapped’ and over-reliant on AI, concealing who actually produced their intellectual work.

AI permits scientists to work at a rapid pace by presenting them with instantaneous answers and various insights into their research inquiries. The advanced analytical abilities of AI assist in accelerating to pace at which research is conducted (Ochuba *et al.* 2024). However, there may well be inaccurate, biased, or fully false information. This then misinforms literature reviews, misinform many arguments, and may even prompt methodological errors (Lund & Wang 2023).

Such issues can and do of course present complicated ethical dilemmas that need to be carefully identified by academics if responsible and ethical use of AI is to be undertaken. Interestingly, some academic publishers allow and promote the notion of academics using AI tools (Budhwar *et al.* 2022). It is challenging to determine the very thin line between original individual work and the reuse of ideas from AI sources. This invariably poses intellectual property concerns and also impacts upon the quality and trustworthiness of research conducted as some users of AI may naively accept AI-generated mistakes or untruths as truths.

Sound guidelines are thus required to mitigate the improper use of AI so that the needed lofty standards of ethical scholarly research are maintained in order that integrity and factual exactitude exist in what researchers’ state in their research endeavours (Floridi & Chiriatti 2020).

Conclusion

Ethical practices and other research considerations are essential for supervisors

and postgraduate students to contemplate in their joint initiative. A strong culture of responsibility in research ethics and general research considerations is critically important and must move beyond mere compliance with procedures towards nurturing a shared obligation between a supervisor and student leading to ethical and sound research practices. Students should be supervised and mentored to think more deeply and critically about the ethical aspects of their research and its impact on society. The supervisor and student have a shared responsibility and also need to consider the reputation of the institution in which they are operating as well as their own reputations, and the potential impact of the research being conducted. There is a great need for open communication about ethical issues and sound decision-making. Where there is misconduct, universities may face lawsuits which will undoubtedly damage their reputation and seriously hamper their financial stability in the long term.

The importance of integrity and responsibility in research cannot be overstated. Ethical decision-making in a research endeavour may at times necessitate traversing ‘murky waters’ and contemplating competing values. The important lesson is to always do what is right. Institutions of higher learning must promote initiatives that can help develop critical thinking skills in students that are required when analysing possible ethical challenges. Students need to be taught to evaluate all potential risks and possible benefits. They thus need to make informed decisions and consider the prospective long-term impacts of their research on participants and society in general. Consequently, a wholly compliance-driven approach is dangerous and may lead to a ‘tick-box’ mentality developing in which researchers view the ethics review of their work as a purely procedural requirement rather than viewing it as an opportunity for critical reflection and ethical education. A culture of responsibility in research is of paramount importance which goes beyond mere compliance. Students must also be practically supported as they develop ethical awareness and astuteness and carefully consider all the ethical aspects in their research activities.

References

- Adedokun, T. & F. Oyetunde-Joshua. 2024. Navigating the Academic Odyssey: Exploring the Role of Supervisors in Supporting Postgraduate Students. *Journal of Culture and Values in Education* 7,1: 1 - 18.
<https://doi.org/10.46303/jcve.2024.1>

- Allen. G. 2008. Getting beyond Form Filling: The Role of Institutional Governance in Human Research Ethics. *Journal of Academic Ethics* 6: 105 - 116. <https://doi.org/10.1007/s10805-008-9057-9>
- Amon, J.J., S.D. Baral, C. Beyrer & N. Kass 2012. Human Rights Research and Ethics Review: Protecting Individuals or Protecting the State? *PLOS Medicine* 9,10: e1001325. <https://doi.org/doi:10.1371/journal.pmed.1001325> PMid:23091422 PMCid:PMC3472977
- Anderson, M.S. 2011. Research Misconduct and Misbehaviour. In Bertram Gallant T. (ed.): *Creating the Ethical Academy: A Systems Approach to Understanding Misconduct and empowering Change in Higher Education*. London & New York: Routledge.
- Australian Government 1999. *National Statement on Ethical Conduct in Research Involving Humans*. Canberra: National Health and Medical Research Council.
- Baloy, N.J.K., S. Sabati & R.D. Glass 2016. *Unsettling Research Ethics: A Collaborative Conference Report*. Santa Cruz: University of California.
- Bærøe, K., A. Kerasidou, M. Dunn *et al.* 2022 Pursuing Impact in Research: Towards an Ethical Approach. *BMC Medical Ethics* 231: 37 - 39. <https://doi.org/10.1186/s12910-022-00754-3> PMid:35387625 PMCid:PMC8988365
- Bengtsen, S.S. & L. McAlpine 2022. A Novel Perspective on Doctoral Supervision: Interaction of Time, Academic Work, Institutional Policies, and Life-course. *Learning and Teaching* 15,1: 21 - 45. <https://doi.org/10.3167/latiss.2022.150103> PMid:28173859 PMCid:PMC5297186
- Bless, C., C. Higson-Smith & A. Kagee 2006. *Fundamentals of Social Research Methods: An African Perspective*. Cape town: Juta and Company Ltd.
- Blumberg, B., D.R. Cooper & P.S. Schindler 2014. *Business Research Methods*. Maidenhead: McGraw-Hill,
- Bracken-Roche, D., E. Bell, M.E. Macdonald & E. Racine 2017. The Concept of ‘Vulnerability’ in Research Ethics: An In-depth Analysis of Policies and Guidelines. *Health Research Policy and Systems* 15,1: 8. <https://doi.org/10.1186/s12961-016-0164-6>.
- Broesch, T., A. Crittenden *et al.* 2020. Navigating Cross-cultural Research: Methodological and Ethical Considerations. *Proceedings of the Royal Society of London, Series B*, 28720201245. Available at:

- <http://doi.org/10.1098/rspb.2020.1245>;
<https://doi.org/10.31234/osf.io/thqsw>
PMCID:PMC7542829
- Brynard, P.A. & S.X. Hanekom 2006. *Introduction to Research in Management-related Fields*. Pretoria, South Africa: Van Schaik Publishers.
- Budhwar, P., A. Malik, M.T. De Silva & P. Thevisuthan 2022. Artificial Intelligence – Challenges and Opportunities for International HRM: A Review and Research Agenda. *The International Journal of Human Resource Management* 33,6: 1065 - 1097.
<https://doi.org/10.1080/09585192.2022.2035161>
- Carniel, J., A. Hickey, K. Southey, A.I. Brömdal, L. Crowley-Cyr, D. Eacersall, D. Farmer, Gehrmann, T. Machin & Y. Pillay 2023. The Ethics Review and the Humanities and Social Sciences: Disciplinary Distinctions in Ethics review Processes. *Research Ethics* 19,2: 139 - 156.
<https://doi.org/10.1177/17470161221147202>
- Council on Higher Education (CHE) 2022. *Ethical practices in Research*. A Guide to Researchers Working on Research Projects of the Council on Higher Education. Pretoria: CHE.
- Constitution of the Republic of South Africa 1997. *Chapter 2 - Bill of Rights*. Available at: <https://www.justice.gov.za/constitution/SACConstitution-web-eng-02.pdf>
- Cooper, D.R. & P.S. Schindler 2014. *Business Research Methods*. 12th Edition. New York: McGraw Hill International Edition.
- Dang, H., K. Benharra, F. Lehmann & D. Buschek 2022. Beyond Text Generation: Supporting Writers with Continuous Automatic Text Summaries. In Agrawala, M. & J.O. Wobbrock (eds.): UIST '22: Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (Article 98). Association for Computing Machinery. Available at: <https://doi.org/10.1145/3526113.3545672>
- De Wet, K. 2010. The Importance of Ethical Appraisal in Social Science Research: Reviewing a Faculty of Humanities' Research Ethics Committee. *Journal of Academic Ethics* 8,4: 301 - 314.
<https://doi.org/10.1007/s10805-010-9118-8>
- Douglas, H. 2014. Values in Social Science. In Cartwright, N. & E. Montuschi (eds.): *Philosophy of the Social Sciences. A New Introduction*. Oxford: Oxford University Press.
- Ember, C.R. & M. Ember 2009. *Cross-Cultural Research Methods*. 2nd Edition. AltaMira Press.

- Flite, C.A. & L.B. Harman 2013. Code of Ethics: Principles for Ethical Leadership Perspectives. *Health Information Management* 10, 1.
- Floridi, L. & M. Chiriatti 2020. GPT-3: Its Nature, Scope, Limits, and Consequences. *Minds and Machines* 30,4: 681 - 694.
<https://doi.org/10.1007/s11023-020-09548-1>
- Guillemin, M. & L. Gillam 2004. 'Ethics, Reflexivity, and Ethically Important Moments' in Research. *Qualitative Inquiry* 10,2: 261 - 280.
<https://doi.org/10.1177/1077800403262360>
- Islam, M. 2023. The Importance of Research in the Advancement of Knowledge and Society. *International Research Journal of Basic and Clinical Studies* 8,4: 1 - 3. Available at: <http://www.interestjournals.org/IRJBCS>
- Keane, M. 2016. Coaching Interventions for Postgraduate Supervision Courses: Promoting Equity and Understanding in the Supervisor - Student Relationship. *South African Journal of Higher Education* 30,6: 94 - 111.
<https://doi.org/10.20853/30-6-720>
- Lund, B.D. & T. Wang 2023. ChatGPT and the Academic Researcher: Perspectives on Ethics and Integrity. *Journal of Academic Librarianship* 49,2.
- Manti, S. & A. Licari 2018. How to Obtain Informed Consent for Research. *Breathe* 14,2: 145 - 152. <https://doi.org/10.1183/20734735.001918>
- Marshall, A. & S. Batten 2004. Researching across Cultures: Issues of Ethics and Power. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 5,3: Art. 39. <http://nbn-resolving.de/urn:nbn:de:0114-fqs0403396>
- Mertens, D. & P.E. Ginsberg (eds.). 2009. *The Handbook of Social Research Ethics*. London: Sage Publishers. <https://doi.org/10.4135/9781483348971>
- Merton, R.K. 1973. *The Sociology of Science: Theoretical and Empirical Investigations*. Chicago: University of Chicago Press.
- Mulenga, R. & H. Shilongo 2024. Academic Integrity in Higher Education: Understanding and Addressing Plagiarism. *Acta Pedagogica Asiana* 3. 10.53623/apga.v3i1.337. <https://doi.org/10.53623/apga.v3i1.337>
- Netshitangani, T., P.R. Machaisa & S.S. Roy 2021. Supervision Experiences of Postgraduate Students at an ODL Institution in South Africa. *Cogent Social Sciences* 7,1. <https://doi.org/10.1080/23311886.2021.1970442>
- Ochuba, N.A., A. Adewunmi & D.O. Olutimehin 2024. The Role of AI in Financial Market Development: Enhancing Efficiency and Accessibility in Emerging Economies. *Finance & Accounting Research Journal* 6,3: 421 - 436. <https://doi.org/10.51594/farj.v6i3.969>

- Oliver, P. 2010. *The Student's Guide to Research Ethics*. 2nd Edition. Berkshire: Open University Press.
- Parker, M., J. Holt, G. Turner & J. Broerse 2003. Ethics of Research Involving Humans: Uniform Processes for Disparate Categories? *Monash Bioethics Review* 22,3: 50 - 65.
- Pather, S. 2022. A Reflection on Post-graduate Supervision Practice: Towards a Deeper Understanding of Effective Student Engagement. In *Proceedings of the International Conference on Future of Teaching and Education* 1,1: 46 -58. <https://doi.org/10.33422/icfte.v1i1.3>
- Payne, S.L. 2000. Challenges for Research Ethics and Moral Knowledge Construction in the Applied Social Sciences. *Journal of Business Ethics* 26,4: 307 - 318. <https://doi.org/10.1023/A:1006173106143>.
- Pelissier, R. 2007. *Business Research Made Easy*. Cape Town: Juta & Co.
- Perkins, M., U.B. Gezgin & J. Roe 2020. Reducing Plagiarism through Academic Misconduct Education. *International Journal of Education Integrity* 16, 3. Available at: <https://doi.org/10.1007/s40979-020-00052-8>
- Piquemal, N. 2001. Free and Informed Consent in Research Involving Native American Communities. *American Indian Culture and Research Journal* 25,1: 65 - 79. <https://doi.org/10.17953/aicr.25.1.g67261j557p2p13m>
- Réaume, D.G. 2003. Discrimination and Dignity. *Louisiana Law Review* 63,3: 1 - 53. Available at: <https://digitalcommons.law.lsu.edu/lalrev/vol63/iss3/3>
- Ren J. & L.S. Hagedorn 2012. International Graduate Students' Academic Performance: What are the Influencing Factors? *Journal of International Studies* 2: 135 - 143. <https://doi.org/10.32674/jis.v2i2.526>
- Resnik, D.B. 2020. *What is Ethics in Research & Why is it Important?* Available at: <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
- Science Europe 2024. *Research Integrity and Ethics*. Science Europe: Brussels. Available at: <https://www.scienceeurope.org/our-priorities/research-culture/integrity-ethics/>
- Scott, P. 2004. Ethics 'in' and 'for' Higher Education. *Higher Education in Europe* 29,4: 439 - 450. <https://doi.org/10.1080/03797720500083039>
- Sivasubramaniam, S., D.H. Dlabolová, V. Kralikova *et al.* 2021. Assisting you to Advance with Ethics in Research: An introduction to Ethical Governance and Application Procedures. *International Journal for Educational Integrity* 17:14. <https://doi.org/10.1007/s40979-021-00078-6>
- Steinmann, R. 2016. The Core Meaning of Human Dignity. *Potchefstroom*

- Electronic Law Journal* 19. <http://dx.doi.org/10.17159/1727-3781/2016/v19i0a1244>
- Streefkerk, R. 2022. The 5 Types of Plagiarism. Explanations & Examples. *Scribbr*. Available at: <https://www.scribbr.com/plagiarism/types-of-plagiarism/>
- Szala-Meneok, K. 2009. Ethical Research with Older Adults. In Mertens, D.M. & P.E. Ginsberg (eds.): *The Handbook of Social Research Ethics*. London: Sage Publishers. <https://doi.org/10.4135/9781483348971.n32>
- TCPS 2 2014. Ethical Conduct for Research Involving Humans. *Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada*. Available at: https://www.mcgill.ca/skillsets/files/skillsets/tcps2updated_workshop4.pdf
- The Belmont Report 1979. Ethical Principles and Guidelines for the Protection of Human Subjects of Research. *The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research*. Available at: https://www.hhs.gov/ohrp/sites/default/files/the-belmont-report-508c_FINAL.pdf
- UK Research and Innovation 2022. How Research England Supports Research Excellence. UKRI. Available at: <https://www.ukri.org/who-we-are/research-england/research-excellence/ref-impact/>
- UKRIO Research Integrity Office 2024. What is Research Integrity? Available at: <https://ukrio.org/research-integrity/what-is-research-integrity/>
- UN 2007. Declaration on the Rights of Indigenous Peoples. Resolution Adopted by the General Assembly on 13 September 2007. 61/295. Available at: https://www.un.org/development/desa/indigenouspeoples/wpcontent/uploads/sites/19/2018/11/UNDRIP_E_web.pdf
- Vanclay, F., J.T. Baines & C.N. Taylor 2013. Principles for Ethical Research Involving Humans: Ethical Professional Practice in Impact Assessment Part I. *Impact Assessment and Project Appraisal* 31,4: 243 - 253. <https://doi.org/10.1080/14615517.2013.850307>
- Weindling, P. 2001. The Origins of Informed Consent: The International Scientific Commission on Medical War Crimes, and the Nuremberg Code. *Bulletin of the History of Medicine* 75,1: 37 - 71. Available at: <https://doi.org/10.1353/bhm.2001.0049> PMID:11420451
- WHO 2009. Research Ethics Committees - Basic Concepts for Capacity-building. Available at:

https://www.who.int/ethics/Ethics_basic_concepts_ENG.pdf

Willison, J. & K. O'Regan 2007. Commonly Known, Commonly not Known, Totally Unknown: A Framework for Students Becoming Researchers. *Higher Education Research & Development* 26,4: 393 - 409.

<https://doi.org/10.1080/07294360701658609>

Wood, L. & I. Louw 2018. Reconsidering Postgraduate 'Supervision' from a Participatory Action Learning and Action Research Approach. *South African Journal of Higher Education* 32,4: 284 - 297.

<https://doi.org/10.20853/32-4-2562>

World Conference on Research Integrity (WCRI) 2010. The Singapore Statement. 2nd World Conference on Research Integrity, 21 - 24 July 2010, Singapore.

Zhang, J., M. Wu & G. Zhang 2024. The Influence of the Supervisor – Postgraduate Relationship on Master's Students' Research Learning Engagement – The Mediating Effect of Academic Aspiration. *Behavioral Sciences* 14,4. <https://doi.org/10.3390/bs14040334> PMid:38667130

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