

Postgraduate students' interpretations of research misconduct and their views on enabling research integrity at universities.

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Abstract

Background

Upholding research ethics is critical within the landscape of postgraduate research in South African higher education. This study, conducted at a University of Technology with postgraduate students in Health Sciences, sought to explore their understanding of research misconduct, strategies to prevent misconduct, and the need for a dedicated module on ethics in Health Sciences.

Method

This study employed a qualitative exploratory research design. The sample consisted of postgraduate students from the Faculty of Health Sciences who registered in 2022. Data were collected from 15 postgraduate students between April and October 2022 using semi-structured interviews to explore their views on research misconduct, strategies to prevent it, and the need for a research ethics module for health science research. Thematic analysis was used to analyse the data.

Results

Participants comprised 11 females and 4 males, representing disciplines such as Biomedical and Clinical Technology, Chiropractic, Child and Youth Care, Emergency Medical Care and Rescue, Nursing, and Radiography. Ten were master's students, and five were doctoral candidates, including those enrolled in the generic PhD programme. Three main themes emerged from the data: Research Misconduct, Preventing Research Misconduct, and Research Ethics Training.

Conclusion

Postgraduate students are aware of research misconduct risks, but universities must enforce robust policies, agreements, and ethics training to uphold academic integrity. Misconduct threatens credibility, funding, and participant safety, underscoring the need for proactive institutional safeguards. The absence of a dedicated ethics module reveals a critical curricular gap, warranting urgent integration into health science education.

Recommendations

A comprehensive Research Ethics Module should be developed and implemented across the Faculty of Health Sciences and made compulsory for all postgraduate students upon registration. The University should also formalize a misconduct agreement for students to sign at the start of their research, reinforcing the consequences of misconduct and the importance of upholding ethical standards.

Keywords: Research, ethics, misconduct, health sciences

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Introduction

Research ethics are “principles, standards, norms and guidelines that regulate scientific enquiry” (Kumbhar 2020:

511-513) and are integral to health research, ensuring the safety of human participants within the contemporary higher education research landscape. Student researchers are therefore expected to be guided by the cardinal rules of ethics, which include autonomy, beneficence, nonmaleficence, and justice so that their research is conducted with “moral and ethical rigour” (Hyytinen and Löfström 2017: 23-41). Upholding ethical norms is therefore crucial to achieving research goals, nurturing collaborative values, ensuring researcher accountability to the public, and enabling public research support whilst maintaining moral and social values. This study aimed to explore postgraduate students’ understanding of research misconduct, their understanding of the consequences of such misconduct, and their views on a module on research ethics in Health Sciences.

Research plays a significant role at universities, contributing to the enhancement of learning processes amongst its students (Guzman, Teran, and Rojas 2020). Impactful research that benefits society must, however, adhere to certain ethical protocols to ensure the protection of participants' rights and to avoid repercussions. Kaewkungwal and Adams (2019) argued that research should be designed, reviewed, and conducted with rigor and the results disseminated with scientific integrity and concordant with ethical considerations. Many health-based research inquiries have resulted in adverse events or research misconduct, which have led to the development of guidelines for the protection of human participants, animals, and the environment.

Makola and Ntoyanto-Tyatyantsi (2023) argued that abiding by important moral rules like treating people well, doing good without harm, and being fair while conducting research with humans is the very cornerstone of ethical research. For research to proceed, ethics approval is required from a research ethics committee to ensure that the rights, safety, and well-being of participants are protected (Doody and Noonan 2016).

Historically, researchers have trusted that the knowledge generated through their studies was founded on truth. However, as Caruth (2015) argued, research misconduct has bred mistrust in the research community, leading to a renewed need to prioritize research ethics. Moreover, the history of research ethics has demonstrated that there have been “repeated cycles of harm” caused to participants due to unethical research being conducted (Gelling 2020: 1019-1022). The Nuremberg Code, formed in 1947, has set ten principles to be followed, which include voluntary consent for participants, withdrawal of participants from a study, that benefits should outweigh the risks, research should

benefit society, and a study should be terminated, should it result in harm or injury (Resnik 2018).

Research misconduct has been described as “fabrication, falsification or plagiarism in proposing, performing or reviewing research or in the reporting of research results” (Omutoko 2020: 41-55). Misconduct occurs when issues such as plagiarism, data manipulation and fabrication, poor reporting of the study processes, and a lack of transparency become evident. This also includes wrongdoings such as deliberate breaches of research protocols, falsifying resumes, improperly attributing authorship, and failure to disclose conflict of interest (Felaeffel et al. 2018). Other types of misconduct include unethical authorship or publication practices, conflicts of interest, mismanagement, and other unethical behaviors. Misconduct, however, diminishes the trustworthiness of research and can adversely affect multiple stakeholders such as researchers, research team members, participants, academic institutions, and society.

Nikravanfard, Khorasanizadeh, and Zendehtdel (2017) found in their survey of twenty-three American schools that half of these universities had required ethics training for graduation. Cho and Shin (2014) further reported that a study done with 240 Master's and Doctoral students in Korea had revealed little educational preparedness on research ethics for students. Munoli, Niveditha, and Deepthi (2017) further shared that a study conducted to assess the knowledge, attitudes, and practices regarding research ethics had found a gap in knowledge of research ethics guidelines. These studies suggest that because of a lack of training, students may be unprepared to deal with ethical issues, resulting in the potential for research misconduct. These studies reflect that because of a lack of preparedness to meaningfully understand ethical issues at the interface of research, the potential for a breach of ethics becomes more likely for students.

Methodology

Study Design

This study employed a qualitative exploratory design, which provided an approach to gathering rich insights from postgraduate students at the University of Technology in KwaZulu-Natal, South Africa.

Study Setting

The study was conducted in the Faculty of Health Sciences at a University in KwaZulu-Natal. The University offers a range of undergraduate and postgraduate programmes across six faculties. Within the Faculty of Health Sciences,

postgraduate qualifications are offered in Biomedical and Clinical Technology, Chiropractic, Community Health Studies, Emergency Medical Care and Rescue, Homoeopathy, Nursing, Radiography, and Somatology. Data collection took place between April and October 2022.

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Participation Selection

Postgraduate students from the Faculty of Health Sciences who were registered in 2022 were recruited for the study. Students from all departments were invited to participate, and those who expressed willingness to do so were included. Those registered for the Generic Master's and Doctorate in Health Sciences were also included in this study. Participants from the Departments of Homoeopathy, Somatology, and Community Health Studies did not volunteer and were therefore not represented in the sample. This, however, did not affect the quality of the data, as the study focused on information richness concerning ethical issues in health science research broadly, rather than within specific disciplines.

Sampling

A convenience sampling technique was used to select participants for this study, which focused on interviewing postgraduate students engaged in health research within the Faculty of Health Sciences. In 2022, a total of 320 postgraduate students were registered (244 master's and 76 doctoral students). While participants represented a cross-section of different disciplines, those who volunteered first were recruited.

Method of Approach

An invitation to participate in the study was sent to all postgraduate supervisors within the Faculty of Health Sciences, who were requested to forward it to their respective students. Supervisors were not involved in recruiting participants but merely facilitated the distribution of the invitation. Postgraduate students who expressed willingness to participate had their details forwarded to the researcher through their supervisors. Upon receiving this information, the researcher contacted

the students directly to confirm suitable dates and times for the interviews.

Sample Size

A total of 320 postgraduate students were registered in the Faculty of Health Sciences in 2022. Participants who volunteered first were recruited for the study. Data collection was conducted following informed consent and continued until data saturation was reached. Fifteen interviews were conducted, at which point no new information emerged.

Setting of Data Collection

Data was obtained through semi-structured interviews conducted online using Microsoft Teams.

Data Collection

Data was gathered using individual interviews with fifteen students, which lasted approximately an hour. The semi-structured guide had several sections which focused on their understanding of research misconduct, the consequences of the same, their views regarding preventing research misconduct, and the need for an ethics module in health sciences. After obtaining ethical clearance from the Durban University of Technology Institutional Research Ethics Committee in October 2020 (Ethics number: IREC 100/20), data were collected using online platforms and recorded digitally. Permission was obtained to record these sessions. After transcribing them verbatim, the transcripts were anonymized and checked for accuracy using member checking for trustworthiness. The transcripts were inductively analysed through a search for repetitive or meaningful themes.

Data Analysis

Data analysis was supported by the research team for rigor and accuracy. Thematic analysis, a widely used method for qualitative data analysis, was employed in this study. Two members of the research team coded the data and discussed the emerging themes to reach consensus.

Results and discussion

Descriptive data:

Table 1: Demographic data of study participants

PSEUDONYM	GENDER	DEPARTMENT	QUALIFICATION	YEAR OF STUDY
Participant one (P1)	Female	Faculty Office	Generic PhD in Health Sciences	2nd
Participant two (P2)	Female	Nursing	Masters	3rd
Participant three (P3)	Female	Chiropractic	MHSc: Chiropractic	6th
Participant four (P4)	Female	Radiography	MHSc: Radiography	3rd
Participant five (P5)	Male	Radiography	Masters	2nd
Participant six (P6)	Female	Nursing	Masters	2nd
Participant seven (P7)	Female	Radiography	PhD	1st
Participant eight (P8)	Male	Faculty Office	Generic PhD in Health Sciences	2nd
Participant nine (P9)	Female	Faculty Office	Generic PhD in Health Sciences	3rd
Participant ten (P10)	Female	Chiropractic	M Tech: Chiropractic	6th
Participant eleven (P11)	Male	Emergency Medical Care	Master's: Emergency Medical Care	2nd
Participant twelve (P12)	Female	Faculty Office	Generic PhD in Health Sciences	2nd
Participant thirteen (P13)	Female	Clinical Technology	Masters	3rd
Participant fourteen (P14)	Male	Chiropractic	MHSc: Chiropractic	6th
Participant fifteen (P15)	Female	Chiropractic	MHSc: Chiropractic	6th

Three main themes emerged from the data, namely, research misconduct, preventing research misconduct, and research ethics training.

Theme one: Research misconduct

Two sub-themes emerged: (i) students' understanding of research misconduct, (ii) consequences of research misconduct.

Sub-theme one: Students' understanding of research misconduct

The first sub-theme focused on students' understanding of research misconduct.

"Research misconduct would be not obtaining consent, not keeping the individuals' names out of the study, and copying someone else's work." P2

"Anything that's going to compromise the ethics and compromise the integrity of the study itself and potentially

harm participants, whether that's just personal information or physically harming participants. P3

"It's when you will expose the names of the participants as well as not maybe reference your studies..... plagiarism as well." P5

"Research misconduct... when you transgress any of the principles of ethics, breach the principle of confidentiality, steal other people's work, and make it your own. Creating your ghost participant." P6

"Research misconduct, for example, includes situations where you are biased in how you choose your participants, if you give fraudulent information, when you skew the research findings to match the outcome that you want, and bribery to get participants. Causing injury to your participant, exposing your participant to other people in the surrounding area." P9

Students had good insight into the multiple ways research misconduct could occur, saying that it focused on several aspects that included plagiarism, failure to obtain consent,

compromising the integrity of the study, and potential harm to participants. Misconduct was regarded as a violation of ethical principles, with most participants believing that research misconduct had involved actions that undermined the ethical foundations of research, which ranged from non-adherence to protocols and procedures to manipulation of data and breaching participants' rights. Research misconduct has been defined as engaging in "fabrication, falsification, or plagiarism" during the proposal, execution, or review of research, and in the reporting of research results (Redman and Caplan 2021: 37-41). Yeo-Teh and Tang (2021) opined that despite a broad understanding of research misconduct, which was reflected within a significant knowledge level about misconduct-related acts, researchers tended to succumb to moral lapses.

Sub-theme two: Consequences of research misconduct

Participants were further asked if they were aware of the consequences of research misconduct at the university. They said:

"The researcher might be at risk or is at risk of facing a disciplinary committee. They're also at risk of the research being suspended and being expelled from the university." P8

"You can also suspend academic training for a short period...there should also be some corrective measures where you can perhaps get the student to work closely with somebody who's going to develop them in research." P9

"The University needs to take a very strict stand. Such a student needs to be struck from that program because if this student goes on to be a health practitioner in his career, what kind of conduct will he or she exhibit in his professional life?" P12

"From my understanding, currently, they have to go for a tribunal. The worst-case scenario is that they get banned from the institution and from practicing in that field again. I think that's the outcome." P14

Most students seemed to be aware of the severity of the consequences that were linked to research misconduct. They were aware that failure to adhere to protocols, procedures, and regulations brought significant consequences that involved facing a disciplinary committee, the potential withdrawal of research ethics clearance, and suspension of their study. These findings cohere with those made by da Silva Stigger *et al.* (2022), who reported that postgraduate students had a detailed understanding of the seriousness of inappropriate behavior in scientific research and the adverse consequences linked to such transgressions.

These findings support the notion that students are aware of the need to maintain good ethical conduct. Several students linked research misconduct to overall conduct in one's profession, saying that students who engaged in research misconduct were at risk of also behaving unprofessionally in their given health science careers. They lamented the same, saying that such breaches as both researchers and professionals could affect patient well-being, and suggested that students secure mentoring to correct maladaptive behaviours if they deviated from ethical standards.

Theme two: Preventing research misconduct

The second theme focused on strategies proposed to prevent misconduct at a university level. Participants shared as follows:

Having a supervisor and more research-related modules. This could potentially help and guide the students to follow the correct procedures and protocols. Supervisors should be more involved." P8

"I think that this could be included as a module in the curriculum." P9

"The ethics boards have to play a major role in this because, even in my proposal, a lot of iterations happened and, in the end, many weaknesses were rectified during the proposal approval process. Also, the role of supervisor." P12

Participants indicated that guidance and support from the supervisor, research ethics training, and the research ethics committee were crucial in overseeing potential breaches of ethics during a study and preventing research misconduct. They supported the need for a dedicated research module on ethics, which prioritizes awareness of research misconduct. Tarboush *et al.* (2020) argued that mandatory research ethics training, coupled with regular monitoring, should be in place to monitor the activities of all student researchers.

Moreover, institutional regulations should be in place to act as mechanisms that oversee the processes and activities linked to research studies, to ensure that misconduct is prevented. This is crucial to upholding the integrity and credibility of scientific research. The suggestion made by students to amplify the number of modules on research misconduct, therefore, deserves to be prioritized. The inclusion of research integrity within an ethics module will not only enable postgraduate students to build credible reputations as novice researchers but will also ensure that their research is trustworthy and reliable. In addition, research ethics committees need to have oversight of all research being conducted at the University.

Theme three: Research ethics training

The third theme that emerged focused on a module for ethics training. Two sub-themes, namely (i) support for a research ethics module and (ii) components of a research ethics module, were interlinked to this theme.

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Sub-theme one: Research ethics Support of a module

The first sub-theme focused on support for a research ethics module. Liu *et al.* (2023) argued that developing an in-depth understanding of research ethics is critical for postgraduate students, so that they can thread together fundamental knowledge related to ethics and the standards required for conducting sound and safe research. Students who supported a module on research ethics said:

"I would support that. I just think that a module would be really useful if it were done well, and it's something that I looked for. Try to get the students passionate about ethics instead of them looking at it just as a stumbling block. P1

"I think it would be fundamentally important. It is scattered throughout our course, but I think a comprehensive module on ethics would be amazing." P3

"I think it would be a very good thing. You know, we are facing a situation of moral decay in our profession. Yes, we are writing it in the books, but practically it's not there." P6

"It definitely should be a module for every student who does their master's," P10.

Participants who supported a research ethics module recognized its importance in terms of enhancing their understanding of ethical issues for research purposes. Some believed that such a module would also prevent moral transgressions in their careers as health professionals, as similar principles applied.

Hence, they urged the need for a dedicated research ethics module as a compulsory module across all Health Science Degrees. They believed ethics should be integrated throughout the academic journey, including both the undergraduate and postgraduate levels, thereby entrenching its importance within research. In this vein, Chen (2003) argued that it was important that ethics be taught early within research modules.

Liu *et al.* (2023) made similar findings amongst 94.4% of their sample, who also believed that research ethics courses should be compulsory. In another study, Than, Htike, and Silverman (2020: 379-398) found that more than 90% of postgraduate students in their study recommended that research ethics should be a mandatory module at the

postgraduate level. In further support of this, Tang and Lee (2020) further argued that a formal course on ethics was essential to guiding young researchers to conduct themselves appropriately in academic and social research settings and in making ethically sound decisions when facing moral dilemmas in research.

Sub-theme two: Components of a Research Ethics Module

The second sub-theme focused on students' views regarding possible course content with regard to a research ethics module. They said:

"What makes Health Sciences research special... why is it different and why is it so important? Go back into the history... informed consent. The importance of confidentiality and when confidentiality hasn't been maintained. Research misconduct, data storage...anonymity." P1

"The importance of ethics and research misconduct, as well as the four principles and the processes of getting a consent form and the gatekeeper's permission." P5

"The ethics checklist was subcategorized, for example, with confidentiality, and there were questions on informed consent. I think a more in-depth understanding of each of the subdivisions that ethics entails will be useful." P7

"What are the processes that have to be done to get full gatekeeper permission? Misconduct, I think, is the most important thing. Coercion is necessary. The history of ethics must be included." P14

"Bias, explain the repercussions of having bias, repercussions of not informing your participant about what can happen. And if you don't inform them, how can it be a legal case? Coercion...it would be nice if they explained the principles." P15

These narratives reflect the varied aspects that students believed should be interwoven into a module on research ethics. Participants supported the need to cover issues of confidentiality of data, informed consent, the history of ethics, and why the coercion of participants to participate was unethical. Torrence *et al.* (2017) similarly argued that the curriculum should focus on providing information that could help students make better ethical choices, instead of superficially following guidelines.

Lotto (2018) argued that to avoid research misconduct, huge support has been garnered for the formal training of researchers in ethics. Ethics training is essential to ensure research integrity. Torrence *et al.* (2017) asserted that training in research ethics requires an "organised and structured approach" and content such as facts, concepts,

principles, and processes should be part of the instructional content. A study conducted by Ramalingam, Bhuvanewari, and Sankaran (2014) further found that ethics training was crucial even at the undergraduate level and that short ethics training workshops could capacitate researchers effectively. This could prepare students for a more enhanced understanding of research ethics before they begin postgraduate work. A qualitative review of instructional methods used for research ethics education revealed that active participation, case-based studies, a combination of individual and group approaches, and a small number of instructional methods were most effective in increasing an understanding of ethics (Todd *et al.* 2017). A study conducted at a South African University, regarding the evaluation of Undergraduate Health Science Research Methodology Programmes, concluded that a research methodology course, which includes research ethics aspects, should be completed before the final year of Undergraduate Programmes, to ensure that students understand how to prepare the research proposal (Coetzee, Hoffmann, and de Roubaix 2015).

Conclusion

Whilst students seemed to have an awareness of research misconduct and the consequences of such transgressions, policies regarding the same are crucial to upholding ethical standards and maintaining credibility at universities. Postgraduate students may face temptations to fabricate data or be dishonest with participants, which can bring them and the university into disrepute. Misconduct depletes research resources, particularly hard-to-secure funding, and can harm participants, leading to potential legal repercussions. The University must therefore have robust policies and guidelines in place to prevent and address research misconduct effectively. A potential mechanism to deter misconduct is ensuring that postgraduate students sign a misconduct agreement at the onset of their research study. This can serve as a formal acknowledgement of the consequences of any misconduct, thereby reinforcing the importance of upholding ethical standards throughout the research study. By implementing rigorous and transparent policies, providing training on research ethics, and holding individuals accountable for their actions, universities can mitigate the risks associated with research misconduct and uphold the integrity of academic research.

The absence of a research ethics module for postgraduate students highlights a significant gap within health science curricula. Considering the importance of research ethics in health research, particularly the involvement of human

participants, the development of a module should be an imperative within curriculum restructuring initiatives. The support for a research ethics module amongst the current sample reflects both a lack of preparedness to engage with research ethics and a desire to learn more about research ethics. It suggests that students in health sciences may be struggling to grasp key ethical issues and apply them during their research studies, due to the lack of attention to fundamental aspects of ethics within health science curricula. This calls for an immediate prioritization of dedicated research ethics modules within health science faculties.

Generalizability and Limitations

This study was conducted at a single university within the Faculty of Health Sciences, and the sample was limited to postgraduate students, which may limit the generalizability of the findings to other institutions or contexts. Additionally, the study relied on self-reported data, which may be subject to bias. Despite these limitations, the findings offer valuable insights into research ethics challenges among Health Sciences postgraduate students.

Recommendations

Development and implementation of a comprehensive Research Ethics Module across the Faculty of Health Sciences for Health Science research. This module must be compulsory for all postgraduate students upon registration. The University should consider formalising a misconduct agreement that postgraduate students must sign at the beginning of the research process. This agreement would formally acknowledge the repercussions of misconduct and emphasize the significance of maintaining ethical standards throughout the research journey.

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Data availability

The data supporting the findings of this study are available upon reasonable request from the corresponding author. Due to ethical considerations and confidentiality

agreements, individual participant data cannot be publicly shared. However, anonymized and aggregated data may be provided for academic or research purposes upon institutional approval.

Conflicts of interest

There are no conflicts of interest

Author Contributions

Lavisha Deonarian conceived the study, collected and analysed the data, and drafted the manuscript. Prof R Bhagwan and Prof M N Sibiyi provided guidance on study design, methodology, data interpretation, and manuscript review.

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References

- Chen, D. T. (2003). *Curricular approaches to research ethics training for psychiatric investigators*. *Psychopharmacology*, 171, 112–119. <https://doi.org/10.1007/s00213-003-1500-4>
- Coetzee, T., Hoffmann, W. A., & de Robaiax, M. (2015). *An evaluation of research ethics in undergraduate health science research methodology programs at a South African University*. *Journal of Empirical Research on Human Research Ethics*, 10(4), 389–394. <https://doi.org/10.1177/1556264615592389>
- Da Silva Stigger I, D. A., et al. (2022). *Postgraduate nursing students' knowledge of research misconduct*. *Revista Enfermagem UERJ*, 30, e66591. <https://doi.org/10.12957/reuerj.2022.66591>
- Hyytinen, H., & Löfström, E. (2017). *Reactively, proactively, implicitly, explicitly? Academics' pedagogical conceptions of how to promote research ethics and integrity*. *Journal of Academic Ethics*, 15(1), 23–41. <https://doi.org/10.1007/s10805-017-9289-7>
- Kumbhar, S. (2020). *Knowledge and attitudes about research ethics among dental postgraduate students: A cross-sectional survey*. *Journal of Applied Dental Sciences*, 6, 511–513.
- Liu, X., et al. (2023). *Knowledge and attitudes of Chinese medical postgraduates toward research ethics and research ethics committees: a cross-sectional study*. *BMC Medical Education*, 23, 482. <https://doi.org/10.1186/s12909-023-04459-y>
- Lotto, R. (2018). *Postgraduate students' perception of research ethics training: a qualitative study*. *Innovations in Practice*, 12(2), 24–33.
- Ramalingam, S., Bhuvanewari, S., & Sankaran, R. (2014). *Ethics workshops—are they effective in improving the competencies of faculty and postgraduates?* *Journal of Clinical and Diagnostic Research*, 8(7), XC01–XC03. <https://doi.org/10.7860/JCDR/2014/9283.4562>
- Redman, B. K., & Caplan, A. L. (2021). *Should the regulation of research misconduct be integrated with the ethics framework promulgated in The Belmont Report?* *Ethics & Human Research*, 43(1), 37–41. <https://doi.org/10.1002/eahr.500078>
- Tang, B. L., & Lee, J. S. C. (2020). *A reflective account of a research ethics course for an interdisciplinary cohort of graduate students*. *Science and Engineering Ethics*, 26(2), 1089–1105.
- Tarboush, N. A., et al. (2020). *The understanding of research ethics at health sciences schools in Jordan: a cross-sectional study*. *BMC Medical Education*, 20, 121. <https://doi.org/10.1186/s12909-020-02040-5>
- Than, M. M., Htike, H., & Silverman, H. J. (2020). *Knowledge, Awareness, Attitudes, and Practices towards Research Ethics and Research Ethics Committees among Myanmar Post-graduate Students*. *Asian Bioethics Review*, 12(4), 379–398. <https://doi.org/10.1007/s41649-020-00148-w>
- Todd, E. M., et al. (2017). *Effective practices in the delivery of research ethics education: A qualitative review of instructional methods*. *Accountability in Research*, 24(5), 297–321.



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<https://doi.org/10.1080/08989621.2017.1301210>

14. Torrence, B. S., et al. (2017). *Curricular approaches in research ethics education: Reflecting on more and less effective practices in instructional content.* *Accountability in Research*, 24(5), 269–296.

<https://doi.org/10.1080/08989621.2016.1276452>

15. Yeo-Teh, N. S. L., & Tang, B. L. (2021). *Research ethics courses as a vaccination against a toxic research environment or culture.* *Research Ethics*, 17(1), 55–65. <https://doi.org/10.1177/1747016120926686>

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