

Common flaws in library and information sciences (LIS) PhD theses submitted for examination in east, southern and west African universities: A critical experiential view

Stephen Mutula and Rebecca M Majinge

Information Studies Programme, University of KwaZulu Natal

Abstract. The successful completion of a thesis is a requirement for the award of doctoral degree (PhD) in the information sciences in east, southern and west African universities. This article is aimed at presenting the experiential views of the authors on the common flaws found in library and information sciences (LIS) PhD theses submitted for examination in 15 purposively selected universities in Kenya, Uganda, Botswana, Ghana, and South Africa.

The results revealed several flaws such as poor writing skills, failure to apply theory as a framework to organise content; generate research questions; guide literature review; and discuss the findings. Furthermore, the candidates fail to link the findings with the research questions and the technical presentation of citations in the text and list of references is a major challenge. These flaws may be attributed to a number of factors such as inadequate preparedness and limited skills and competencies on the part of supervisors and the candidates; the limited support in the form of workshops given to PhD to improve their writing; absence of course work as part of the PhD programmes and masters programmes.

The authors recommend capacity building programmes to improve writing and supervision of PhD theses. A rethinking of the LIS PhD model from the current research based to a more hybrid model is recommended.

Keywords: thesis writing, scholarly publishing, postgraduate supervision, technical writing, doctoral studies, library science research, PhD thesis flaws, east Africa, southern Africa, west Africa.

1. Introduction

The successful completion of a thesis is a requirement for the award of doctoral degree (PhD) in the information sciences in east, southern and West African universities. This article is aimed at presenting the experiential views of the authors on the common flaws found in library and information sciences (LIS)

PhD theses submitted for examination in 15 purposively selected universities in Kenya, Uganda, Botswana, Ghana, and South Africa.

By definition a PhD thesis is a piece of work or project which sets out a certain problem that the student has worked on, possibly within a larger team, under guidance of one or more supervisors (Ruger 2013). It consists of an argument or series of arguments that describe and discuss the research being investigated (Philips and Pugh 1994:23). The PhD thesis also delineates the limitation of the work done or the conclusions drawn and outlines possible future research directions (Ruger 2013).

In writing a PhD thesis the candidate motivates, defines and presents approaches to addressing the problem. In addition, the candidate identifies clear gaps and a framework for addressing them. Furthermore, the PhD candidate is expected to provide clear evidence of original contribution of their study to the body of knowledge in the chosen field (Dwivedi, Ravishankar and Simintiras 2015; Philips and Pugh 1994:23) and afford new insights into little understood phenomena (Peters 1997:177). The PhD candidate must also adduce the originality of the PhD project by showing evidence of independent and critical thought. Badley (2009:337) asserts that originality in a PhD research project should include applying existing stances, methodologies, and theories to new data; finding new ways of analysing and theorising existing data; proposing new methods and theories for old problems; and reinterpreting existing theories.

A PhD thesis may be written in two formats: firstly as a single coherent book. Secondly as a set of papers which are published, in press, submitted, or intended for submission in peer reviewed accredited journals. Aina (2015:112) in this regard asserts that the main requirement for obtaining a PhD is the submission of a substantial body of original research report in the field in the form of a thesis, which is subsequently addressed and confirmed by external assessors in oral defence examination. The PhD award that is based on published papers is not common in east, southern and west African universities. The focus of this article is therefore on the flaws committed by candidates who complete a PhD as a single coherent book (thesis).

2. Objectives

This article presents three objectives:

- 1) Present common flaws found in LIS PhD theses submitted for examination in east, southern and west African universities
- 2) Suggest best practices of writing a PhD thesis
- 3) Make appropriate policy and practical recommendations

3. Methodology

The population on which this article is based consisted of 15 purposively selected universities in east, southern and West Africa regions covering five countries of Kenya, Uganda, Botswana, Ghana, and South Africa from which 27 PhD theses have been examined between 2009 and 2016. The universities were purposively selected based on the fact that the author(s) have either supervised or examined theses from these institutions. The theses have covered diverse topics such as information behaviour, artificial intelligence, library automation, technology acceptance and use, information management, knowledge management, information needs and information seeking behaviours, small business enterprises, information literacy, digital libraries, institutional repositories, scholarly publishing, records management, ethics, collection development, e-learning, business intelligence, electronic information resources, LIS curriculum development and more.

4. Results

This section presents and discusses the flaws that are commonly committed by PhD candidates in the information sciences field in east, southern and west African universities when writing their theses. These flaws are committed throughout the PhD research project from the selection of the research topic to submission of the thesis for examination.

4.1. Selecting the PhD Research Topic

The common mistake is choosing a topic without first reviewing the available literature sufficiently to determine the extent to which related studies may have covered similar research phenomenon as that being proposed. In this regard the candidates miss out on the approaches, contexts, methods, and theories that would inform their study. In addition, the candidates do not often take into account the feasibility of the topic in terms of scope (temporal, spatial), resources available (time, money, skills) and permissions that will be required from the gate keepers or ethics committees. Furthermore, PhD candidates also fail to relate the topic selected with their own world view (ontological, epistemological and methodological perspectives) of the phenomenon being studied. The PhD candidates also tend to select topics which they are not familiar with and consequently find it difficult to investigate them. This often happens when they rely on other people to give them the topics for their research without considering their own passion or interests for such topics. Accordingly, Blankenship (2010) advocates for the researcher to learn more about the phenomenon before making a decision to investigate it.

The PhD candidates must before choosing a topic for their thesis, read widely the relevant literature around their research interests to appreciate the current issues and debates that are obtaining in the field and must situate their research in these conversations. The candidates must then provide a brief descriptive title that clearly identifies the context, the problem being investigated and objects (animate or inanimate) of interest to the study. The sources of the research topic

may arise from discussion with peers, themes of conferences, areas identified for further research in completed theses, reading literature, work experiences, observations, academic debates, policy changes, and more.

4.2. Introduction and Background to the Study

The experiences of the authors in examining and supervising PhD theses in the information sciences field within east, southern and west African universities reveal that in most cases candidates fail to provide the context of the phenomenon being investigated including current debates in the field, the major question to be answered, hypotheses or assumptions, and the motivation for investigating the phenomenon. The candidates often fail to situate the research problem into the wider literature and debates in the field.

While some theses present equal number of research objectives to research questions in this chapter, others provide fewer general research objectives from which more research questions are teased. This seem to an area where there no common unanimity among scholars. Some scholars insist that each research objective must be restated in the form of a research question. There is however an emerging trend that advocates for 1-2 broad research objectives from which specific research questions (3-5) can be derived. The proponents of this approach argue that repeating the research objectives in the form of research questions or vice versa does not add any value to the thesis. They also assert that where research questions are provided there is no need to provide hypotheses or vice versa. More engagement is still required on these areas of contention.

The importance of presenting the introduction chapter in a PhD thesis correctly need not be over emphasised. Quine and Howard (2010) assert that introduction presents the subject of the thesis to the reader and discusses the reason or justification for the work. It tells the readers what the student sets out to do and why and also how he or she will be doing it (Kekale, Weerd-Nederhof, Cervai and Borelli 2009; Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner 2014). Usually a major research question will be posed in this chapter from which several specific questions will later emerge. Evidence of the existence of the research problem should be adduced as well as the issues that will be addressed. The research problem and questions may be derived from gap(s) in literature, experiences of the researcher, scholarly debates, policy declarations, project implementation and more. The theory, literature and methodology should be introduced in this chapter and later discussed substantively in subsequent chapters. The implications of the study and expected outcome from practical, policy and theoretical and methodological perspectives should be provided. Finally, a summary of the organisation of the thesis as well as definitions of the key terms should be explained.

4.3. Selecting Theory

Theory in research is used to provide variables that are to be investigated in the research phenomenon. The theory further provides a framework for literature

review, analysis, presentation and interpretation of the findings (Mathipa and Gumbo 2015). Without the theory, it is like flying a plane that has lost all the information on the dashboard that is necessary to effectively navigate the flight safely and predictably.

The experiences of the authors in examining and supervising PhD theses in the LIS field in east, southern and west African universities reveal a number of errors that are commonly committed by candidates in choosing and using theory. The candidates tend to formulate research questions that are delinked from the theory and as a result they find it difficult to effectively relate the literature with the key aspects of the research problem. The other common problem that candidates make is in the choice of a suitable theory to address the research problem. A suitable theory provides the framework for the formulation of research questions, literature review, data analysis and interpretation of findings. Poor choice of theory arises when candidates do not review literature extensively to understand the kind of theories that have been used in similar studies. While in most cases the candidates will present the theory that underpin their studies, they however fail to justify how such theory from among other probable theories is suited for the study. Understanding the broad range of potential theories other than the one underpinning the study is important for the candidates to understand the phenomenon being investigated from multiple perspectives.

It is becoming a common practice for PhD candidates to deploy more than one theory to underpin the research. The theory if appropriately chosen should address all if not most of the research questions of the study. While it may be necessary for a PhD study to apply more than one theory especially where the field of study is new and limited established theoretical models exist, the use of multiple theories may also suggest that the study is less focussed and instead covers multiple perspectives.

The PhD candidates also seem to rely commonly on over flogged theories. Whereas this practice may be justified on the basis that such theories are widely tested and therefore robust it may also suggest that little new knowledge may be generated using such over flogged theories. There is need for candidates doing PhD in the information sciences field within east, southern and west African universities to explore interdisciplinary theoretical frames especially when research problem cuts across different disciplines.

4.4. Review of Literature

The literature review summarises and evaluates a body of writings in relation to one's research study (Kaniki 2006:19; Knopf 2006:127). In the literature review a candidate selects the kind of sources to be reviewed and explains the purposes for which she/he has to study them. The candidate further shows the scope of research that has been undertaken on a particular subject and reveals areas that require further investigation. The literature review also helps in understanding

current debates in particular field of study; indicate the methods, theories, as well as ontological and epistemological approaches that have been commonly used in similar and related studies. Blankenship (2010) states that the review of literature educates the researcher about what studies have been conducted in the past, how these studies were conducted, and the conclusions in the problem area.

The literature reviewed in a PhD thesis should describe in detail the relationships of variables that are being investigated on the specific and broader perspectives of the research problem. The candidate must analytically engage with the literatures and not merely describe and present them. The literature must be diverse and comprehensive covering both the international and local contexts, as well as the practical and policy aspects of the problem. Krishnaswami and Ranganatham (2010:64) add that the review of literature must be focused, selective, current and relevant to the problem being investigated. Furthermore, PhD candidates in the region seem to cite literature cited in other sources rather than consulting and providing original sources. In this regards the candidate cannot vouch for the authenticity of the sources being cited. Besides, any misrepresentation in the cited sources are replicated in subsequent research.

The PhD candidates are expected to organise their literature using a framework that may one, more or a combination of temporal, spatial, and thematic (such as objectives, research questions or key constructs of the theory) perspectives. Dwivedi, Ravishankar and Simintiras (2015) are the opinion that the literature review chapter in a PhD thesis can be organised around ideas and concepts. Normally the framework for organising and presenting the literature review should be provided upfront in the introductory section of the literature chapter.

The experiences of the authors in east, southern and west African universities has shown that candidates in LIS field face various challenges in presenting literature in the PhD thesis. The candidates fail to provide upfront the framework of how the literature is organised in the thesis. As a result, there is incoherence in the presentation of ideas. They also fail to apply theory to analyse and present the findings. Furthermore, they most often than not present literature that is less selective, and less comprehensive (covering international and local scope). Consequently, it becomes difficult to situate effectively the research problem being investigated within existing body of knowledge in the field. In addition, the candidates experience challenges in identifying the gaps in literature and how the research problem they are trying to investigate can assist to address such gaps. The most common gap that candidates tend to unravel in the literature is that 'no studies have been done in the context of the research problem being studied'. This argument is usually flawed because the candidates do not adduce evidences obtained from searching key databases in the field to show the status and growth of research in the field or in the area being investigated. The PhD candidates are expected to demonstrate depth of

understanding of methodological, theoretical, practical, policy, legal or regulatory issues in the field they are investigating and consequently identify the gaps in these areas in the literature. The gaps identified should then link up with research questions that are being investigated in an attempt to address those gaps.

Assuming there are limited or no studies in the area being investigated this is still not reason enough to justify a PhD study. Similarly, even if a study exists or has been undertaken on a particular research problem, it does not preclude similar or same study being repeated as long as there are justifiable reasons for doing so. Such justifiable reasons may include wanting to validate the findings of previous study, because the existing study was undertaken in a different environment or context, new approaches (ontological, epistemological, and methodological) or with the passage of time have emerged. Without identifying the gaps in literature the contribution of the study to the body of knowledge in the field being investigated will be limited or remain unknown. Similarly, the originality of the study which is a key consideration in PhD research cannot be demonstrated in the absence of niche within the field that the candidate is addressing.

In justifying an investigation into a particular problem for a PhD award one or more of the following reasons may be adduced: the study will be valuable in addressing particular societal problem such as improving aspects existing policy or formulation of a new policy, improving delivery of services, or extending improving existing theory and more. Evidence should be adduced to demonstrate that there is need to investigate the phenomenon being studied.

Finally, in reviewing literature, the candidates will inevitably encounter different and diverse views and findings on the phenomenon being investigated from different researchers. The candidates must therefore strive to consolidate and reconcile the diverse findings of related studies using the relevant theory and situate their stance in the debates in the field.

4.5. Writing Methodology

The methodology section in PhD thesis should present clearly the ontological (positivism, interpretive, pragmatic/post-positivist paradigms) and epistemological (qualitative, quantitative, mixed methods) perspectives of the study and any hypothesis or underlying assumptions (Dwivedi, Ravishankar and Simintiras, 2015). The methodology should also provide a discussion of the research designs, population of study, sampling procedure, data collection methods, data analysis, validity and reliability, presentation of findings and ethical issues. Pickard (2007) is of the view that research methodology should describe the relationships between different parts of a research starting from the overall philosophy (paradigm) all the way to data collection strategies. Kekale, Weerd-Nederhof, Cervai and Borelli (2009) assert that the chosen method should be one that is suited for the research problem being addressed.

The experiences of the authors supervising and examining PhD theses in LIS in east, Southern, west African universities reveal a general lack of understanding by the candidates of the relationships that exist between the different parts of the methodology such as ontology, epistemology, research design, data collection methods and axiology. Sometimes candidates tend to present the epistemological aspect of the study (for example qualitative, quantitative and mixed method) and fail to discuss the ontological perspectives (paradigmatic or philosophical underpinning of the study such as positivism, interpretive, pragmatism and more). This is largely because candidates tend not to understand the meaning of ontology and how this can be applied in research. The failure to show the ontological leaning of a study undermines values and beliefs of the researcher about the research phenomenon being addressed and how these influence the various choices they make.

Where candidates make efforts to provide ontological underpinnings of their studies, they fail to align it appropriately with the epistemological perspectives of the study. For example, quantitative epistemology aligns with survey or experimental research designs on one hand and questionnaire as data collection method. In contrast, the interpretive ontology espouses the ethos of qualitative epistemology and uses designs such as case study, grounded theory, ethnography, content analysis, archival research among others with data collection methods as focus group discussion, interviews, and observation. Similarly, pragmatic ontology uses mixed method epistemology with combination of more than one research designs including but not limited to case study, survey, observation, and content analysis. In addition, pragmatic ontology makes use of more than one data collection methods that may include among others interviews, survey questionnaire, observation, and content analysis.

There is also a common trend in the PhD theses submitted for examination in LIS in the region to rely on pragmatic ontology and mixed method epistemology that uses more of qualitative epistemologies. Even with qualitative epistemologies dominating the PhD theses submitted for examination in LIS, the candidates rely on case study or survey designs at the expense of ethnography (understanding ways and cultures through participatory observation, phenomenology (understanding lived experiences of respondents), grounded theory (starting with no theory with intent to generate a theory based on findings obtained), action research (understanding the practices of organisations with a view to coming up with plan to improve performance), archival research (mining and using archival data to understand phenomenon being studied, and experimental design (using experiment to investigate a phenomenon). Consequently, the results from such studies are largely descriptive and not analytical. This exacerbated by lack of advanced statistics skills among supervisors and candidates. The candidates and many supervisors seem not to understand descriptive and inferential statistics measures such as mean, mode, standard deviation, t-tests, regression analyses, among others and how they can be used in data analysis and interpretation of the findings.

The other most common flaw in the PhD theses submitted for examination is failure by candidates to present clear strategy for recruiting the respondents. While, most PhD theses will clearly outline how the sample size is selected they do not show how they will reach the respondents to collect data. They also concentrate on non-probabilistic at the expense of probability sampling techniques. This is because they lack adequate statistical skills to use probabilistic techniques. For these reasons, most PhD theses rely on census purposive, convenience and snowballing sampling techniques. There are also flaws in pre-testing of data collection tools. The candidates most often indicate that they pretested their instruments but fail to explain how the data from the pilot are analysed to generate for example measures such as regression analysis, Cronbach alpha, factor analysis and how these are used to improve the data collection tools. The candidates also often indicate that tools they used to collect data were adapted or adopted from related studies. They however, fail to explain how the studies are related to their research. They also do not often show the level of reliability and validity of the tools they have adopted or adapted. In cases where candidates make attempts to calculate and present the reliability and validity of the instruments for example using Cronbach Alpha Coefficient or Factor analysis, they fail to explain whether the values are average across all items (questions) in the data collection tools or only apply to certain items in the tools. It is also important to show what items were adapted and which were fully adopted from related studies to enhance validity and reliability of the instruments. The adopted or adapted tools should be appended in the thesis.

4.6. Presentation of the Findings

The findings chapter in a PhD thesis sets out key investigational findings, including any statistical analysis and whether or not the findings are significant. This chapter usually covers the findings of analyses of data that have been gathered to address the research problem.

The flaws that are usually identified in the findings chapter of PhD theses in LIS in east, southern and west African universities are diverse and varied. They include failure by candidates to provide a framework for organising the chapter; failure to provide upfront a strategy for data analysis and presentation of findings; failure to integrate data collected through various techniques; inappropriate application data analysis techniques; failure to provide biographical information; failure to account for all main research questions investigated as well as the questions in the data collection tools; failure to apply theory in analysis of the data, failure to link methods, findings and recommendation, and tendency to calculate response rate based on population size (N) rather than sample size (n). These omissions tend to affect the quality of the findings and the entire PhD thesis as demonstrated below.

The framework for organising the findings chapter is normally the research objectives or research questions. Such findings will usually be presented using a combination of measures. For example, in quantitative research descriptive

and/or inferential statistics that include frequency tables, pie chart, histograms, chi-square, cross tabulations, regression analyses, t-tests and others are used. On the other hand, the findings in qualitative research are commonly presented using thematic categorisation and narrations among others. It is however, important to point out that depending on how qualitative data are coded and analysed they may also be presented using descriptive statistics commonly applied in quantitative research. PhD candidates are advised to plan in advance and prior to going for field work the kind of data that they will collect, how such data will be analysed and the findings that will be generated to address the research phenomenon.

In analysing data, the candidates should strive to integrate the various data that may have been collected using different techniques as long as such data speak to the same theme of the phenomenon being investigated. By integrating data from different tools, the findings of the analyses can be presented in a coherent manner, minimise unnecessary duplication and enhance logical flow of ideas. This also reduces the number of cross referencing that have to be made with other parts of the thesis making it easy to read and understand. Moreover, in presenting findings from interviews or focus groups the voices of the respondents should from time to time be heard through verbatim representation of their statements.

While the decision to collect biographical data (such as gender, age, education level, race, employment status, socio-economic status, ethnic group, abode and others) will depend on the nature of the study and on whether respondents are animate or inanimate, the extent to which these variables affect the findings must be assessed to determine whether data should be collected and analysed on them or not. Gender, education level, and age perspectives tend to affect the findings in most studies that involve animate respondents. Gender perspective for example can help to reveal the extent of bias in the selection of the respondents in a study.

Sometimes candidates fail to account for all the main research questions and those in the data collection tools that they set out to investigate. They only discover when they start the data analysis process that vital data was not collected. This happens when the candidates do not pay close attention to what data they need to collect from the field to answer each of their research questions, from whom and how such data should be collected, and how the data should be analysed to address the phenomenon being investigated. A checklist should be developed to ensure the appropriate respondents are identified, the questions are correctly formulated and tested before they are administered and the correct analyses are done to obtain findings that can provide meaningful explanation of the phenomenon being investigated.

The PhD candidates also tend to present the findings using repeatedly simple descriptive statistics even where more complex analyses are needed. They

therefore end up with findings that are not helpful to address the research questions. The other problem that is common with the PhD theses in LIS is inability of the candidates to consolidate data that are collected from different tools (such interviews, observation, and survey questionnaire). They also do not integrate the findings from pilot part of the research into the main research project. Integrating the findings of a pilot into the main study can assist to validate or explain and enhance the understanding the findings of the main study.

The theory and findings should be inextricably linked as this would help to determine the extent to which the findings are consistent with the postulation of the theory. Similarly, the link between the methodology and the findings should be provided in order to account and explain the behaviour of the phenomenon being investigated. In linking the methods and findings it is important to provide the sample sizes so that percentage responses can be evaluated to determine the significance or otherwise of the findings. The response rate should be calculated based on the number of respondents who were reached against the number that was targeted.

4.7. Discussion of the Findings

The purpose of discussion of findings chapter in a PhD thesis is to interpret and explain the meaning of the findings, answer the research questions, justify the approach and critically evaluate the findings (Dwivedi, Ravishankar and Simintiras 2015). Like the findings chapter, the discussion of findings chapter should ideally be organised using the research objective or research questions as the framework. The use of the research questions to organise the discussion is two-fold: to account for all research questions and illuminate the extent or otherwise to which the research problem has been addressed and to give logical structure to the chapter. Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2014) in this regard assert that the researcher needs to explain fully how the findings illuminate the research questions.

The flaws that are common in LIS PhD these submitted for examination in east, southern and west African universities include failure to provide framework of how the chapter is organised; failure to restate the purpose of the study; repetition of the content of the data analysis chapter; failure to critically engage with the findings using the literature or theory; failure to show the originality of the project and the gaps that the study has addressed in the current body of literature; and failure to demonstrate clearly the contribution of the findings to policy improvement, existing theories or new theories, methodologies and more. Though not cast in stone, this chapter should commence by restating the initial purpose of the study (or restating the objectives and research questions) in order to bring along the reader since a PhD thesis is a huge document and one can easily lose track of the phenomenon being investigated if not reminded about the purpose of the study from time to time. Restating the purpose of the study

can also help demonstrate how and the extent to which objectives that were set out have been achieved.

The framework of how the content is organised should be provided upfront early in the chapter. As already pointed out, a framework for organising the content ensures coherence and logical organisation of ideas. Such framework can be based on research objectives, research questions, and theory or on any other plan.

The LIS PhD theses submitted for examination in east, southern and west African universities also tend to replicate most content of the findings chapter in the discussion. This is not necessary. The candidate should only highlight key findings and then explain what they mean in the context of the research questions investigated using extant literature and theory which underpinned the study. In addition, the candidate can avoid repeating most of the material already presented in the preceding chapter, by cross referencing the findings in the previous chapter. Cross referencing can be made to questions in the data collection tools, to the findings in tables, to particular hypothesis, to the main research questions, and more.

While attempts are made to explain the findings in most of the PhD theses, often there is tendency to choose literature or aspects of theory that seem to support the candidates' findings. Both literature and aspects of the theory that seem to agree with and also contradict the findings should be presented and the possible reasons for concurrence or divergence explained. The difference or similarity of findings with extant literature and theory may arise due to similarity or differences in context, population, ontological or epistemological approaches, the scope, timing of the study, and more. The reliance only on literature which support the findings of a study may by and large suggest that there is no contribution being made by the study to the existing body of knowledge in the field.

The discussion of findings chapter should end with summary of key aspects that have emerged with regard to the meaning of the findings as they relate to all the research questions that were investigated and how they conform or otherwise to the theory as well as the broader body of literature in the relevant field. The summary should indicate the originality of the study, its contribution and implications for policy, practice, theory and methodology.

4.8. Summary, Conclusion and Recommendations

This chapter of the PhD thesis has two main components – the conclusion and recommendations. Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2014) point out that important arguments should be provided in the opening paragraph of the conclusion. This brief summary should bring home to the readers the significance of what the research has achieved. In addition, the implications of findings for research questions must be clarified.

The conclusion and recommendation in a PhD thesis summarises key issues that have emerged from findings.

The conclusion must also consolidate the findings and show the extent to which each research questions have been achieved and any constraints that could have affected the findings in any way. The conclusion should be presented in such a way that the purpose for which the study was undertaken should be apparent. It is important that the conclusion should be based on findings.

Some of the flaws that are commonly found in LIS PhD theses submitted for examination in east, southern and west Africa include tendency to provide a summary of the whole thesis; repetition of the findings in this chapter; failure to link the summary of key issues that have emerged in the study to the research questions that were investigated as well as the recommendations; failure to differentiate what constitutes conclusion from recommendation; failure to provide a conclusion that does not cover all research questions; failure to present recommendations that do not draw from extant best practices and which are consistent with research questions; failure to provide recommendations that are feasible; failure to provide the action plan for the recommendations.

The recommendations part of the PhD thesis presents the remedial actions that are needed to rectify the anomaly that was being investigated. The recommendation normally relies largely on the findings and the interpretations thereof. Furthermore, each recommendation should provide responsibility for the action. In addition, the resource implications, timelines and any constraints in implementing the recommendation must be envisaged and provided. Where similar recommendation has been made or implemented elsewhere these should be referenced. The recommendations should be tied to the conclusion. The future research direction should also be provided as part of the recommendation.

4.9. Technical Presentation of PhD Thesis

The technical aspect in a PhD thesis is critical and contributes significantly to the quality of the work. The thesis must therefore be satisfactory in literary style and presentation. Buttery and Richter (2005) point out that a PhD thesis should be clear, accurate, logical, persuasive and suitably documented. In addition, referencing and citation, language and grammar, formatting, use of fonts, and coherent presentation are part of important aspects of technical presentation in a PhD thesis.

The flaws that are common in LIS PhD theses submitted for examination in east, southern and west African universities with regard to technical aspects are varied. For example, candidate sometimes use different referencing and citation styles in the same thesis. For example, it is common to find candidates using' (Majinge 2013) and in another place in the same thesis, they present as ' (Majinge, 2013). The other common mistake in this regard is the use of initials or first name and the year instead of surname and year, for example...' (R

Majinge, 2013) or” (Rebecca Majinge, 2013) or (Rebecca 2013). In some cases, candidates provide different years for the same reference for example (Majinge 2013) and in another place in the thesis you find Majinge (2014) while referring to the same source.

It is also common to find candidates using et al. in the first instance when they should actually be providing the names of all the authors. The use of et al should happen in the second and subsequent encounters of the authors. Similarly, the candidates often fail to use the et al correctly. For example, formulations such as Mutula, et. al (2003) are common instead of Mutula et al. (2003). The candidates also present the universal resource locators (URLs) in the place of the authors’ surnames. However, there are instances when URLs are reflected in the text to point to a source rather than as a citation of the source. For example, the website <http://www.ukzn.ac.za> was dated is a correct formulation. However, the sentence ... according to <http://www.ukzn.ac.za>, there are over 46,000 at the University is not a correct formulation.

The other area of concern is the lack of consistency in presenting of URLs as part of the list of references. For example, Mutula, S (2009). Digital libraries. Retrieved 12 June 2016, from <http://mutula.ac.za>. Similarly, this can be presented as... Mutula, S (2009). Digital libraries. . [Online]. Available at <http://mutula.ac.za> [Accessed 12 June 2016]. This can also be presented as ... Mutula, S (2009). Digital libraries. <http://mutula.ac.za>. The challenge arises when candidates use different formats in the thesis instead of sticking to one. The candidates also make errors in the consistent application of upper and lower cases, and the inappropriate use of italics in presenting journal articles and book titles.

The use of brackets and punctuation is often flawed for example the citation Mutula, (2009) is incorrect. The correct citation should be Mutula (2009). It is also common that candidate present incomplete references where one or most of the following bibliographic data are missing title, year, place and date. Similarly, there are always cases of cited references not being in the list of references and vice versa. The use of outdated references is another cause of concern for PhD thesis in LIS submitted for examination. The most current references are needed to reflect the current status and debates in the field. References that go 10 years back unless they are showing status of the field at that time are not helpful as many new developments will have occurred.

Improper citation and referencing in PhD theses it would seem is a widespread concern beyond LIS. Ram and Anbu (2014) in this respect assert that it is evident from citation studies that authors give very little care to the referencing and citations. Similarly, Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2014) observe that acknowledging the work of others which a researcher used to write the research project is an important in academic writing because it shows the researcher is aware of the historical

development of the subject and also recognises that the research project in which they are involved builds on the work of others. PhD theses must therefore be thoroughly edited for language, grammar and consistent formatting as well as referencing before they are submitted for examination.

5. Conclusion

This article presented the common flaws in LIS PhD theses submitted for examination in purposively selected 15 universities in east, southern and West Africa. The results revealed several flaws such as poor writing skills, failure to apply theory as a framework to organise content; generate research questions; guide literature review; and discuss the findings. Furthermore, the candidates fail to link the findings with the research questions and the technical presentation of citations in the text and list of references is major challenge. These flaws may be attributed to a number of factors such as inadequate preparedness and limited skills and competencies on the part of supervisors and the candidates; the limited support in the form of workshops given to PhD to improve their writing; absence of course work as part of the PhD programmes and masters programmes.

The authors have made attempt to proffer recommendations at each point where the common flaws are identified. In particular, the authors recommend capacity building for both supervisors and candidates to improve writing and supervision of PhD theses. A rethinking of the LIS PhD model from the current research based to a more hybrid model is recommended.

References

- Aina, L.O. (2015). Factor Affecting the Timely Completion of Doctoral Degree in Library and Information Science in Nigerian Universities. *African Journal of Library, Archives and Information Science*, 25(2), 111-123.
- Badley, G. (2009). Publish and be Doctor-Rated: The PhD by Published Work. *Quality Assurance in Education*, 17(4), 331-342.
- Blankenship, D. C. (2010). *Applied Research and Evaluation Methods in Recreation*. Champaign, United States: Human Kinetics.
- Bryman, A., Bell, E., Hirschsohn, P., Du Toit, J., Masenge, A., Van Aardt, I. and Wagner, C. (2014). *Research Methodology: Business and Management Contexts*. Cape Town: Oxford University Press.
- Buttery, E.A. and Richter, E. M. (2005). An Overview of the Elements that Influence Efficiency in Postgraduate Supervisory Practice Arrangement. *International Journal of Educational Management*, 19(1), 7-26.
- Dwivedi, Y.K, Ravishankar, M.N. and Simintiras, A.C. (2015). Completing a PhD in Business and Management: A Brief Guide to Doctoral and Universities. *Journal of Enterprise Information Management*, 28(5), 615-621.

Kaniki, A. (2006). Doing an Information Search. In M. Terre Blanche, K. Durrheim and D. Painter (Eds.), *Research in Practice: Applied Methods for the Social Sciences* (pp. 18-32). Cape Town: University of Cape Town Press.

Kekale, T., Weerd-Nederhof, P., Cervai, S. and Borelli, M. (2009). "The Dos and Don'ts" of Writing a Journal Article. *Journal of Workplace Learning*, 21(1), 71-80.

Knopf, J.W. (2006). *Doing a Literature Review*. Cambridge: Cambridge University Press.

Krishnaswami, R.O. and Ranganatham, M. (2010). *Methodology of Research in Social Sciences*. 2nd ed. Mumbai: Himalaya Publishing House.

Mathipa, E.R. and Gumbo, M.T. (2015). Generic Components of a Research Proposal in the Social Sciences. In E. R. Mathipa, and M. T. Gumbo (Eds.), *Addressing research challenges: making headway for developing researchers* (pp. 28-42). Noordwyk: Mosala-MASEDI Publishers & Booksellers.

Peters, R. L. (1997). *Getting What you Came for: The Smart Student's Guide to Earning a Master's or a PhD*. New York: Farrar, Straus and Groux.

Pickard, A. J. (2007). *Research Methods in Information*. London: Facet Publishing

Phillips, E. M. and Pugh, D.S. (1994). *How to Get a PhD*. Bristol, USA: Open University Press.

Quine, S. and Howard, K. (2010). *Advice for Writing a Thesis in the School of Public Health*. Sydney: University of Sydney. Retrieved March 28, 2016, from http://sydney.edu.au/medicine/public-health/current/research/resources/SPH_Thesis_Advice_Fin.pdf

Ram, S and Anbu, J.P. (2014). The Use of Bibliographic Management Software by Indian Library And Information Science Professionals. *Reference Services Review*, 42(3), 499-513.

Ranko-Ramaili, J.M., Mathipa, E.R. and Gumbo, M.T. (2015). The Postgraduate Research Journey. In E.R. Mathipa and M.T. Gumbo (Eds.), *Addressing Research Challenges: Making Headway for Developing Researchers* (pp. 1-13). Noordwyk: Mosala-MASEDI Publishers & Booksellers.

Ruger, S. (2013). How to Write a Good PhD Thesis and Survive the Viva. Retrieved March 17, 2016, from <http://www.scribd.com/doc/193886870/Ruger-2013-How-to-Write-a-Good-PhD-Thesis-and-Survive-the-Viva#scribd>