



Impact of Research Bullying on Research Integrity: Causes of ill Research and Production of ill Researchers at University Level

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Abstract

Present research explored bullying in research academic, its impact on research integrity and production of ill researchers and ill research. A qualitative research paradigm with an inductive approach was followed. The reflexive thematic analysis was conducted based on framework given by Braun and Clark (2006). A total of 20 participants were selected, 10 of whom were research supervisors and 10 were supervisees through purposive sampling technique. Results showed that bullying in research academic occurs in forms of conflict of interest, disrespect of supervisee and supervision, distributive injustice, ethical silences, fear of retribution, social injustice, biased behavior, ethical temptations and influencing policies negatively. Causes of compromised research integrity and quality are bullying and research quality, lack of training, external pressures, ethical leadership, power dynamics, quality vs quantity, lack of autonomy, and ethical dilemmas. Furthermore, causes of production of ill research are poorly designed research, ethical violations, lack of ethical considerations, lack of objectivity and bias, time constraints, lack of practical implications and societal needs. Results also revealed that causes of production of ill researchers are research slaves, irresponsible attitude towards research, dishonest conduct, lack of teamwork, disregard for ethical standards, rigid behavior and focus on quantity. Research implications include desirable research practices, international collaboration, mentoring, support for publication and publication interventions.

Keywords

Research Bullying, Research Integrity, ill Research, ill Researchers

Introduction

Bullying effects performance in term of failure of tasks (Afzal et al., 2022) and according to Einarsen, Hoel, et al. (2020) workplace bullying occurs when managers and/or co-workers consistently abuse one or more employees, and the targeted also struggle to defend themselves against the harassment. Bullying among co-workers appears to be encouraged by a laissez-faire leadership style or "weak" or "inadequate" leadership at higher levels of the company (Hoel & Cooper, 2000). Therefore, it appears that bullying thrives when higher management shirks accountability and does little to stop bullying. Low perceived costs can be used to illustrate the connection between bullying and poor leadership. Weak leadership also lowers the likelihood that the bully will be apprehended because it is presumed that they seldom step in to stop bullying. Bullying in research academia is of great concern and it results in compromised research integrity.

The concept of research integrity (RI) is obligations that individual researchers have to the scientific work they perform and the obligations that institutions must allow those researchers to do so. A third group, also called culture and practice, frequently emerges in addition to these two responsible bearers. Beyond being a residual category that includes anything not covered by

attributions to people and institutions, these ideas need additional study (Valkenburg et al., 2021). The value of science is seriously undermined by research misconduct (RM), which is commonly perpetrated in both the social and scientific sciences. It distorts information, wastes research funds, and damages scientists' credibility. Over the last forty years, the body of research on RM has expanded dramatically, particularly in the fields of behavioral and biological publications. To prevent problematic scientific practices, research councils and policy-making agencies have created several rules and guidelines (Xie et al., 2021). Research misconduct causes serious concerns for the researchers.

The experience of retribution after speaking out is highlighted by some researchers, who point to inadequate supervision and lab bullying as two of the most cited ethical concerns in the reflection exercise. Examples include the PI's lack of personal investment, poor interpersonal relationships, a bad work environment, and a lack of support for career advancement (Magalhães, 2024). There are various forms of academic publication corruption. Even though being published ought to be a happy experience, many researchers and academics feel under pressure to publish research articles to maintain their jobs, advance in their careers, or obtain tenure. This may result in plagiarism, fabrication, falsification, salami slicing, duplicate publishing, and how predatory journals are used. Even more serious corruption of academic publishing can be fuelled by institutional or national incentives that are poorly designed and inappropriate, such as bonus payments for each published paper, sometimes regardless of quality, to unfairly increase the publication count of dishonest academics. Examples include peer review fraud, impersonation and hijacking of legitimate journals, guest authorship for payment, and paper mills. Suggestions are made on how to combat the root causes of academic publication fraud and corruption. By using this knowledge, there should be fewer chances for academic scholars to be used unethically and for research funds to be stolen (Glendinning & Eaton, 2024).

Several ethical conundrums arise in the context of academic research because of the many responsibilities that members of these organizations perform. Research integrity, conflicts of interest, respect for research participants, individualism and performance, power imbalances and lack of supervision, social injustices, distributive injustices, epistemic injustices, and ethical distress are emerging ethical dilemmas (Drolet et al., 2023). Considering the replication issue, addressing dubious research methods needs strong "top-down" policies that challenge those that encourage hyper-ambition while anticipating and accommodating a wider spectrum of academic values, motives, and proclivities (Erden, 2024).

Guidelines and regulations have been developed encompassing the many facets of integrity in research, such as the Singapore Statement (2011), the Montreal Statement (2013), the Hong Kong Principles (2019) and the new European Code of Conduct for Research Integrity (2023). Numerous writers have addressed the dangers to the quality of research, such as the extremely competitive environment, the publish-or-perish mentality, inadequate mentorship and supervision, and the metric-based assessment system that might result in unethical disengagement tactics. Writing about unethical behavior does not, however, imply that integrity will be restored to the system's foundation. Since individual experiences, training, and work environments vary, the definition of integrity for the many research stakeholders is not uniform.

The idea of "hyper-ambition" in academia is presented as a contributing element to what has been called a "replication crisis" in some fields. The phrase "replication crisis" refers to a broad category of "questionable research practices," ranging from careless reporting to fraud. Many ideas have previously been made to address dubious research practices; some of them include actions to support research integrity and center on the values, norms, and motives of researchers and institutions. Promoting integrity in fiercely competitive academic settings that encourage high levels of desire is challenging, though (Erden, 2024).

The public's health and well-being depend on publication integrity in biomedicine, which also serves as the foundation for all the other ways that science influences people's lives. A prevalent issue that jeopardizes public health and erodes faith in research is compromised publication integrity. The same problems exist outside of biomedicine, with the public being impacted and academic confidence being weakened because of compromised publication integrity. Poor handling of compromised publication integrity is common. Publications are being addressed in an ineffective, inconsistent, sluggish, opaque, and incomplete manner. Tools and checklists have been created to aid in the

evaluation of publication integrity. To improve things, systemic change is required, but it takes engagement and investment from the main players (Bolland et al., 2024).

Poor supervision, pursuing good results, conducting research for publication rather than publishing because one conducts research, conflicts of interest, noncompliance with GDPR, lack of teamwork, plagiarism, not sharing research results, not disclosing unfavourable findings, loss of privacy and disregard for the autonomy of others, imbalance between one's personal and professional lives and failure to compromise with assumed responsibility were the most frequently mentioned research misconduct practices in the responses to the prompt (Magalhães, 2024). Particular concerns about research are involving human subjects, including vulnerability, hazards, rewards, informed consent, and confidentiality. Research integrity, also known as responsible conduct of research, or RCR refers to doing research following the law and ethical norms (Shamoo and Resnik 2015). These include guidelines for conducting research with humans and animals as well as guidelines for the conduct of science in general, including standards for data collection, reporting, analysis, sharing, publication, and interpretation; authorship assignment; conflict of interest disclosure and management; collaboration, student, and trainee work; manuscript and grant review; financial and other resource management; and misconduct investigation (Shamoo and Resnik 2015). Some RCR topics are significant to human subjects' research. However, there is a need to investigate integrity in human subjects' research (Resnik & Resnik, 2018).

Unsupportive institutional research climate is challenge in conducting research studies. Research productivity is hampered by several factors pertaining to the research environment. For instance, because there aren't many possibilities for a research job, prospective researchers could just use research projects as a means of completing some of their degree requirements rather than as a means of establishing a clear career path. Other challenges mentioned by our participants were inadequate research infrastructures, a lack of tools to improve scientific writing abilities, a lack of financing, and inadequate training in research technique. Due to resource limitations and lack of significant funding for research and capacity-building for academic and research institutions (Shumba and Lusambili, 2021). Quality of research is affected by lack of teamwork. Many researchers prefer to work alone; therefore, their organizations also lack a culture that emphasizes cooperation. By highlighting the group process and polite cooperation, group support has been demonstrated to enhance the frequency of publications (Grzybowski et al., 2003).

Furthermore, quality of research is also affected by lack of funding, political, and security uncertainties are barriers to scientific research (Almansour, 2016). As expected, academic leaders prioritize other matters that are essential to their survival above undertaking research (Almansour, 2016; Lages et al., 2015). However, the need to develop a research infrastructure based on sustainable financial resources and a research system that motivates researchers has been emphasized by international experts. Furthermore, obtaining worldwide recognition requires the use of English as the research language (González-Alcaide et al., 2017; Almansour, 2016).

Previous research studies conducted on bullying are mostly conducted in the educational context. However, bullying in research academia still needs the attention of researchers. Bullying is a causes' severe consequence in the field of research in the context of compromised research integrity, research misconduct, low quality of research and production of poor-quality researchers and research. Therefore, Present research was intended to explore the factors responsible for the bullying of researchers. Researchers' bullying results in compromised research integrity and low-quality research. Even bullying in research academic produces ill researchers and ill research.

Research Objectives

1. Explore factors responsible for research bullying at the university level.
2. Explore the causes of research integrity and low-quality of research.
3. Explore the causes of ill research and ill researchers at the university level.

Literature Review

Bullying in research academia resulted in low research integrity and quality, ill researchers and ill research studies. In this regard, various research studies conducted on the concept and causes of low research integrity, poor quality research studies and production of ill researchers have been covered in the literature review section.

Integrity in the research is one of the reasons for maintaining quality research. Research integrity values in practice are sanctionable values, preventing fabrication, plagiarism, and

falsification, fair credit, human dignity, transparency, values, integrity, inquisitiveness, reflexivity, collegiality and trust (Valkenburg et al., 2021). Quality of research and integrity are at risk due to questionable research practices. Questionable practices (QRPs) in research are based on intuition, eliminate data (such as outliers), select analysis based on positive results, not disclose findings that are at odds with existing literature, eliminate outcomes that conflict with earlier study by oneself or others, eliminate results that are not significant, declare p values to be inequalities (for example, by not trying to publish a study with results that are not significant), don't disclose methodological information, present a mean devoid of its SD, only provide effect sizes for noteworthy outcomes (Isbell et al., 2022).

Academic infractions are a cause of decline in academic integrity and research quality. Academic infractions include adjusting or changing data to achieve the intended outcome, adjusting or changing data because of financial constraints, adjusting or changing data for statistical significance, create or fabricating data (Isbell et al., 2022). The question of what constitutes creative research is raised by the novelty issue. Orfali (2022) explains that the breadth of the journal may be used as a proxy for what constitutes new research, it frequently reflects a "non-Arabic dominance" of the area (Accordingly, American and European publications frequently consider research on disorders that are pertinent to Arab researchers' health situation to be of low importance (Hanafi, 2011; Lages et al., 2015). Arab academic and research institutions must therefore expand the number of reputable Arabic journals with impact factors that draw Arab scholars to reclaim scientific authority (Orfali, 2022). According to writers, selecting a study topic that lacks originality cannot be later saved, while mistakes in research technique and data analysis, together with bad language and manuscript arrangement, indicate weaknesses that may be corrected to some extent. Robinson et al. (2013); Enago Academy (2023) emphasize the problem that how crucial a thorough literature assessment is to determine the current research gaps that will aid in the identification of novel research ideas. Similarly, when Hamadeh et al. (2017) looked at trends in cancer research in the Arab world, they found that Arab researchers conducted marginally relevant research that is unlikely to enhance cancer health in their populations, confirming the lack of original research.

Research integrity concerns pertaining to human subjects' research, including vulnerability, hazards, rewards, informed consent, and confidentiality. Research integrity, also known as responsible conduct of research, is concerned with abiding by the law and ethical standards. Regulations governing the conduct of science in general and research involving humans and animals in particular, including standards for data collection, reporting, analysis, sharing, publication, and interpretation; authorship assignment; conflict of interest disclosure and management; collaboration, student, and trainee work; manuscript and grant review; financial and other resource management; and misconduct investigation (Resnik & Resnik, 2018). Emerging ethical issues in research are social injustices, distributive injustices, epistemological injustices, ethical anguish, research integrity, conflicts of interest, individuality and performance, power disparities and oversight, and regard for study participants (Drolet et al., 2023).

Questionable research practices (QRPs), research misconduct, and their potential explanatory factors also cause low-quality research work and researchers. Most common practices in questionable research are not publishing or republishing legitimate negative studies, publications do not adequately disclose study flaws and limitations, inadequate mentoring or supervision of junior co-workers, not paying enough attention to the tools, abilities, or knowledge" and not taking enough notes on the research process. Research misconduct is fabrication or falsification and reasoning factors behind peer and scientific norms, perceived job pressure, publication pressure, funding-dependent pressure, mentorship, research field competition, and organizational justice either distributive or procedural (Gopalakrishna et al., 2022). Causes of academic publishing corruption are the use of predatory journals, duplicate publications, fabrication, peer review, salami slicing, falsification, and plagiarism, fraud, impersonation and hijacking of legitimate journals, paper mills, and guest authorship for payment (Glendinning & Eaton, 2024).

Research Methodology

A qualitative research paradigm with an inductive approach was followed as the current study was exploratory and few research studies are conducted on existing research topics. The inductive approach involves creating themes and deriving meaning from data without any idea of what themes will emerge from the data without preconceptions. From the inductive approach present research

followed the reflexive thematic analysis as this is a very flexible way of conducting the thematic analysis which allows researchers to remove, change and add codes while working with data. It emphasizes the researcher's active engagement in reflecting critically on their assumptions and interpretations to shape the analysis.

Research Instrument and Data Analysis Technique

Interviews were conducted to explore the participants' subjective experiences regarding research bullying, the quality and integrity of research, ill researchers, and ill research. Thematic analysis was used to analyze the data, as it is useful for gaining subjective information about participants' opinions, views, and experiences.

Sampling Technique and Research Participants

Given the nature of the research, a purposive sampling technique was used for data collection. Research supervising faculty and supervisees, degree holders who completed their degrees in the last five years, were selected as participants in the research. A total of 20 participants were selected, 10 of whom were research supervisors and 10 were supervisees.

Data Analysis

Thematic analysis is based on the framework given by Braun and Clark (2006). Themes and subthemes emerged from the data. The concise abbreviation of RSup is used for mentioning the Research Supervisors' Perspectives whereas RSe is used for representing the Research Supervisees Perspective.

Theme 1 Bullying in Research Academia

Bullying in research academia is unethical behaviour in research environments where individuals involved in the research process exert power over others through coercion, manipulation, or intimidation which manifests in several forms such as taking credit for others' research, discouraging a colleague's work and creating a hostile research environment.

1.1 Responses on Conflict of Interest

- Conflict of interest with higher authorities is a cause of bullying in research. Conflict of interest with higher authorities can be financial, professional and personal but it may damage the quality of research and is a cause of research bullying. (RSup 5)
- Researchers' conflict of interest with higher authorities is also a cause of research bullying. Research bullying occurs in many forms and one of the reasons for it is researchers' or supervisors' viewpoints is not following the interest of the higher authorities. (RSe 4)

1.2 Responses on Disrespect of the Researcher and Supervision

- Disrespect of the researcher is a research bullying. Targeting researchers' personalities, criticizing them publicly, and humiliating them due to personal liking and disliking. (RSup 2)
- Research bullying happens in many forms and disrespect of researcher is one of them. Targeting the personality and work of the researcher instead of guiding the researcher is a disrespect. (RSe 3)
- Researchers and even supervisors face inappropriate and distrustful behaviour from the higher authorities and evaluators. (RSe 4)
- The department makes the supervisor responsible for every action of the supervisee. Supervisors and supervisees face disrespectful behaviours during defences and presentation of research work in front of panels (RSup 2).
- Supervisees suffer and face tough times as Heads and higher authorities dislike their supervisors. Sometimes students suffer due to conflicts of heads with supervisors (RSup 9)
- Instead of giving respect to the supervisor for supervising the academically low achievers, supervisors face disrespectful behaviour from higher authorities. (RSe1)
- Supervisors face disrespectful attitudes due to the disliking of supervisors by the higher authorities or heads. Students also face problems due to conflict between supervisors and heads. (RSe 7)

1.3 Response on Distributive Injustice

- One of the reasons for research bullying is the distributive injustice from the heads of the departments. It is a perceived unfairness or inequality in the allocation of research students among supervisors by Heads of Departments (HODs) is an example of distributive injustice. (RSup 7).

- Heads mostly take those students who perform academically well. They don't want to give supervision to the faculty who they don't like. (RSe3)
- 1.4 Response on Ethical Silences**
- Ethical silences by research students" describes circumstances in which students conducting research may decide not to confront with supervisor while they are working. This can happen for several reasons, such as a desire to fit in with the norms, pressure from institutions or supervisors, ignorance, or fear of the consequences (RSup 3).
 - Researchers mostly don't confront the higher authorities and keep silent. Sometimes supervisors also prefer to keep silent due to the interest of the supervisees. (RSe2)
- 1.5 Response on Fear of Retribution**
- Researchers and supervisors face bullying due to fear of retribution. (RSup 5)
 - Researchers face bullying sometimes due to fear such as delays in award of degrees and unpleasant circumstances during various stages of research. (RSe 8)
- 1.6 Response on Social Injustice**
- When people or groups involved in or impacted by research operations are treated unethically or unfairly, it is referred to as social injustice in research (RSup 7)
 - Scholars supervised by higher authorities were given things for granted and they got their degrees easily. (RSup 5)
 - Students opt for supervisors in good positions such as head because they get the benefits of getting a degree easily. (Respondent 6).
 - The department showed some grudges for the supervisory staff & this must face scholars. The department discourages hard-working & multitasking scholars. Such scholars must face the rude behaviour of the department. This situation irritated me a lot. Consequently, I faced some health issues. (RSe 2)
- 1.7 Response on Biased Behaviours**
- Bullying also occurs in the form of biased behaviour of heads. Higher authorities' behaviour should be unbiased for the supervisors and supervisees. (RSup 2)
 - Heads show biased behaviour towards those supervisees who are not under the supervision of heads or higher-ups. (RSe 7)
- 1.8 Response on Ethical Temptations**
- Ethical temptations are situations when researcher chooses between acting in a way that may be immoral or unethically against their ethical values. These temptations frequently occur when short-term advantages, such as writing a thesis by someone else. (RSup10)
 - Students compromise on research integrity and show misappropriation, silencing dissent, manipulating data, and neglecting mentorship in their research process. (RSe 2)
- 1.9 Response on Influencing Policies Negatively**
- It looks that policies are only for few students. Departments interpret the policies in their way. Students suffer due to misinterpretation of policies. This negatively impact the quality and integrity of research and researcher. (RSup 6)
 - Influencing organizational policies negatively is also a cause of bullying. There is a need for the same rules for all students. Some students get degrees easily while others face difficult situations in the whole process of research work. (RSe 9)
- 1.10 Response on Bullying by Superiors or Higher Authorities**
- An attitude or practice in which superiors put undue pressure on researchers during the research process, restrict their freedom or creativity, or harass them for personal or professional reasons. This attitude can negatively affect the integrity, quality, and mental health of researchers.(RSup 10)
 - Researchers face pressure to deliver results according to the wishes of superiors/higher authorities, unreasonable deadlines, ignoring researchers' opinions or challenging their competence, unfair control of funds, and unnecessarily criticizing their work, despite their efforts and not recognizing researchers' achievements. (RSe 2)

Theme 2 Compromised Research Integrity and Quality

2.1 Response on Bullying and Research Quality

- One of the reasons for low research quality is the bullying of research supervisors and supervisees. Bullying of supervisors and supervisees both undermines the research quality and leads to setbacks. (RSup 3)
- Bullying promotes a toxic research environment that suppresses the collaboration and creativity of supervisors as well as supervisees. As a supervisor, I strive to foster a supportive atmosphere where all researchers feel valued and safe to express their ideas. (RSup 8)
- As a supervisee, I have experienced instances of bullying that affected my confidence as well as positive research contributions. This negative environment not only impacts my mental well-being but also detracts from the overall quality of our research. Addressing bullying of researchers and research supervisors is essential for promoting a productive culture of research. (RSe 10)

2.2 Response on Lack of Training

- Lack of training for supervisors and supervisees results in compromised integrity and low research quality leading to unethical research practices. (RSup 9)
- Inadequate training regarding research practices makes it challenging for research scholars to uphold integrity and quality in their work. Scholars need training in many areas of research such as data analysis etc. (RSe 1)

2.3 Response on External Pressures

- Researchers engage in ill research practices and compromise the research integrity due to pressure to complete the thesis within tight deadlines. (RSup 3)
- Researchers mostly face stress and pressure to complete their research work quickly which results in ill research practices to meet deadlines set by organizations and supervisors. (Respondent 5)

2.4 Response on Ethical Leadership

- Supervisors need to perform as ethical leaders to set a positive example to foster a culture of integrity among researchers to address issues of bullying and low research quality. (RSup 7)
- The supervisors' role is important to prioritize ethical research practices to address issues of low research quality and bullying. (RSe 4)

2.5 Response on Power Dynamics

- Research integrity and quality stem from power imbalances where supervisors exert undue influence over researchers which leads to a culture of intimidation and fear. (RSup 1)
- Supervisees face bullying from higher authorities. Supervisors because of power imbalances promote adverse work environments and compromise on research integrity. (RSe 4)

2.6 Response on Quality vs Quantity

- Research faculty compromise the integrity and produce low-quality publications due to the pressure to publish more research papers. Most of the research supervisors focus on producing more research MPhils and PhDs. (RSup 2)
- My supervisor is supervising 5 MPhils and 4 PhDs. It becomes difficult for supervisors to provide proper time and guidance to the supervisees due to many supervisions as they are also involved with other teaching and administrative responsibilities. (RSe 8)

2.7 Response on Lack of Autonomy

- Supervisors can't make independent decisions regarding many aspects of research as they follow organizational rules and procedures. Liking and disliking of higher authorities and heads also stops the supervisors and supervisees to take certain decisions which may help to enhance the quality of research. (RSup 6)
- Supervisees are not involved in decision-making regarding research processes as they only follow directives of higher authorities and supervisors without question. (RSe 4)

2.8 Response on Ethical Dilemmas

- Sometimes we want to work on some research areas that are important but higher authorities reject them due to their interests. (RSup 7)
- Supervisees face conflicting pressures or priorities to produce specified results which is the cause of compromise in research quality standards and integrity. (RSe 2)

2.9 Response on Consequences of Research Unethical Practices

- Unethical practices in research can lead to decreased quality, damage to creativity, self-esteem, increased stress, and professional frustration, promoting an unhealthy environment and weakening trust in research results. (RSup 7)
- Research unethical practice is detrimental to the development of research and academia and reflects an unethical behaviour that affects the performance and well-being of researchers. (RSe 2)

Theme 3 Production of Ill Research

Researches that do not adhere to scientific principles, standard procedures, or ethical guidelines may include flaws in the research design, data collection, analysis, or interpretation of results. The research provides unreliable or inaccurate results, which may be of no use in solving scientific, social, or practical problems. Failure to use proper methodology or authoritative references in research, collect adequate data to test hypotheses and presenting results in a biased or misleading manner.

3.1 Response on Poorly Designed Research

- Mostly research studies are poorly design in terms of objectives, methodology and lacks proper support of literature. (RSup 7)
- As a research scholar I understand the importance of research design however mostly researchers lack information regarding research process and only want to complete their research work (RSe 2)

3.2 Response on Ethical Violations

- Researchers compromise on ethical standards which lead to low quality research. Universities must prioritize ethical considerations. (RSup 5)
- Ill research studies are cause of not following the ethical standards of research integrity. (RSe 6)

3.3 Response on Lack of Ethical Considerations

- Students ignoring ethical standards and compromise on research integrity. They just want to complete the work to get degree on time. There is many software which are used for paraphrasing and other shortcuts in research process used by the research scholars. (RSup 2) Ethical guidelines feel restrictive in some cases. Those students who are language smart they easily work on paraphrasing and even no software detect their work. (RSe 6)

3.4 Response on Lack of Objectivity and Bias

- Researchers are human being they show biasness in reporting results and writing research which undermine the research integrity. There is need of objectivity in research process specially in analyses and interpretations. (RSup7)
- Ill research lacks objectivity. Personal biases unconsciously influence research discussions and findings. (RSe 5)

3.5 Response on Time Constraints

- Pressure to complete the work and publish lead to rushed and lower quality and ill research. Universities are required to support the quality over quantity. (RSup1)
- Research scholars are supposed to follow the deadlines which are in many cases unrealistic that is why instead of working on quality they work on completion of their work. (RSe 8)

3.6 Response on Lacks Practical Implications

- Students focus is not to address the real-world problems instead they focus on the completion of their degrees. This is the reason that majority of the research studies don't have any societal impact. (RSup 4)
- While topic selection much of the focus of higher authorities is on the theoretical framework, research methodology and research gaps and they forget to connect research to its practical applications in the society. (RSe 7)

3.7 Response on Societal Needs

- Research studies do not address society needs. Students only consult research studies when they want to cite it in their research. One of the reasons that most of the research studies don't have impact on society as they don't address social problems. (RSup 8)

- Researchers are disconnected from societal issues, and they just focus on academic requirements for the completion of their research work. In some cases, even supervisors and organizations discourage students from selecting topics relevant to issues of society. (RSe 5)

Theme 4 Ill Researcher

A researcher who does not follow research principles, standard procedures, or ethical guidelines and substandard researcher often engage in careless, biased, or unprofessional conduct in research, which can lead to unreliable or flawed research results. Ill researchers often fail to select the right research methodology, use biased data, and present results in an unethical manner, leading to negative consequences such as influencing public decisions, setting a wrong example for new researchers, using unreliable research in development projects, and weakening academic and moral values, and ignoring research ethics or other requirements.

4.1 Response on Research Slaves

- Now students and slaves are research slaves. In return for guidance and academic credit, researchers become "research slaves" of supervisors and higher authorities. They were given different tasks like data entry, transcription, literature reviews, and even experiment assistance that may be included in a research study. (RSup10)
- Students don't have independent thinking. Mostly they followed what the supervisors and organizers wanted from them. They act like puppets. (RSe2)

4.2 Response on Irresponsible Attitude towards Research

- One of the characteristics of ill researchers is that they are irresponsible. They don't take responsibility for research misconduct and errors. They should be held accountable for their mistakes. (RSup 8)
- Sometimes researchers blame external factors for their failures and don't take responsibility. (RSe 9)

4.3 Response on Dishonest Conduct

- Ill researchers falsify data or research findings to get desired results. Open dialogue with researchers may make an environment where they can discuss their challenges openly instead of feeling pressure to alter results. (RSup 9)
- Researchers sometimes manipulate research data to fit their narrative due to the pressure to publish. (RSe 6)
- Plagiarism practices are common. Students use software for paraphrasing. AI tools make these tasks easier for them and even many plagiarisms detective software even can't detect the source of information. (RSe 2)

4.4 Response on Lacks Teamwork

- Ill researchers don't want to work in in team and prefer to do work in isolation and to accept feedback. A collaborative research environment is important where students regularly meet in group to share their ideas to improve the quality of research. (RSup10)
- Researchers prefer to work alone due to their inflexible attitude, but this limits growth. (RSe 1)

4.5 Response on Disregard Ethical Standards

- Ill researchers disregard and ignoring already established ethical principles and guidelines of research. There is a need to incorporate training regarding research ethics to ensure research integrity. (RSup 9)
- Ill researchers mostly overlook ethical considerations as their focus is on the completion of work and publication. (RSe 10)

4.6 Response on Rigid Behaviour

- Researchers are mostly resistant to new research methods, ideas and constructive criticism. (RSup 5)
- Feedback provided by others stops my work progress. Everyone has its own point of view. Why supervisees are supposed to accommodate all suggestions given by evaluators. (RSe 2)

4.7 Response on Focus on Quantity

- Focus of ill researcher is on just increasing the number of publications. Ill researchers use malpractices of fake publications through adding their names in researchers in which they don't have any contribution. (RSup 9)

- Few supervisors want from their supervisees to complete the work only just because they want more research thesis with names. In these cases, they give unrealistic deadlines to them. Therefore, the focus is not on the quality of research work. (RSe 3)

Discussion and Conclusion

The present research defines research bullying as unethical behaviour in research environments where individuals involved in the research process exert power over others through coercion, manipulation, or intimidation which manifests in several forms such as taking credit for others' research, discouraging a colleague's work and creating a hostile research environment. The objectives of research were to explore the impact of research bullying on research integrity, causes of ill research and production of ill researchers at the university level. For this purpose, qualitative research approach with inductive method was employed to conduct current research. A total of 20 participants 10 research supervisors and 10 research supervisees were selected through purposive sampling technique.

Results of the thematic analysis showed that bullying in research academic occurs in forms of conflict of interest, disrespect of supervisee and supervision, distributive injustice, ethical silences, fear of retribution, social injustice, biased behavior, ethical temptations and influencing policies negatively. Drolet et al. (2023) in their study also identified that research integrity, conflicts of interest, respect for research participants, individualism and performance, power imbalances and lack of supervision, social injustices, distributive injustices, epistemic injustices, and ethical distress are the first ten factors. To help identify future solutions to address transversal ethical difficulties in research that impact the diverse members of the academic community, this study highlighted several problematic components.

Results of present research study also explored that bullying in research academia results in compromised research integrity and quality. Causes of compromised research integrity and quality are bullying and research quality, lack of training, external pressures, ethical leadership, power dynamics, quality vs quantity, lack of autonomy, and ethical dilemmas. Majid and associates conducted a mixed-methods study to identify the obstacles Pakistani postgraduate trainees face while doing and publishing research. Lack of time, statistically insignificant results, low publication priority in their research culture, poor scientific writing abilities, difficulty navigating the journal submission process, and insufficient funding for publication fees were the primary obstacles, according to their survey (Majid et al., 2022). Weathers and colleagues found that the primary obstacles to conducting research and navigating the publication process were insufficient time, poor mentorship, poor study quality, and delays in receiving approval from the relevant institutional review board (Weathers et al., 2019). According to Almansour's analysis of an interview study conducted with presidents and rectors of academic institutions in the Arab Middle East, "the main causes of the dilemma of Arab universities are a lack of research infrastructure, funding and resources, and English publications" (Almansour, 2016).

Present research explored that causes of production of ill research are poorly designed research, ethical violations, lack of ethical considerations, lack of objectivity and bias, time constraints, lack of practical implications and societal needs. Previous research studies also identified the causes of research misconducts. Research misconduct are practiced by researchers irrespective of the country including LMICs (Okonta and Rossouw, 2013; Felaefel et al., 2015), It is important to realize that research misconduct is not exclusive to any one area. Inadequate ethical training, a lack of resources, and the "pressure to publish" that pervades both global zones are the main causes of misconduct instances, even in the West. It is essential to address these prejudices to promote a more inclusive and equitable international scientific community and solutions to the problems of research and publication. Busse and August (2020) found that the scientific community, high-quality research and subsequent publishing in peer-reviewed publications are essential.

Present research explored causes of production of ill researchers are research slaves, irresponsible attitude towards research, dishonest conduct, lacks teamwork, disregard ethical standards, rigid behaviour and focus on quantity. Research study conducted by Drolet et al. (2023) also consistent with results of present study that emerging ethical issues in research are social injustices, distributive injustices, epistemological injustices, ethical anguish, research integrity, conflicts of interest, individuality and performance, power disparities and oversight, and regard for study participants.

Research Implications and Future Directions

Various strategies may be adopted to reduce the bullying in research academic for enhancing the research integrity and quality which will decrease the production of ill research and researchers. International collaboration is significant in this context. Collaborations with foreign researchers were praised by several participants as a crucial strategy for removing obstacles and raising the possibility of high-caliber research and ensuing publications. It is beneficial to have a global research team since the range of perspectives generates more innovative research ideas for investigating new illnesses, treatment comebacks, tools for clinical decision-making, and strategies to lessen health inequalities (Ilonze et al., 2022). Additionally, LMIC universities can work with HIC colleges to get funds. International collaboration between high-income countries (HICs) and low-income countries (LMICs) faces challenges such as power dynamics, authorship rank, and fair funding allocation. Perceived bias and power imbalances between researchers contribute to unfair authorship practices in North-South partnerships (Busse & August 2020; Smith et al., 2014; González-Alcaide et al., 2017). Addressing these issues could potentially improve global health research equity (Salager-Meyer, 2008; Smith et al., 2014). Support for publication may help researcher. There are difficulties in navigating the complexities of the scientific publication process. Writing cover letters, editing copy, and effectively responding to reviewers' feedback are all included in this. To help researchers who wish to publish their health research in peer-reviewed journals, programs like the non-profit Pre-Publication Support Service (PREPSS) provide on-site training, peer review, and copy-editing services (Busse & August 2020). Similarly, Author Aid in the Eastern Mediterranean (2023) region broadens its services to include ethical and good editorial standards training, manuscript editing training, and research writing training.

Writing and publishing interventions are also important in this aspect. A comprehensive study of several treatments to improve writing and publishing abilities was conducted by Busse and colleagues (Busse et al., 2022). The most effective interventions were those that emphasized the significance of having a high mentor-to-participant ratio, the necessity of accommodating the time demands of time-pressed researchers, and the need for funding to sustain open access costs and high-quality internet connectivity. Additionally, it is now clear how beneficial collaborative groups are for researchers. Galligan and colleagues, for instance, emphasized that writing groups were infused with a spirit of camaraderie, which improved the writing process (Galligan et al., 2003). This view was supported by Shah and colleagues' interview research, where participants valued the contribution of mentors and peers to group writing (Shah et al., 2009). Lastly, Pololi and associates discovered that writing in pairs produced sentences that were more succinct and grammatically correct (Pololi et al., 2004).

Desirable research practices are also required to reduce the ill research practices. Desirable practices of research are verifying statistical test assumptions, conduct a priori power analysis and report effect sizes (isbell et al., 2022). Moreover, mentoring is also beneficial for graduate and postgraduate students. However, inadequate coaching was highlighted by our participants. Graduates who want to work in research are ill-prepared and frequently need close supervision from more experienced researchers. The basis upon which graduate students build their academic careers is weakened by ineffective mentorship from older investigators. Numerous institutions lack a critical mass of research-based mentors and researchers and are not research-intensive (Sweileh et al., 2014). Research using focus groups and discussions was conducted by Shah et al. (2009) demonstrated how mentors are crucial in helping novice researchers and are often looked to for assistance and confidence. Current research study also proposed suggested framework for future researchers.

Table 1 Suggested Research Framework for Future Researchers

	Bullying in Research Academia	Compromised Research integrity and quality	Production of Ill Research	Production of Ill Researchers
i.	Conflict of interest	i. Bullying and	i. Poorly Designed	i. Research slaves
ii.	Disrespect	Research Quality	Research	ii. Irresponsible
iii.	Distributive injustice	ii. Lack of Training	ii. Ethical	Attitude towards
iv.	Ethical silences	iii. External Pressures	Violations	Research
v.	Fear of retribution	iv. Ethical Leadership	iii. Lack of Ethical	iii. Dishonest
vi.	Social injustice	v. Power Dynamics	Considerations	Conduct
vii.	Biased behaviour	vi. Quality vs Quantity	iv. Lack of	iv. Lacks Teamwork
		vii. Lack of Autonomy	Objectivity and	v. Disregard Ethical

iii. Ethical temptations	viii. Ethical Dilemmas	Bias	Standards
ix. Influencing policies negatively	ix. Consequences of Research Unethical Practices	v. Time Constraints vi. Lack Practical Implications	vi. Rigid Behavior vii. Focus on Quantity
x. Bullying by Superiors or Higher Authorities		vii. Societal Needs	

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