ABSTRACT

This paper provides a qualitative analysis on promoting research governance in higher learning institutions. The purpose of this paper is to analyse the importance of research integrity and ethical practices in higher learning institutions qualitatively for the implementation of good governance in research practices. Qualitative research is utilized to discover the deeper associations that underlie individual researcher's approach for research integrity and avoid any misconduct. Comments on qualitative questions asked to university lecturers were coded systematically. The research quantifies the qualitative interview data through data query, and cross tabulation. To synthesize the findings, thematic analysis was used which were interpreted within the study context of promoting governance, research integrity and ethical practices. This paper also provides recommendations for additional research and further discussions on these issues. The thematic findings confirmed that researchers need to maintain a high standard of research integrity together with appropriate, ethical, legal and obligations ensuring highest standards of rigor to support research integrity.

Keywords: Research integrity, Governance, research ethics, universities
INTRODUCTION

In recent years, it is really surprised that research fraud and scientific misconduct has increased Steen (Koepsell, 2017). Research is performed to find the truth and solve complicated issues. A great deal of research is performed to explore a topic and provide evidence to advance knowledge. Before embarking to any research project, certain basic presumptions are made and gradual accumulation of knowledge is built upon. Research integrity refers to “high quality and robust practice across the research process”. However in recent decades, promoting research integrity and ethical practice for knowledge creation have received great attention (Beisiegel, 2010; Tsui & Galaskiewicz, 2011; Wang, Xiao, Zhang, & Li-ping Tang, 2013). Research ethics and honesty are the most important principles for the integrity and conduct of science (Forschungsgemeinschaft, 2006).

In the scientific research, the cases of misconduct are serious problem and thus such misconduct and falsification have enforced a scientific and public discussion in recent years (Sponholz, 2000; Titus, Wells, & Rhoades, 2008). In the survey conducted by Titus et al. (2008) evaluating 265 description to determine research misconduct it was found that 24% of them did not meet the threshold federal definitions. Out of 201 observations of potential misconduct identified by (Titus et al., 2008), 60% included fabrication and falsification and 36% plagiarism only.

In addition, DuBois et al. (2013) analyzed 40 cases of research misconduct in the form of fabrication, falsification or plagiarism. The Qualitative data suggested financial incentives, oversight failures and seniority correlates significantly to research misconduct. It was also revealed that misconduct also involves thinking errors, poor coping with research pressures and inadequate oversights. Specifically, serious misconduct and plagiarism of all kinds has been observed by the academic research and editorial communities (Jacobs, 2010; Michel, 2010; Wang et al., 2013).

The main research question is what are the key factors that impact research governance in the universities by the research scholars? To answer this, the current research applies qualitative approach to reveal the underlying intention of the researchers to follow research integrity and ethics. Semi structured interview reflect to the individual’s perspective with overlap at the boundaries. Semi structured is flexible, accessible, and capable of disclosing important hidden facets (Qu & Dumay, 2011).

The main focus on this current research is of promoting research governance among research scholars through research integrity and ethics. Research governance is defined as the process of making and implementing decisions. University is one of the actors promoting research governance. Other actors that have the responsibility of good governance in research may include administrations, lecturers, head of departments (HOD), students and especially, individual researchers. The first contribution of this paper is the usage of qualitative method for identifying key factors that influence research integrity and ethics in the universities. Second, this paper provides a model that contributes for promoting good governance in the universities. The current paper begins with a literature review on research integrity, ethics and good governance in the universities. Next section highlights key methodology approach followed in the study. The third section deals with the key findings from the semi structured
interviews together with the thematic analysis and derive some prepositions. Finally, this paper concludes together with the managerial implications.

LITERATURE REVIEW

Research Integrity in the Universities

Research integrity refers to the method of proposing, performing and evaluation of research with particular attention to rules, regulations and guidelines. Research integrity includes honesty, accuracy, efficiency and objectivity. Research integrity is an ethical behavior that builds trust of the research stakeholders. Facilitating the knowledge utilization approach, the value of the norms of knowledge production is not only for the sake of integrity but also for the shelter of institutional goals. However, Gano, Crowley and Guston (2007) mentioned that the importance of protecting the research integrity is a scientific question that should be investigated. Integrity supports best research practices and promote research governance framework (Menzel, 2005). Defining research integrity in terms of both moral principles and professional standards is problematic. Moral principles and professional standards play different roles in research (Steneck, 2006).

Research Ethics

Research that includes human participants raises unique and complex ethical, legal, social and political issues (Diener & Crandall, 1978; Dingwall, Iphofen, Lewis, Oates, & Emmerich, 2017). Research ethics is specifically interested in the analysis of ethical issues that are raised when people are involved as participants in research. This reinforce the need to understand research ethics. Researchers and policy makers use different terms to refer to the way researchers should and should not behave. Research institutions aspire to set high standards for integrity in research (Steneck, 2006).

Research participants may be unaware of the nature, scope, and granularity of data collected and what information they are actually consenting to provide. In many cases, there are actually no standards, best practices, or demonstrated safety mechanisms to guide either researchers or IRB risk assessment or management strategies. Researchers may thus feel uncomfortable with explaining benefits (Torous & Nebeker, 2017). Research ethics governance is a major system aimed at promoting research integrity and responsible conduct of research, and research ethics committees are a prominent feature of this system (Iphofen, 2017).

Good governance

Good governance refers to make decisions and implement them (Aguilera & Cuervo-Cazurra, 2009). Good governance includes 8 key characteristics assuring misconduct to be minimized. It is participatory, consensus oriented, accountable, transparent, responsive, effective, efficient, equitable and inclusive. Good governance by the universities requires that the integrity and ethical approach in the research is maintained. Good governance is very crucial for the university reputation (De Boer, Enders, & Schimank, 2007). However, the research on
governance of research institutions has not been available until now (Jansen, 2007). Research integrity is an inherent part of the institutional research policy as it is one of the six spearheads in the research policy plan. There is a growing understanding that research integrity is a keystone of good governance. Maesschalck and Bertók (2009) stated in their publication that integrity management should take into account four main functions: determining and defining integrity, guiding towards integrity, monitoring integrity and enforcing integrity.

A key premise of the proposed model is the ability of the system to promote research governance in the case of research misconduct. A comprehensive qualitative research process was utilized to examine the factors promoting research governance and given these factors asses the viability of the proposed integrity model for the universities.

**METHODOLOGY**

This study was conducted in one of the public university in Malaysia. Head of Faculty also known as Head of Department (HOD) from each faculty was considered as the participants for the data collection. Qualitative approach is highly suggested in the constructivist paradigm. Previous studies confirmed that academic misconduct and ethical concerns are due to lack of research mindset and traditional learning orientation (Wang et al., 2013). The usage of semi structure interview questions provided an opportunity to the participants to explain comment and share their opinions on the research integrity and ethics promoting good governance in research. Semi structured interview questionnaire helps to address specific dimensions of research question offering new meanings to the study topic (Galletta, 2013). This qualitative research method has been applied in marketing or behavioral research, but its application in the governance research is novel. Scale validation in the form of qualitative steps was developed where key 9 questions were randomized in order to avoid bias (Kerlinger and Lee, 2008).

This paper examined the qualitative comments from the faculty members regarding promoting good governance mechanisms in the universities for tackling research misconduct or fabrication issues and gain insights into the research propositions. The open ended questions included:

- Who is to blame for research misconduct?
- Should universities do more to protect research integrity?
- Villains can be heroes, and heroes’ villain? What initiatives should the university perform to let this not happen?
- Why would someone fabricate research data?
- Why a scientific researcher not follow the protocols required by the university before performing the research investigation?
- What are the environmental factors that may predict wrongdoing in research?
- What can change researcher’s understanding of ethical practices?
- Should the universities have zero tolerance towards research misconduct?
- Does research misconduct will taint university’s global reputation?
Responses were collected using Google Docs Form. In total, 5 participants contributed themselves providing their qualitative comments for at least one of these questions out of 20 emails delivered using Google Docs Form. The research protocols involved matrices that highlights consistency and differences in the contrasting patterns (Eisenhardt and Graebner, 2007).

RESULTS

The qualitative insights indicated that research fairness and zero tolerance of misconduct is very important for the good governance in research publications and data fabrications. Firstly, the qualitative findings were depicted into a matrix. Secondly, the questions related to research integrity, ethics and good governance were analysed by coding the themes generated from the qualitative comments. Themes that was emerged from the semi structured interviews regarding their views on promoting governance, research integrity and ethical practices is provided as follows:

- Fairness and equity, zero tolerance and dealing with allegations (Research Integrity)
- Ethical climate, benchmarking process, fraud, and mistrust as environment factor
- Violations of professional ethics, replication of misconduct as ethical behavior.

The proposed model shown in Figure 1 is comprehensive in that it shows all the distinct types of factors that is able to improve good governance and research integrity.

![Figure. 1: Conceptual framework](image)

This examination of themes also suggests that the scope of motivations and attitudes as well as actual behaviors of the researchers are obvious to investigate. The new evidence suggests that some earlier assumptions are not reliable, leading to the conclusion that there is a need to change the way we think about and regulate research behavior. The conceptual model suggests that the environmental factors is comprised of four key areas:
1. Ethical climate;
2. Benchmarking process;
3. Fraud;
4. Mistrust

The conceptual model suggests that the ethical behavioral factors is comprised of two key areas:

1. Violation of professional ethics;
2. Replication of misconduct

The conceptual model suggests that the research integrity factors is comprised of three key areas:

1. Fairness;
2. Zero tolerance;
3. Dealing with allegations

From the semi-structured interviews it was found that, even in major cases of misconduct that have included publications, the full impact on the course of research is difficult to assess. In order to promote research governance in education, there must be advanced course for the researchers that classify principal investigator and collaborative researchers individually. This initiative will promote the standards of research integrity in the universities.

CONCLUSION

From the examination of themes developed it can be concluded that many misconduct research incidents may jeopardize the name and fame of the institutions. If we want to build strong integrity in research there is a need to pay more attention of minimizing research misconduct. The qualitative insights indicated that research fairness and zero tolerance of misconduct is very important for the good governance in research publications and data fabrications issue. The universities in order to be a world-class comprehensive institutions, research integrity is vital important. All members of the university should uphold the highest standards of professional conduct and abide by the university’s rules, guidelines and also by relevant policies. This paper through qualitative interviews provided the best practices to promote research governance. However, the challenges and factors that bridge the gap between researchers and the universities have not been highlighted. Thus future studies should fill the gap between policy and practices that protect university reputation and avoid subjectivity.

REFERENCES


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**APPENDIX. INTERVIEW GUIDE**

The transcript outlined below provided a general context for the question asked during the interviews with the academicians. The topic emphasis within each of the issue categories varied according to the role of interviewed academician would play in the research governance activities.

- **Who is to blame for research misconduct?**

  It is not viable to blame universities only for the research misconduct, but the researcher itself should be held accountable morally (*Participant 1*).

  According to me it is the responsibility of the universities to take measures to prevent misconduct and improve research integrity. However, the *participant 2* also claimed that the misconduct by the researchers cannot be excused and thus they should accept the moral responsibility. Participant 3, 4 and 5 have similar opinion of blaming the individual researcher who is involved in the research misconduct.

- **Should universities do more to protect research integrity?**

  In reply to this question on protecting research integrity, participant 2 mentioned that there is a need of developing multi track career options that are not focused only on research based. Furthermore, participant 3 opined that there is a need of strict regulation policies by the university in order to protect research integrity. Finally, participant 5 stated that, “Yes the issue of research integrity is very serious and urgent and the university should take more actions together with strict regulations”.

- **Villains can be heroes, and heroes’ villain? What initiatives should the university perform to let this not happen?**

  In order to save the integrity of research and research scholars, university should avoid forced research culture. Research should be based on interest and not on the university requirements. Whereas, participant 2 reiterated that, perhaps university
should initiate with formulating some regulations to praise the ethical behavior and punish the unethical behavior in the research.

- **Why would someone fabricate research data?**

  There are many reasons that attribute to fabricate the research data (Informant 1). Some of them are to achieve the result compliance, inability to conduct research time pressure, work pressure and so on. Similarly, participant 2 mentioned that, some of the researchers fabricate the data to increase their reputation and earn money. Researcher fabricate data may be due to research pressure, difficulties of collecting data, laziness or braveness as no punishment would incur (participant 4).

- **Why a scientific researcher not follow the protocols required by the university before performing the research investigation?**

  Lack of time to deliver the progress of the research is one of the main reason (participant 1). Sometimes scientific researchers get frustrated with the lack of new insights in the findings (participant 2). Usually researchers do not follow the protocols due to lack of self-discipline (participant 3).

- **What are the environmental factors that may predict wrongdoing in research?**

  Participant 1 stated that, “I think the ethical climate of the organization is also one of the main reason for research misconduct”. I believe that when the researcher experience an unintentional failure in their research led them to adapt fabrication activities (participant 3). Whereas, contradicting to participant 1 and 3, participant 4 stated that it is difficult to predict wrongdoings in research. Finally, participant 5 mentioned that, perhaps the research culture within the organization is the reason for wrongdoings by the researcher.

- **What can change researcher’s understanding of ethical practices?**

  There is a need to provide ethical education and exposure to ethical practices in order to change their mindset (participant 2). There is a need to provide training on research integrity especially to the new researchers as they may not be really aware of the unethical practices (participant 5).

- **Should the universities have zero tolerance towards research misconduct?**

  There is a need of assigning certain tolerance range for the researcher. If the research misconduct is out of the range than strict legal actions must be taken into account. Yes, I totally agree that research misconduct is a serious issue that is exploring like a virus in the academia. However, without a certain limitation to it would make this virus spread like a diseases. Better to have strict regulations by the universities to tackle such situations. We have examples of National university of Singapore who have adopted unified set of standards for research publications and ethics.
• **Does research misconduct will taint university’s global reputation?**

Yes surely research misconduct by any individual researcher will affect the reputation of the university both globally and locally. There is a need of taking important steps towards achieving commitment by the researchers to maintain their integrity. Participant 2 mentioned that research integrity must be taken seriously by the university and must have zero tolerance towards research misconduct.

• **Please suggest your realistic solutions on research integrity that can be implemented in practice for research scholars.**

There is a need of zero tolerance to misconduct. At the same time, multi-track career options must be provided to the research scholars. Participant 2 suggested that there is a need of increase in awareness among the researchers. Whereas; participant 3 suggested to promote ethical research culture and appreciate ethical research practice. Participant 4 further suggested to provide relevant information sharing and establish unethical reporting channels. Finally, participant 5 suggested to promote and facilitate the transition of governance in the research community to confirm the ethical standards in the universities.