



## Should Institutional Review Boards for Research Ethics be Held Accountable for Retracted Publications from Academia and Industry?

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### ABSTRACT

In recent times there has been evidence of many publications across academia and industry being retracted for various ethical violations in research including data Fabrication, Manipulation, Falsification, and Plagiarism despite the widespread Institutional Review Boards (IRBs) to uphold Research Ethics from conceptualizing a study, publication of results and implementation of findings. Although the structure and membership composition of IRBs may vary globally, they all have converging guidelines. This study tackles research misconduct by holding Institutional Review Boards accountable for retracted articles, employing interest analysis and principle-based idea analysis in critically reviewing my concerns. Based on the evidence from the literature on the increasing numbers of retracted papers that have had ethical clearance, I argued that, if IRBs are doing their job correctly, research misconduct should be minimal. Further, if research misconduct resulting in retracted publications becomes a spreading problem that attracts sanctions, then IRBs must be considered as part of the problem and should suffer sanctions too.

### KEYWORDS

Institutional Review Board, Research Misconduct, Research Ethics, Paper Retraction.

### ARTICLE HISTORY

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### Background

Research misconduct refers to a variety of ethical violations, including purposeful data Fabrication (making up data), Manipulation, Falsification, and Plagiarism (Stern, Casadevall, Steen, & Fang, 2014). Studies have shown that perverse incentives, financial interest, and pressure to publish are some commonly reported risk factors for scientific misconduct (Davis, Riske-Morris, & Diaz, 2007; Fanelli, Schleicher, Fang, Casadevall, & Bik, 2022). However, evidence of their prevalence as well as association with actual data fabrication and falsification are inconclusive (Gopalakrishna, Ter Riet, Vink, Stoop, Wicherts, & Bouter, 2022). Findings of Fanelli, Schleicher, Fang, Casadevall, and Bik, (2022) in their case-controlled analysis of articles containing problematic image duplications indicate that the country of affiliation of first and last authors is a significant predictor of scientific misconduct. These have been a concern to the scientific community since the late nineteenth century (Babbage, 1830), hence special attention has been paid to these to ensure credible research and prevent academic dishonesty (Ayodele, Yao, & Haron, 2019). Despite the attention given to research misconduct, I have observed that the practice is on the ascendancy in recent times and igniting public uproar as well as professional discussions for redress. This observation which requires the needed attention has

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also been documented by Eaton, (2021) and other investigators of research misconduct in academia (Tong, Shen, Huang, & Yang, 2022; Gopalakrishna, Ter Riet, Vink, Stoop, Wicherts, & Bouter, 2022 and Christensen Hughes, & Eaton, 2022).

The relevance of IRBs in academia and industry over the years cannot be overemphasized (Abbott, & Grady, 2011). While acknowledging the significant challenges IRBs face including 'being pulled in competing directions' (Friesen, Gelinas, Kirby, Strauss, & Bierer, (2023), IRBs play a crucial role in protecting vulnerable populations in research (Gelinas, Strauss, Chen, Ahmed, Kirby, Friesen, & Bierer, (2023). In this paper, I explored a recent phenomenon of increasing retractions of scientific publications that have already had ethical clearance from Institutional Review Boards (IRBs) for research ethics and debated whether these IRBs should be held accountable for their review practices in these retracted publications. I questioned the rigorousness of IRBs, the supervision of their work, and whether it was time for IRBs to be sanctioned for misconduct. I also in this paper discussed who should be responsible for sanctioning misconduct.

The focus of this paper is multifaced since it looked at the contextual issues relating to paper retraction and the perceived role of IRBs and practices towards research integrity. The Committee on Publication Ethics (COPE) defines retraction as "a scientific mechanism to correct and alert readers to articles with flawed or erroneous content or data that their findings and conclusions cannot be relied upon so as to correct the literature and ensure its integrity" (COPE Council, 2019, p. 4). In recent times however, there have been pieces of evidence that many papers across academia and industry are being retracted for various research-related misconducts (Karabag, & Berggren, 2012; Fanelli, Costas, & Larivière, 2015; Azoulay, Bonatti, & Krieger, 2017; Aspura, Noorhidawati, & Abrizah, 2018). For instance, Grieneisen, and Zhang (2012), in a systematic review on paper retraction, found 4,449 scholarly publications retracted from 1928–2011. Siva, and Rajendran, (2023) who looked at the retraction of scientific publications in Brazil, Russia, India, China, and South Africa (BRICS nations) between 1989 and 2021 also found that 230 articles by the top 20 authors have been retracted, accounting for 72.67% of all papers. While the Springer publisher retracts 29.69% of articles, the Institute of Electrical and Electronics Engineers (IEEE) Computing Society retracted 99.04% of publications. Retractions in the Arabian Journal of Geosciences amount to 6.19%. These papers suggest that combating plagiarism and fabrication is essential for advancing research integrity for averting more retractions.

These observations in my view question the general core mandates of IRBs which are expected to generally ensure research integrity as identified by Roje, Reyes Elizondo, Kaltenbrunner, Buljan, & Marušić, (2023) and Frank, Florens, Meyerowitz-Katz, Barriere, Billy, Saada, & Besançon, (2023). Globally, Institutional Review Boards (IRBs) for Research Ethics are responsible for protocol review, approval of the overview of data collection, and approval of research manuscripts for submission to publication (Vitak, Proferes, Shilton, & Ashktorab, 2017). Although the structure and membership composition of IRBs may vary, they all have common converging guidelines to ensure the ethical conduct of research whose results are credible (Rodríguez, Corralejo, Vouvalis, & Mirly, 2017). In my opinion, which is also based on the evidence from the literature on the increasing numbers of retracted papers that hitherto have had ethical clearance, I argue that if IRBs are doing their job correctly, then research misconduct leading to paper retractions should be minimal. I, further, argue that if the retraction of publications due to research misconduct becomes a spreading problem, then IRBs must be seen as part of the problem hence they must also be held accountable. In my personal considered

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view, a number of reasons may contribute to this problem which this paper has unearthed, critically reviewed, and discussed.

I further raised these additional three (3) key points based on which my arguments were advanced as follows:

1. If IRBs have approved research manuscripts that were later retracted, IRBs are contributing to research misconduct.
2. If IRBs are contributing to research misconduct, IRBs should be ethically responsible for their review practices in retracted publications.
3. If IRBs are being regulated, then these IRBs must be ethically held responsible for their review practices in retracted publications.

## Methodology

### Design

This is a philosophical paper which argued the point 'Should Institutional Review Boards for research ethics be held accountable for retracted publications from academia and industry'? My argument was based on empirical evidences on the incidence of retracted papers worldwide.

In order to provide some solutions to the ethical conundrums relating to the issues raised in this paper, I adopted an interest-analysis (Sedler, 1982) and a principle-based concept analysis (Penrod, & Hupcey, 2005) designed to dispassionately discuss my points on the premise of holding Institutional Review Boards accountable or penalizing them for retracted papers that had ethical approval from an IRB. While the principle-based concept analysis is founded on four philosophical principles (epistemological, pragmatic, linguistic, and logical reasoning), the interest analysis offers fair discussions and answers to the issues. For this reason, Bernard, (2015) posits that interest analysis is a rigorous and complete approach for scientific idea analysis since it requires researchers to critically evaluate scientific meaning and think analytically without being fanciful which was done in this current paper.

### Results

A critical review of the literature and reported incidences on occurrences of retraction of research publications have shown that many of these retracted publications across the globe including some in very reputable high-impact journals had IRB approvals at some stages of the research prior to publication. For the purpose of honest, constructive, and objective discussions In a publication by Ceci, Peters, and Plotkin, (1985), who reviewed the work of 157 Institutional Review Boards (IRBs) on socially sensitive proposals observed that socially sensitive proposals were twice as likely to be rejected by IRBs. Reasons for the rejections varied but included sensitive proposals containing ethical concerns (e.g., deception), violation of ethical requirements, proposals that did not involve ethical concerns, and methodological flaws particularly relating to using a poor control group.

Perry, (2011), also analyzed the work of 32 Institutional Review Boards (IRB) in a university based on evidence obtained from the universities' websites to examine two specific issues: (a) How IRBs define vulnerable populations, and (b) the policies of IRBs regarding participants who may have limited or no knowledge of the English language. Perry observed that there are significant differences in the definition of vulnerable populations and the requirements for including or excluding participation in research. These variations to me are the starting point of confusion in establishing the inclusion and exclusion criteria for participation in research as well as addressing concerns relating to who is eligible for providing informed consent for participating in research.

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In the light of these, I will build my key findings/results and arguments on the following five (5) key points:

### **1. IRBs are understaffed (lacking members) to conduct the review**

Seralegne, Wangamati, Bernabe, Farsides, Aseffa, and Zewdie, (2022) in their study observed that only a few studies particularly in sub-Saharan Africa evaluated the capacities of Institutional Review Boards (IRBs). It was noted that in exploring the composition of IRBs, training, and challenges experienced in the ethics review processes by members of research institutions and universities in a sub-Saharan African country such as Ethiopia, the majority of IRB members were trained in research ethics and good clinical practice but most IRBs lack the required resources (funding, physical and human resources) to work effectively. Candilis, Lidz, Appelbaum, Arnold, Gardner, Garverich, and Simon, (2012) on the hand stated in their study that Institutional Review Boards (IRBs) are most often viewed as overburdened, understaffed, and requiring significant investments of time and resources to work effectively. Seralegne, Wangamati, Bernabe, Farsides, Aseffa, and Zewdie, (2023), in a study that evaluated the IRB's capacity in Addis Ababa, Ethiopia, observed that most members of the various IRBs are trained in research ethics and clinical practice, but perceive the training as basic due to challenges including investigators wanting rapid review, time pressure, not following guidelines, limited expertise, and lack of administrative offices. Other researchers (Lasco, Yu, and Palileo-Villanueva, 2021), in clinical, public health, and social scientific research, argued that ethics review is a key source of inequality since it disproportionately disadvantages researchers on specialized issues, those outside of academia, and industry without qualified or recognized IRBs. Kim, (2012) held the view that many IBS are burdened, understaffed, lacking resources, and facing various forms of challenges while performing their tasks. These pieces of evidence suggest that most IRBs are lacking the required and adequate resources (including human resources) to work efficiently and effectively.

### **2. IRBs are compromised, due to Conflicts of Interest (COI) or financial gains**

I observed some factors that influence IRBs' conflicts of interest and these have the potential to ethically compromise the work of IRBs with regard to how fair and effective IRBs will perform their duties (Fleetwood, 2001). In both academic literature and media rapportage, financial conflicts of interest in human subjects' research have been on the increase over the years (Barnes, & Florencio, 2002). However, little is known about how decisions are made concerning the disclosure (i.e., what to disclose and what not) of financial benefits to research participants. In another study, Weinfurt, Friedman, Dinan, Allsbrook, Hall, Dhillon, and Sugarman, (2006) explored the attitudes, beliefs, practices, and issues relating to conflict of interest among IRB committee chairs. In this study, several issues emerged, key of which include the general attitudes towards conflicts of interest, circumstances under which financial interests should be disclosed, reasons and benefits of disclosure, what should be disclosed, negative impacts and barriers to disclosure, and timing and presentation of disclosure. The authors cited several reasons for the disclosure of conflicts of interest including enabling informed decision-making, promoting trust in researchers and institutions, as well as reducing legal liabilities.

Pivovarova, Klitzman, Murray, Stiles, Appelbaum, and Lidz, (2019) on the other hand examined how different types of IRBs manage their own COI by documenting existing processes and comparing them with commercial, governmental, and academic IRBs. Their findings show the differences in COI management policies among the different types of IRBs. They observed that a commercial IRB operates on a for-profit model, recognizes its own COI, uses firewalls to manage it, relies on external evaluators, and turns down potential clients. In contrast, academic IRBs, like regional IRBs, do not report specific policies for managing COI. They concluded that as IRBs

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become more common, researchers will need to weigh the various COIs specific to each IRB type. Additionally, academic IRBs may consider adopting specific policies to manage COI.

### **3. IRBs lack adequate supervision. (Who has oversight supervision of IRBs' practices?)**

The available literature on human subject regulation in research indicates that IRBs have failed the responsibilities of regulating research involving human subjects (Burriss, 2008; White, 2020; Wolf, & Jones, 2020). Moving beyond critique, Heimer, and Petty, (2010) evaluated the literature on IRB supervision drawing on the tools and scholarship of the social sciences, examined human subjects' regulation by IRBs, and stated the work of IRBs as an insufficient remedy to resolving inequalities between weak and powerful actors as a site of professional claims- and career-making, and as an occasion for institutionalization.

Distinguishing between the regulation of science and the regulation of ethics, it has been observed that the latter is far more difficult because ethics are contextual and subject to social construction (Heimer, & Petty, 2010). Findings of a retrospective study by Shetty, and Saiyed, (2015) on analyzing some warning letters that were issued by the US Food and Drug Administration to clinical investigators, various IRBs, and the sponsors of these researches showed substantial violations of ethical standards. It was noted from the analysis that the most common violations were failure to follow a monitoring schedule (58.69%), failure to obtain investigator agreement (34.78%), failure to secure investigators' compliance (30.43%), and failure to maintain data records and ship documents to the investigators (30.43%). There were also other issues related to the organization of research oversight systems and procedural issues related to unethical conduct of reviews of research protocols by the IRBs.

A critical assessment of the oversight supervision of IRBs' practices in the literature also documented how well-proposed reforms such as accreditation and centralized IRBs address these issues. In fact, most initiatives focused on procedural issues and not structural or performance evaluation issues. Based on the delineation of the problem, various calls have been made to ensure oversight of all research, a standing advisory committee to address recurring ethical issues in clinical research and a mandatory one-time review for multiple clinical studies. In most cases, the various components of IRB supervision are expected to be more effective in the areas of reviewing research protocols, financial support for IRB functions, and a standardized system for collecting and distributing data on both adverse events and performance evaluations of the activities of IRBs.

### **4. IRBs' members don't have adequate expertise for conducting the protocol review**

The importance of getting high-quality, efficient, and knowledgeable members with the requisite expertise for technical reviews of research protocols and supervision of approved research protocols has become very crucial in recent times due to the challenges relating to the limited hands-on experience and fewer number of current members serving on various IRBs both in academia and industry across the globe (Patrick, Peach, Pocknee, Webb, Fletcher, & Pretto, 2008). This quest is reflected in the paradigm shift in the way IRBs are formed and mandated to perform their assigned roles and responsibilities (Schrag, 2010). A study by Churchill, Largent, Taggart, and Lynch (2022) on diversifying the membership of IRBs found that despite gender diversity advancements, IRBs in the United States of America, remain racially and ethnically homogeneous. While 64% of the IRB chairpersons were generally satisfied with the diversity initiatives, about 57% expressed satisfaction with specific areas like having adequate expertise for conducting protocol reviews. In this regard, memberships of these IRBs remain diversified

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with about 50% of the respondents having at least one member from Black, Asian, or Hispanic backgrounds to ensure high-quality outputs emanating from diverse views.

Harbour, (2011) in a doctoral dissertation, proposed some local guidance intended to assist in the implementing activities of research technical review boards. In most institutions (Academia and Industry), the guidance created for setting up IRBs is expected to assist the members of IRBs in running a more efficient and effective review of research protocols. In most jurisdictions, these guidelines include lessons learned about the complexity of organizational decision-making, policies, procedures, checklist, organizational cultural change, quality assurance, and meeting management requirements to ensure that the IRBs do not overlook critical issues in the ethical conduct of research (Rodriguez, Hanna, & Federman, 2003; White, 2007).

Gaps in IRBs' expertise to assess the risks and benefits of research protocols have been identified in the literature (Nebeker, Harlow, Espinoza Giacinto, Orozco-Linares, Bloss, & Weibel, 2017). Consequently, a study in recent times (Serpico, Rahimzadeh, Gelinas, Hartsmith, Lynch, & Anderson, 2022) reported that as many as half of the IRBs assessed relied on outside experts to support their work. Beskow, Grady, Iltis, Sadler, & Wilford (2009), argued that it is not out of place for an IRB that might request a consultation with experts who have specialized training in a particular area of interest to assist with their work. This approach calls for effective collaboration among institutions and sometimes individual experts in an area where a particular IRB might be lacking resource persons.

Managing multiple IRBs for one project might require strong partnerships to overcome the challenges associated with overwhelming tasks that will result in work inefficiency (Gopalan, Bunger, & Powell, 2020). However, a teething problem that I can envisage is managing potential conflicts of interest and competition that might arise during such third-party collaborations. Additionally, in outsourcing ethical obligations, one might be concerned about who bears the ultimate responsibility for the outcome of a study should there be an ethical violation.

#### **5. If IRBs should be held accountable for retracted papers who should enforce the decisions?**

Various arguments have been raised as to whether IRBs should be held responsible for retracted papers and who should enforce the sanctions that might be prescribed in this regard (Redman, 2009; Horner, & Minifie, 2011; Shah, 2013). Although there has not been any empirical global consensus on this, anecdotal evidence has begun to show that most IRBs are being careful in the review of protocols to minimize the incidence of retraction of publications that granted ethical approvals to the retracted papers.

In a paper titled: 'Life after research misconduct: Punishments and the pursuit of second chances' Galbraith, (2017) observed that the scientific community frowns on research misconduct as it constitutes a serious violation of ethical standards in research. Scientists who commit research misconduct typically face corrective actions from employers and funding agencies, as well as significant professional stigma. There is, however, limited evidence about the post-misconduct career of these guilty parties. A review of Office of Research Integrity (ORI) case summaries, identified about 284 researchers who engaged in research misconduct and were subject to various ORI corrective actions including being given second chances as researchers, with indicators of post-misconduct research activities identified for 134 (47.18%) of the offending researchers in the United States.

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## Discussion

In this paper, I argued that IRBs should be ethically responsible for their review practices in retracted publications; so, if IRBs have approved manuscripts that were later retracted, IRBs are contributing to research misconduct and they should suffer sanctions too. Although the aforementioned reasons seem persuasive, I also raised the following counterarguments (objection) against sanctioning IRBs because papers that they might have approved have been retracted for some research-related offenses. I hold the objection that many a time, Institutional Review Boards (IRBs) are overwhelmed with heavy workloads amidst limited resources which might not enable them to be able to follow up on the implementation of the research after approving research protocols. In some situations, there are limitations in the implementation of IRB follow-up activities due to issues beyond the control of these IRBs, which might not allow them to be able to become accountable for the research misconduct or conflicts of interests associated with the approved research protocols. Additionally, although I hold the assumption that retraction is one of the objectives and verifiable indicators of research misconduct, a retracted paper might not necessarily be due to ethical issues but many other concerns that the publishers might have noted after a paper is published to necessitate a retraction. It will therefore be unfair and unjustified to punish an IRB on account of the retraction of a paper(s) whose protocol hitherto was approved by the IRB.

The key points of arguments driving this paper remain highly debatable. For instance, the call as to whether Institutional Review Boards (IRBs) should be held accountable for retracted publications is a grey area in bioethics since there is limited empirical evidence to support this claim of IRBs contributing to research misconduct hence, they must also be punished just like the authors of retracted papers. I hold the view that, just like any other profession, there should be some provisions for justifiable errors (margin of error). In this regard, a retracted paper whose protocols were already approved by an IRB should also be seen as one of these errors of monitoring. The other side of these arguments is to what degree of such errors or frequency of retraction should be deemed acceptable or unacceptable. Should a retraction of one published paper for instance be a basis for punishing an IRB?

Institutional Review Boards (IRBs) may be seen as well-established units in academia or industry, yet they may be perceived as an impediment to human research in some situations (Rice, 2011). Many IRBs usually have clearly defined terms of reference as well as a code of practice, which clearly spells out their roles and responsibilities toward the ethical conduct of research. The previous arguments I raised that if IRBs are contributing to research misconduct, then these IRBs should be ethically responsible for their review practices in retracted publications, need to be discussed within a specific context and not a generalized policy since such generalized policies could be misleading and the policy implementation outcomes might also be very devastating in some situations.

Haven argued earlier that IRBs should be ethically responsible for their review practices in retracted publications, the level of accepting such responsibility requires some detailed clarity on what IRBs may be liable for and what they may not. This can be likened to acquiring a building permit to build a mansion and later that mansion collapses. In such a scenario, who should be held accountable or by extension punished for wrongdoing? In the first place what has been done wrong needs to be clearly identified and a thorough root causes analysis of events leading to the collapse of the building established for the appropriate actions. In the same way, the unfolding issues leading to the retraction of a published paper should be the main focus of the argument and not the emphasis on the work of an IRB that approved a research protocol.

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It has been argued that if IRBs are doing their job correctly, then research misconduct should be minimal (Robert, 2022; Xia, 2022). I am of the view, that no matter how well IRBs work, research misconduct might not be entirely eradicated for many reasons that have already been given in the earlier points that I raised. If retracted publications on the other hand become a spreading problem, then IRBs will definitely become the center of investigation and not necessarily part of the problem. Das and Biradar, (2016) supported this view and indicated that research misconduct may take various forms including plagiarism which I think an IRB might not have full control over to avoid after a protocol is approved and a manuscript developed.

The issue of staffing in IRBs (IRBs lacking members) to conduct research protocol reviews was observed by Seralegne, Wangamati, Bernabe, Farsides, Aseffa, and Zewdie, (2022) in their study of research institutions and universities in Addis Ababa, Ethiopia, raises concerns about the qualifications required by IRB members, the recruitments process of members and the remuneration package for working in an IRB. In many institutions, the work of IRB members is voluntary and sacrificial, and in academia, it is most often seen as community services which usually comes with no or small remuneration. In my opinion, the unattractive remuneration packages for IRB members will not motivate qualified people to join IRBs especially when responsibilities are very time-consuming. It is therefore justified to say that IRBs are compromised, due to Conflicts of Interest (COI) or financial gains particularly working in IRBs where people are not well incentivized based on the workload and deliverables to ensure optimal integrity.

As observed by Fleetwood, (2001), The three major factors that influence IRB's conflicts of interest will have the potential for pushing IRB members to become morally corrupt hence compromising the credibility of IRBs. The different ways observed by Pivovarova, Klitzman, Murray, Stiles, Appelbaum, and Lidz, (2019) through which various IRBs manage their own COI may need to be evaluated to ensure objectivity, integrity, and professionalism at all times. It will be useful if both academic and industrial IRBs consider adopting specific policies that will co-bind all IRBs to ensure the prevention of potential Conflicts of Interest and the proper management of these when they occur. Earlier observations made in the literature proposing reforms towards accreditation for centralized IRB may address some of the issues leading to research misconduct to reduce retraction of published papers. If the initiatives being proposed are tailored and focused on procedural issues more than structural or performance evaluation issues, I believe in my personal considered views that there will be more sanity in the work of IRBs. It is a major concern knowing that some IRB members don't have adequate expertise for conducting research protocol reviews (Patrick, Peach, Pocknee, Webb, Fletcher, & Pretto, 2008).

The manpower capacity of IRBs should be a key consideration and requirement for setting up an IRB. One will therefore wonder about the basis for setting up an IRB without first ensuring that there is highly qualified and competent human resource support for achieving the aims and objectives of the IRBs. Though Harbour, (2011) proposed some local guidance for implementing activities of research technical review boards. I think there is much more work to be done in this area using a multisectoral approach to encompass all areas that might require research and not just establishing guidelines that are purely academic and might not comprehensively address the various concerns of ethics and emerging issues in research credibility. Following the work of Nebeker, et.al. (2017) in identifying gaps in IRBs' expertise to assess the risks and benefits of research protocols, I argue that the lack of requisite expertise to serve on IRBs could be a major challenge for a thorough review of research protocols prior to giving approvals. It is therefore not out of place to note from Serpico, et.al. (2022) that about half of the IRBs relied on outside experts in various disciplines to support their work of reviewing research protocols. The calls for

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collaboration among IRBs become greater, particularly in situations that might require multiple IRB approvals for one project.

In the likely event of such a need, which IRB gives the first approval and which follows next? The current practices as I have observed particularly in Ghana and other developing countries are that the IRBs are autonomous and independent of each other. Each of these IRBs has its requirements which sometimes are duplications. I, therefore, wonder what values acquiring multiple IRB approvals for one project brings to ensuring research integrity if there are not many synergies in their activities. On the other hand, if the IRBs are structured and graded in order of capacity and what is expected to be reviewed and at which level, a level one review for instance may make recommendations to the subsequent levels based on initial review reports to guide the work of the other levels who will build on and give the ultimate approval for a project in line with the IRB requirements for the project deliverables. It is therefore not surprising to see many academic institutions having various IRBs request protocol reviews purely as a means to generate internal funds and not necessarily the core mandates of IRBs. This observation obviously becomes a conduit for conflict of interest as it relates to aligning a need for income generation and reviewing protocols for the ethical conduct of research.

Drawing from the various arguments raised as to whether IRBs should be held responsible for retracted papers and who should enforce the sanctions that might be prescribed in this regard (Redman, 2009; Horner, & Minifie, 2011; Shah, 2013), relate to my earlier arguments which relate to managing potential conflicts of interests and competition that might arise during the use of multiple IRBs for a single project and the need for third-party collaborations in some instance where protocol reviews will have to be outsourced. Holding an IRB accountable for a retracted paper or Punishing IRBs for retracted papers, therefore, creates the ethical dilemma of who bears the ultimate responsibilities for the outcome of a study should there be an ethical violation, and if there should be a punishment what should be the proportionate allocation of the punishment for all the multiple IRBs that gave the various approvals for the project to be implemented?

In relation to all these arguments and counterarguments that I have made, I believe it is a dicey issue responding to the question of whether Institutional Review Boards for Research Ethics should be held accountable or Punished for their Review Practices in Retracted Publications. Though there is little empirical evidence to learn from the best practices on handling post-misconduct/retraction sanctions, the observation by Galbraith, (2017) in the United States on the concept of corrective actions including being given second chances as researchers, whose papers are retracted could be extended to IRBs who reviewed the protocols of these papers.

### **Limitations And Strengths of the Paper**

Being a philosophical paper, the issues or questions raised may promote free discussions on the various issues raised thereby encouraging individualized opinions and persuasive strategies that might confuse or persuade readers to embrace my various opposing and supporting viewpoints on holding IRBs accountable for retracted papers. Nevertheless, this paper has a lot of merits and is really timely. The paper's major strengths are the way it links the author's personal beliefs and viewpoints with literary works. It also makes an argument in a "prompting" manner and tackles a very important issue of shared accountability for research misconduct in academia and industry. Although the IRB's inefficiency is always the subject of inquiry, it is vital to consider research misconduct from this perspective. The paper's influence on the field of bioethics would identify the areas in which the IRB has to make changes in order to minimize research misconduct in academia and industry.

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## Conclusion

I argue that IRBs should be ethically responsible for their review practices to prevent or minimize incidences of retracted publications from academia and industry. However, if IRBs approved manuscripts that were later retracted, the IRBs should not necessarily be seen as contributing to research misconduct. Rather, I think investigations reports outlining the reasons for the retraction of the papers should be used to make informed decisions.

I however think there is a need to start moving beyond criticizing IRBs and blaming them for research misconduct that might not yield any constructive outcomes. Rather, there is the need to have an independent body mandated by the research community that will be responsible for certifying IRBs and regulating their practices both in academia and industry. Arguably, the various IRBs in different institutions worldwide may have these regulatory systems or quality controls, yet research misconduct still occurs. To this call, I support the views of Heimer, and Petty, (2010), who observed the work of IRBs as being insufficient for resolving inequalities between weak and powerful stakeholders who uphold professional claims on the ethical appropriateness of research protocols. In all these, it is important to also distinguish between the regulation of science and the regulation of ethics as well as morals, since what is ethical in research might not necessarily be a moral issue of significance and vice versa. In all these, I also believe that the focus should not be on holding IRBs accountable for retracted papers of punishment, but rather on corrective actions that would make indulging in research misconduct unattractive in academia and industry. Additionally, where it is evident that an IRB did not do the due diligence in reviewing a study protocol prior to the conduction of a study and publication of a paper, such an IRB should suffer sanctions too.

## Declarations

### Ethical considerations

Ethics approval was not applicable to this article since there was no human or animal participation.

### Conflict of interest information

I declare no conflict of interest in writing this paper

### Funding Information

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### Data availability statement

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