

Upholding integrity in Postgraduate Research: A systematic approach

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Article History	Abstract
Review Article	<i>This article examines the decline in quality and integrity within postgraduate research, positing that a shift from genuine knowledge creation to a focus on mere publication has led to a proliferation of subpar academic work. Based on a grounded case study approach and extensive scholarly input, the authors identify systemic issues spanning ethical failures, methodological flaws, and institutional neglect. The problems highlighted include misalignment between a study's core components, a lack of rigor in data analysis, and an overall absence of self-auditing practices. The text also emphasizes the importance of effective data visualization, such as the use of socio-graphs, to demonstrate a deeper understanding of the research sample and its relationship to the broader population. The authors propose a systematic solution that advocates for a collaborative culture of academic integrity among all stakeholders—students, faculty, and administrators. The article stresses the importance of using robust assessment tools and checklists to ensure that research is not only sound but also clear, transparent, and replicable. Ultimately, restoring integrity is critical for the credibility of academia and for the real-world impact of ethically conducted scholarship.</i> Keywords: Research integrity; Postgraduate education; Academic ethics; Plagiarism prevention; Research supervision; Quality assurance.
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Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited. Citation: Sam Lubbe, PhD; Henry Mynhardt, PhD. (2025). Upholding integrity in Postgraduate Research: A systematic approach. UKR Journal of Economics, Business and Management (UKRJEBM), Volume 1(9), 92-98.	

Introduction

The pursuit of academic excellence often demands unwavering commitment to integrity, an essential component that has unfortunately been overlooked in the growing landscape of postgraduate research. As more individuals embark on their research journeys, the authors have observed a concerning decline in the overall quality of postgraduate work, with many students more concerned with managing their studies rather than conducting rigorous, ethically sound research (Sozon et al., 2024).

A fundamental issue is the perception that publishing is a mere "passport" to the academic community rather than a genuine contribution to knowledge. This mindset has led to a proliferation of subpar articles, theses, and dissertations, where the focus is on meeting formal requirements rather than ensuring the integrity of the research process (Caravello, 2008). The authors argue that this trend not only undermines the credibility of the academic enterprise but also deprives students of the invaluable lessons that can be learned through meticulous, ethically grounded research.

While some universities have clear guidelines regarding research integrity, many others prioritise the sheer number of graduates over the quality of their work. This disconnect between institutional policies and their actual implementation suggests a concerning gap that must be addressed.

The authors propose a systematic approach to restoring integrity in postgraduate research, one that acknowledges the multifaceted nature of the challenge and offers practical solutions.

First and foremost, the authors emphasise the critical importance of fostering a culture of academic integrity, where all stakeholders – from students and faculty to administrators and policymakers – actively collaborate to uphold the highest ethical standards. This requires a concerted effort to promote values such as honesty, trust, respect, fairness, and responsibility throughout the research ecosystem (Bretag, 2013).

Additionally, the authors suggest a comprehensive review of existing research practices, with a focus on identifying and addressing the key characteristics of substandard research. This includes, but is not limited to, issues related to authorship, plagiarism, data falsification, and inappropriate research methodologies.

Problem Statement

As this is the heart of the study and most readers start with it, the authors felt that it should help to understand the problem if the problem is unpacked in the form of a couple of sub-problems:

Kipling wrote in 1902 about the six honest serving men whose names were what and why and when and how and where and who. The overall problem this article wishes to address is the inability of researchers/academics to conduct research in the proper way. The number of outlets, over and above the post/graduate numbers, is the increasing number of journals available to source articles from. The first journal was called Philosophical Transactions of the Royal Society. In 2009, there were about 23000 journals, and about 1.4 million articles per annum were published. Finding a gap to research with millions of articles available is becoming an obstacle for the researcher. The number of supervisors for post/graduate students is also not enough, and some might not have the experience in the field of having too many learners. The same could be said of the number of examiners and reviewers. The postgraduate student's first mission should be to preserve the quality of the work that universities should expect as research work should be replicated and work should support the work of Karl Popper. Wrong titles, problem statements, research questions, research design and method, wrong statistics, incorrect interpretation, no support from the theory, incorrect recommendations and problems with referencing are part of the problem.

Elsevier states that between 40% and 90% of articles are rejected. Many universities and publishers will have to look at new models to handle the examination and reviewing. All of these are important, but a balance based on alignment is sometimes hard to negotiate. The examiners and reviewers are not concerned whether this research is to get funding, promotion on the line, a degree, etc., because they have to ensure integrity and quality. The problems mentioned above could be classified as a value problem, but there is a conflict of ethics, integrity and desirability. The dilemma is that incorrect research may lead to errors in other fields that may lead to the loss of life, scandals and un-evaluated programs. The statistics that will follow will be based on the use of Atlas.ti or NVIVO. There will be no use of correlation since it will not inform about cause and effect. The final study should be a grounded case study, as

empirical observations would form the general features of the study.

Research Questions:

The following items need more attention:

1. Did the student/author ensure that there is proper alignment between the problem statement, the title, the keywords, the themes for chapter 2 and the research questions/objectives? Was the study registered, and is the study possible in the time span available?
2. Has the research design been properly motivated and is the approach the correct one? Will it help the wo/man to solve the problem?
3. Are the data impossible, not duplicated ethically well motivated?

Literature Review

Although there is a sparseness of literature addressing the topic directly, some sources covered sections that were needed to ensure a theoretical framework. This will be covered at the end of the literature review. Maimonides (12th century) noted that if one seeks the trueness then one should cast aside emotionality, acknowledged ideas and the tendency toward what you used to respect and you shall not be led in error. In other words, (Simon, nd), do not allow bias in your discourse.

Title, abstract and introduction

The title should be based on the problem statement. Many students arrive at a department at the university with a faint idea of where they want to do it, not what they need to do. The problem that many students/researchers make is that they need to find what is wrong as management based research is problem based research (PBR). The title should support key concepts and part of the research questions. The abstract should be done last and unpacks each of the elements, including a context, research method, some results and some recommendations (Harzig, 2019).

The introduction, according to Harzig (2019) should be a miniature version of the paper. The importance should be on circumstances, aspects of the problem statement (what gave birth to the problem), research questions and objectives (these two should be fully aligned and be based upon the problem statement), unique contribution to the body of knowledge if it is for a doctorate or confirming certain sections of the body of knowledge if it is for a lower level of degree. Also to be included should be the research design - one of the key issues that covers the blueprint for the study. This section should be an abbreviated section with enough information as a roadmap to the final phase of

the study. If the research design is incorrect, then the study will be flawed.

The context should explain where the study belongs and this could also explain the domain so that people can judge the place of the study. It should be easy for readers to separate the bottom 30% of studies as the research design will not be right. It should also be easy to pick the top 10% as it would be apparent that the student knows what they need to do. The problem is the 11%-70% as the quality difference might be confusing.

Caveats

The student/researcher should be careful not to reveal too much of the study to fellow students or friends as many people will steal a topic. The topic should be formally registered as soon as the student/researcher has finalised the field and problem statement. The student/researcher should use a fine balance between social and scientific processes. It is therefore important to minimise presentation defects. A log of writing and editorial changes should be kept. Ensure that you only use articles in your field. If an article falls outside the field, explain why this is being used. The important item to remember is that you must use manuscripts that advance the knowledge and understanding in your particular field.

Gastel (2012) that there must be some problem based idea that will be named as a reason to do the study. She suggests that the supervisor/overseer should be interested in the field and that the student/researcher should have some additional advisers that he can approach to debate an item that is unclear. The topic should be small enough to be doable. It will also take time to refine the field and problem statement. The proposal should be regarded as the first step and a useful start to chapter one of the thesis/dissertation. There should be no yes/no questions in the research questions or the instrument being used as it is not suitable for formal research (Simon, nd).

Tools that can be used

A tool that focuses on the paper/dissertation/thesis that is being created should be able to trust a publication. This is a tool that students/researchers should use. The question that could be asked of any research is: can it be trusted (Grey et al., 2020). The retraction of such a piece of work could take quite long and by that time many other authors might have cited the work or based medical decisions that could upon life, all could have been prevented if the mis-information was stopped.

Apparently delays happen because people have to deliberate if the student/researcher did this intentionally or was this a fault? The problem that could be joined with this is: why did the examiner or reviewer not pick this up.

Peer reviewing or examining assume that the person doing so would ensure that the information is above board. Any publication can this be questioned with: is the integrity of the actual publication reliable and is the conclusion/recommendation valid (Grey et al., 2020). If a commentary is published that is accurate, important and measured (Vazire, 2020) then it seems that the researcher questioning the results are being attacked and not the 'guilty' party (Vazire, 2020). The important item that should not be missed is that the student/researcher should be able to rephrase many of the work. Gastel (2012) argues that the four C's (clear, correct, concise and consistency) should always be kept in mind. The important part is that a thesis or dissertation is not published whereas an article is published (Gastel, 2012).

Grey et al. (2020) aver that a tool that they designed focuses on research that somebody can trust. There were some suggestions in the past that some papers cannot be trusted - nobody however, tried to advice on how to determine that this is the case. Some of the mistakes could be typos, incorrect analyses but others could be data falsification, plagiarism in all its facets or manipulation of images. They designed a tool they called REAPPRAISED - a checklist to assess if a research project is flawed (thesis, dissertation or article). This checklist is not the same as one that is used to determine if this is a predatory publication or a checklist that journals provide to ensure that the article. This checklist is adapted and changed for management research as some of the issues cannot be determined unless one ask the author certain questions (e.g. workload, etc.).

Discussions between the supervisor and the student

A research project is costly in terms of money and time (Fiala and Diamindis, 2019). This is because of the search for literature, reading it, summarising it, developing a research design and method, editing and peer reviewing or examining the research study. Any discrepancy that the supervisor or advisor have with the researcher or student must be based on hard facts and should be supported by benign explanation for problems that exists. Some students/researchers would take kindly to the advice while others might think and build up a grudge against the supervisor or the advisor. The norm, some would use, if you cannot say anything nice about the work then do not say anything at all.

The fault detectors sometimes are being regarded as unsympathetic and it seems to some students that the work they did is prone to failure or that the published work, if scrutinised would be regarded not worthy of the degree. The important thing is that the contribution to the body of knowledge (unique or normally) should be emphasised and the process should be audited by the student and a third

party to ensure that the work is above board. It should not be a hurdle.

Vazire (2020) argues that self-correction should be part of the process and the work should be replicable to ensure that the research is good. The need for a framework that can be used to ensure that no anomalies exist and if they do, how do we handle it. The important part would be not to use the criticism process as a form of bullying. The anomalies could be self-citation or recycling work and it should be avoided. Nobody gets it right the first time. There is the case of a famous expert (Vazire, 2020) that attacked the person that dared to point out faults in his research and argued that there is a witch-hunt against him.

Literature review

It should be noted that there should be an alignment between the literature review and the problem statements. That is why it is important to obtain 10-12 themes from the problem statement and these can serve as headings in your literature review. Articles from a highly cited journal would be a plus and predatory journals should be avoided as some of the research published cannot be verified or falsified (applying Popper's suggestion of falsification of results). The researcher should check what is new and how does it differ from what one would do. The originality of the work for a thesis is important. Show the originality and significance in an organised way (Jia, nd). Do not linger on one point too much.

The better way is to rephrase words from the original author so that your turn-it-in or authenticate reports not show that there was little attempt by the author to interpret and apply the study. Do not use general phrases that has nothing to do with your topic spoilt the paper. There should be a logical flow of headings in the literature review. Related work should be together and should not be like confetti, all over the show. The listing of the references used should also be in the preferred way that your university or journal requires.

It is quite important to evaluate resources. Information gathered should be vital (Landoy et al., 2020). The best articles that support the idea should be used and it should be a scholarly source where peer review is clearly present. Should be mostly a primary or secondary source that is current and it should be based on solid research and not be biased. Some journals are also starting to list the peer reviewers' names and reports. The predatory and cloned journals should be given a wide berth. It is difficult to determine if it is predatory unless thorough research was done and this could impact on the timeline and the quality of the literature review. Proper peer reviewed articles have credibility and will ensure that your own research is more acceptable.

Citation indexes and bibliometric databases could help but some predatory journals did manage to find a way to be listed in these databases. Articles that appear in popular magazines should be avoided as well as trade journals because these will not be necessarily be peer reviewed. Attention should be given if there are some mistakes in the paper, who has written it, the purpose of the research (no opinions please), the latest data to be used and how deep is the analysis. It is important to note that the researcher should be information literate.

Problem Statement

Descartes (1596-1650) noted that every problem he solved became a rule that serves afterwards to solve other problems. This is the heart of the study and should be 'attacked' first. Based on this the title should be created, the keywords to search for literature should be formulated, themes to read for in the articles and to be used as headings in the literature review, research questions should be formulated and it should be solvable.

Simon (nd) argues that the scholar should indicate what is the overriding problem and where it is found. Because managerial science is problem based research there will not be the possibility of using a one sentence problem statement as it should supply enough detail about the problem and it should be the blueprint for many items in the study/article. The problem should be serious and it should be examined.

The problem statement should state the nature of the study (e.g. heuristic, Delphi, focus groups, q-methodology, create a model, etc. (Simon, nd). The idea is that there will be different versions of the problem statement until the researcher and the advisor/supervisor/co-researcher is satisfied. The population and sample should be precisely enumerated and should not be in such a state that no idea exist what the size of the population is and that the sample eventually conveniently be assembled.

According to Simon (nd) there exist various types of problem statements. It could be conceptual (a pair of close elements that as conceptually contradictory), action problem (when a group action offers no clear class of activity) and a value problem (when there is an inaction about integrity, worthy, desired). The problem should be doable, original and should make a contribution to the body of knowledge (unique for a doctoral study). It should therefore indicate what type of problem is being investigated.

Grace-Martin (2019) argues that one should write out the research questions in theoretical and operational terms and she uses the following examples:

Theoretical: Does poverty help predict physical health, after accounting for demographic factors?

Operational: Do people living in households with incomes below the poverty line have a lower men physical health score that people in households above the poverty line, controlling for age, education lever, race, and gender.

The research design will determine in the data that is available if you have a clear research design. Design issues could be impacted by sampling, restriction and randomisation, co-occurrence of conditions, independence of data and measurement of predictors (Grace-Martin, 2019). The researcher needs and analysis plan where data should be coded, entered and should be cleaned up - could take quite a while. One should run univariate and bivariate statistics and graphs. This is just an initial step and should not be confused with the final results. Change your analysis plan and change the model until you are happy. When you finally get the results, interpret it and once ready communicate your results.

Research method

A research design is a detailed plan on how to answer a research question, solve a hypothesis or solve a problem statement. The research design will depend on whether a research question or hypothesis or both are used and the finish of the research leaving no stone not turned over. If the research question is not clear and ideas used not well explained, then it would be advisable to use an explorative research design based on a case study. It thus means that either survey or experiment can be used. If the research question is not covered in the literature than us also an explorative research design based on a case study. If you are only interested in the impact of your research and looking at causality, then experiments would be useful. However, if you want to generalise to the population then a survey research design would be better.

Simon (nd) states that the reader of the problem statement should agree that the research design and method picked should help solve the problem. There should be a specific methodology that can be used to solve the problem. Any literature and data collected should be convincing to ensure success. The selection of a qualitative/quantitative/mixed method should be clearly and exactly described.

Simon (nd) argues that a case study could be used when one investigates contemporary phenomena within its limitations and perimeters. This can help provide the basis for the application of ideas and extension on methods. Grounded theory should not be used for a masters' study or a normal article as it should be used to create new theory where no theory exists. It is a long process and could depend on whether a solution is possible.

In an article on how to choose from the different research methods it was stated that the method you choose should give you reliable observations that could help to solve the

problem. The article noted that there are two major approaches to a problem statement. Quantitative methods that generates numerical data that can be used to generate solutions or methods to interpretation. Qualitative methods generate non-numerical data that can be quantified. This verbal data can be transcribed and analysed in an interpretative way but bias can influence the interpretation of this data.

Quantitative methods shall provide a detailed description of the research topic. Quantitative methods can help create models/frameworks by using software such as NVivo and Atlas.ti. Normally in the earlier stage of the research it is easier to use qualitative research and to confirm the model created it is better to use quantitative research. On the other hand, quantitative focuses on counting and classification creating statistical models and figures to help explain what is observed. The idea is to reduce the compromises and the generalisations and remain realistic at the same time. The argument is that for social sciences there are a variety of models to select that the task can become daunting. The best way to select a statistical method is to pick the one that can help to strengthen the research. Observation can also be used but bias and personal interference could impact on this method.

Statistics

The biggest obstacle in the process is how to present data. This should not be a process of comparing two sets of data (Simon, nd). The portrayal of a relationship between data sets must not be accepted for a studious inquiry (Simon, nd). The scholar should remember that a statistic such as correlation will not show cause and effect and in many cases the discussion circles around the own experience of the researcher (do not take yourself into the discussion). If a strong relationship is found then a supportive sophisticated or experimental approach can be used. The sample size will determine the strength of the findings.

Snedecor (1950) states that a distinctive function of statistics is that it enables the researcher to make a numerical evaluation of the uncertainty of his conclusion. The sample must be representative because everybody should have an equal chance to be sampled. Descriptive statistics helps to describe the sample (and this should be clear in good research) while inferential statistics is a collection of me different methods to quantify how certain the researcher can be when making inferences from a given sample of census when everybody in the population is included). Descriptive statistics would be a sample mean, median, mode, range, standard deviation, variance, etc. The figures would be a histogram, boxplot, frequency polygon or steam and leaf diagram (socio-diagram). Some inferential statistics would be correlations, data dependency, sign reversals and reliabilities (Bedelan,

2015). Missing data should be handled properly and should be described how it was handled. The problem with using a dataset from somebody else is that the reliability of the data cannot be verified and if there was an error while capturing, then it will impact on your findings (Janes, 1999).

The more important representation for research in management sciences are explorable where the scholar attempt to explore phenomena to get solutions; descriptive research where they can give an account of reality and explanatory research where the scholar tries to find casual relationships. Discovering and measuring may vary because of their structure that cannot be imposed. If you want to find out why certain things happen then experimental design would be better but you cannot measure causality. The important item to remember is that one can report negative findings as well (Goodyear-Smith, nd). Also, the important thing is to make sense of the data.

Data can be presented with socio-graphs because it shows a deeper level of understanding - that is required for an academic study. It focuses on the sample that are part of the population. Demographics, psycho-graphics and socio-graphs offer better profiles and could help with in depth analysis of the sample. It could also show different points of view so that the researcher could display all angles of the presentation. It therefore demonstrates that the researcher has spoken to all parties that is of interest or needed to give their input or were part of the sample. It will also show the digital path between sample and population. The sample should be representative of the population. Students, for example, may not be representative of the population of a country. This may be one reason why you cannot generalise the findings to the population. We have seen students that shows a table and a figure for the same data. This could be interpreted as padding as the student most of the time try to expand the study to the required length.

In an article on popular techniques for visualising qualitative data (2017) it is noted that qualitative data is unstructured and could be used for clarity. According to the articles there are several formats that can be used. These are: Coding stripes can be used alongside content and can be coloured bars; Word clouds to reflect language within data to show the most recurring words, charts to display data as the make-up for a theme; word trees to display context of a word; concept maps to map connections that present data, or theories; mind maps - a brainstorming tool; hierarchical charts to look for a structure; explore diagrams showing all the links to a single item; Comparison diagrams showing what 2 items have in common; project maps visually exploring and presenting different items; socio-diagrams as previously explained; and geo-visualisations looking at the location of groupings and help with demographic information.

Reviewing your own work

Harzig (2016) argues that one should submit or use the best idea one has for research. Importantly, she notes that one should be aware of any limitations and be prepared to accept constructive advice. Harzig (2016) states that it is important to have different summarised versions, a short version (10 seconds), a one-minute version; and a 5-minute version. The presentation used could vary, depending whether you want to tell your grandmother or a fellow academic. Any work, until it is published should be regarded as secret until it is in print. Nobody should use the work to criticise before it is published and peer reviewed. The problem with peer-reviewing and/or examining is that sometimes the process is faulty and the peer-reviewing and/or examining does not improve the paper nor does it show any fault that could be corrected.

Butcher et al. (2020) argue that researchers should conduct and describe their studies clearly and transparently from the start to the finish and not use the traditional model. It should be remembered that the peer reviewers suggest and the editor decides and if it is an examination process then the examiners suggest but the research committee and senate of the university decides, based on the suggestions in both cases (Elsevier, nd). Nobody communicates directly with the student or author except the responsible party. The problem in academia and academic publishing is that the examiners/reviewers are normally overloaded as many experts in academia have to wear more than one hat.

The examiners/reviewers look at the importance of the contribution to the field, strengths and or weaknesses. Was the correct research design and statistical approach used and is the results and recommendation based on the work done. Obviously presentation of the work (e.g. language, figures, tables, etc.) would also be taken into consideration. Some journals and universities have a check list that the examiner/reviewer can use to list their findings. Any comments by the examiners/reviewers should be addressed, a complete log kept of changes, where and what was done and what the impact was on the study.

Attention to every bit of detail, checking of the work and cross-checking as well, getting a proof-reader, explaining the originality of the work helps. Be critical of your own work as your name and academic career is at stake (Elsevier, nd). Vazir (2020) argues that by doing a careful self-auditing and using a check list would ensure that you do not open yourself up to fact-based criticism.

Ismail and Sabil (2019) state that one need to express ideas with matureness, be able to use multiple vocabularies - in other words speak to the reader. By doing this the author illustrate writing competency. They argue that paragraphs should not be too long, it should be there for the purpose it

is intended (e.g. introductory paragraph). The paragraphs should come together and display the idea that you want to confirm. You should write clearly and shows good sentence construction - everything should be coherent. There seems to be a lackness in presenting ideas (Ismail and Sabil, 2019) and many own ideas are presented without using academic support of such.

They also note that readability should help understanding, and interest. Your work should also be neat. Everything should follow easily onto the next item, it should be in time sequence, space should be used with due consideration and should illustrate from effect to cause. Many students who use English as a second language have problems with spelling (we have seen numerous instances where the author disabled the spell-checker because of the number of red marks on the screen). Grammar is most of the times wrong, students think in their own language and then translate into English with no adherence to rules, punctuation and neat writing (Ismail and Sabil, 2019).

Be consistent in your writing (Goodyear-Smith, nd). Look at tenses, do not use first person and look at singular and plural. Make sure that all is in the correct place, for example no discussion in results. One work can sometimes tell the same as many other words. Ensure that you did not use acronyms (only when necessary). Ensure that you use one idea per sentence and shorter sentences. Use active voice and avoid normalisations. Numbers should not be at the start of a sentence. Also allow one topic per paragraph that should normally be 3-6 lines. The first sentence should introduce the topic. Also, look at the use of apostrophes and spacing (Goodyear-Smith, nd).

Conclusion

The challenges confronting postgraduate research are complex and stem from a culture that often values output over quality. As demonstrated throughout this article, systemic problems—from the initial conceptualization of a research problem to the final presentation of findings—contribute to a decline in academic integrity. A core issue is the perception of research as a perfunctory task rather than a rigorous and ethical pursuit of knowledge. To remedy this, a holistic and collaborative approach is essential, emphasizing a culture of honesty and meticulous self-auditing. The article stresses the need for both robust peer review processes and individual accountability, with researchers taking a critical approach to their own work. The use of advanced data visualization techniques, like socio-graphs, is highlighted as a method to ensure a deeper

understanding and transparent presentation of findings, thereby avoiding “padding” and demonstrating a comprehensive grasp of the subject. By holding all stakeholders accountable, embracing self-correction, and focusing on writing clarity and coherence, the academic community can reverse this trend. This will ensure that future research genuinely contributes to knowledge and addresses critical real-world issues, solidifying the idea that the integrity of scholarly work is not just an academic concern but a societal imperative.

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