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# Examining the Relationship of Chapter 1 to Other Chapters in a Dissertation or Thesis

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## Abstract

The review examined the relationship between Chapter 1 and its subsequent Chapters in a dissertation or thesis, informed by a constructivist paradigm utilising a qualitative approach. It further demonstrated how the contrasting ontological, epistemological assumptions and models of human beings the researcher brings to the research process have direct implications for one's methodological concerns in a project. To ascertain these philosophical assumptions, thirty postgraduate projects were purposively selected and theoretical saturation determined the sample as depth was sought employing a grounded theory. Different Chapter 1s of various dissertations and theses were scrutinised first and used to develop a framework of analysis which was later fine-tuned using literature surveyed. Guided by an interactive process combining the elements of content and inductive thematic analysis, the major components of the study were identified, namely; the research problem, objectives, sub-problems or hypotheses. In turn, these influenced the literature surveyed, research methodology utilised, analysis and interpretation of data, conclusions drawn and recommendations made. These technicalities if carefully observed are meant to guide postgraduate students to produce a quality product independently and reveal the symbiotic relationship that exists between Chapter 1 and its subsequent Chapters in a dissertation or theses.

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## Introduction

Research to an inquisitive mind, commences with a research problem (RP) which determines the process of data gathering for analysis and interpretation in a planned and systematic fashion for the purposes of resolving it (Cohen & Manion, 2007; Hoberg, 1997; Maxwell, 2005; Ngwenya, 2015). Phenomena can either be empirically observed using inductive methods or verified based on preconceived notions using deductive methods (Babbie, 2014; Cohen & Manion, 2007; Cohen, Manion & Morrison, 2007). Therefore, research viewed from this perspective would utilise either a qualitative or quantitative methodology respectively with the middle view adopting both (i.e., deductive-inductive methods), herein referred to as mixed methods (Miles & Huberman, 1994; Tashakkori & Teddlie, 2003).It is through such scientific methods of inquiry that researchers try to comprehend the world around them when they conduct dignified research (Cohen et al., 2007).

The nature of scientific inquiry a postgraduate student undertakes is written in an academic document called a dissertation or thesis. The former is smaller in scope and is usually associated with Master's students, whereas the latter is larger and longer and is done by PhD students (Paltridge, 2002). Both research efforts are for examination purposes and advancing knowledge in a format prescribed by the parent university which students must adhere to religiously (Glatthorn & Joyner, 2005; Paltridge, 2002). Furthermore, in academic circles, a dissertation or thesis are a rite of passage to the world of scholarship (Kivunja, 2016) and should be taken seriously by students and their supervisors. Therefore, the purpose of this review is to examine the major components which constitute Chapter 1 in a dissertation or thesis and illustrate how these components relate to subsequent Chapters so that postgraduate students may undertake such an academic endeavour independently or with little supervision.

Several studies have been conducted on the challenges faced by postgraduate students on the utilisation of different epistemologies (Cadman, 1997), pedagogical shortfalls and supervision (Wang & Li, 2008), the development of research proposals (Mafa & Mapholisa, 2012), writing all sections of a project (Claudius, 2016) and writing the discussion section (Bitchener & Basturken, 2016). Similar literature is also abundant on the market (university prospectus included) giving students guidelines on how to write different dissertations or theses' Chapters with very few of them demonstrating the symbiotic relationship which exists among them with specific reference to Chapter 1. Viewed from this angle, Chapter 1 and its major components, becomes the guiding star which like a thread runs through the literature surveyed, research methodology (RM), data collection methods, analysis and interpretation procedures, and the conclusions and recommendations drawn thereafter based on the empirical investigation (Claudius, 2016). This thought buttresses the argument that Chapter 1 is introductory to the whole project and saves as a referent point as it unfolds (Glatthorn & Joyner, 2005; Kivunja, 2016).It is the lack of this symbiotic relationship among Chapters which the researcher has observed in some projects as a supervisor of postgraduate students over a period of seven years and an internal/ external thesis Examiner which this review intends to address as it seeks to guide them (students) to conduct dignified research in a scientific and objective manner (Schulze, 2002).

## Background

Research which postgraduate students conduct in conventional tertiary institutions at Master's or PhD level respectively, helps them become budding researchers in the discipline of dignified research as they uncover truths meant to improve educational practice. It also further enables them earn a degree qualification, generate new knowledge or modify it depending on the prevailing circumstances (Babbie, 2014; Glatthorn & Joyner, 2005; Kivunja, 2016). However, the voyage of discovery is not a pleasant one. For that reason, students need proper initiation in the tradition of research right from the onset if they are to be transformed from being consumers of knowledge to generators and disseminators of it (Glatthorn & Joyner, 2005). While most of the knowledge individuals possess has been discovered through science and transmitted from one generation to the other, some of it is acquired through personal experience and discovery and the other is sought from experts (Babbie, 2014; Cohen et al., 2007; Mouly, 1978). Such knowledge is based on agreement and experiential reality (Babbie, 2014), to which postgraduate students must make a contribution in their personal capacity.

For postgraduate students to be able to play a hegemonic role in the research arena, knowledge of epistemology which Brannen (1992, p. 2) views as "a branch of philosophy that investigates the origin, nature, methods and limits of human knowledge" must be handy. By its nature, it demands that postgraduate students as inquisitive individuals use science to discover reality through their personal experience utilising an appropriate RM which Cohen and Manion (2007, p. 4) refer to as "an overall plan which produces a scientific enquiry," rather than taking things for granted (Leedy & Ormrod, 2019). Therefore, students in pursuant of scientific discovery using an appropriate RM must know that not all knowledge gained through personal experience and authoritative sources is credible. Time has proved that experts of whatever magnitude cannot be exclusive possessors of credible knowledge since humans are not infallible (Cohen & Manion, 2007).

Likewise, traditional knowledge which is based on agreement and experiential reality although discovered through a scientific process may be a hindrance to future scientific endeavours too since it may be unreliable and invalid (Babbie, 2014). For instance, some of it acquired through empirical observations can also be impeded by overgeneralisations when based on a limited sample (Babbie, 2014). For that reason, RPs must be solved scientifically through a research process which seeks to construct theories carefully, systematically and later on tested empirically so that explanations are grounded in facts not "common-sense knowing" (Cohen & Manion, 2007, p. 3). Such a feat can only be successfully achieved through dignified research which is replicable and is subject to public scrutiny by fellow professionals, more so, that postgraduate dissertations or theses are scrutinised by both internal and external examiners for academic compliance (Glatthorn & Joyner, 2005; Kivunja, 2016).

Therefore, in this context, educational research must be viewed as a combination of experience and reasoning if the truth is to be discovered both in natural and social sciences (Cohen & Manion, 2007; O'Leary, 2014). Above all, the scientific procedures employed must have sufficient safe guards to protect the research process from human error and bias (Cohen & Manion, 2007). All these are technical skills which postgraduate students must exhibit through project work if their academic efforts are to be appreciated by the academic community. The skills must be embedded in Chapter 1 and its subsequent Chapters if the findings are to be credible.

## Literature Review

### *The concepts of social reality*

Educational researchers are convinced that research entails two contrasting views of social reality. On one hand, there is the objective view of social reality which utilises deductive methods which are credited to Aristotle's syllogism method of inquiry (Cohen & Manion, 2007; Leedy, 1980). Such a view claims that reasoning starts from a major premise, and then questions meant to unravel the truth follow in a logical manner from the general to the particular until a conclusion is deduced from a valid premise (Cohen & Manion, 2007; Leedy, 1980). Knowledge discovered in this way is based on preconceived notions which are supported by authoritative sources; laws, rules or other widely acceptable principles (Cohen et al., 2007). A postgraduate researcher employing objective research methods utilising deductive reasoning would therefore test or verify theories or hypotheses for acceptance or modifications and generalisations, which are hallmarks of a quantitative study (Soiferman, 2010).

On the other hand, there is the subjective view of social reality which utilises inductive reasoning which is associated with Baconians (Cohen & Manion, 2007). The movement arose when logic and authority had ceased to be regarded as conclusive means of proof and instead became sources of hypotheses which would empirically be tested for validity (Cohen et al., 2007). In that perception, inductive reasoning was viewed as an empirical RM which was designed to avoid mental fallacies (Cohen et al., 2007). It disregarded quantitative notions of observations from which general principles were developed (Cohen & Manion, 2007; Cohen et al., 2007; Leedy, 1980). Instead, it demanded that postgraduate students, who subscribe to this view, must assemble several observed facts and study them thoroughly so as to develop hypotheses which would eventually lead to generalisations (Cohen & Manion, 2007; Cohen et al., 2007; Leedy, 1980). Such a thrust would compel them to work from the participants' views to build broader themes and generate a theory interconnecting themes utilising qualitative methods to investigate subjective reality (Cohen & Manion, 2007; Cohen et al., 2007).

It is against that background of contrasting views that Burrell and Morgan (1979) identified four assumptions underpinning concepts of social reality which students must be conscious of. That is, the nature or essence of social phenomena being investigated (ontological assumptions), the way how the study of knowledge is disseminated (epistemological assumptions), the study of humans as initiators of their actions or being acted upon (human nature) which have serious implications on the RM to be adopted for any study at postgraduate level.

When a postgraduate student's view of the social world is realist and believes that knowledge is external to the knower and out there, his or her job would be to use a range of traditional objective research designs such as experiments and surveys to do the following: clearly isolate causes and effects, properly operationalise theoretical relations to measure and quantify phenomena, create research designs allowing generalisation of the results and the formulation of laws (Flick, 2007a; O'Leary, 2014). Such methods are predominantly quantitative as they are meant to identify, define and discover ways in which their relationships can be expressed (Creswell, 2018; Leedy & Ormrod, 2019; O'Leary, 2014) and how universal general laws may be discovered (Babbie, 2014). A quantitative RM in this respect employing experiments would

demand that some variables be manipulated, a condition which makes social scientists prefer quasi-or natural experiments (Hoberg, 1997; Schulze, 2002). In the former variables would be isolated, controlled and manipulated in an artificial laboratory, whereas in the latter, sometimes it may not be ethical to set up a laboratory experiment on sensitive investigations involving humans (Cohen et al., 2007).

Despite those differences, in either case, postgraduate students informed by this approach would need to collect large masses of numerical data  using structured, technologically fine-tuned and standardised instruments and such data can only be analysed using inferential or descriptive statistics, thereafter reported in a structured manner using frequent tables, graphs or figures (Maxwell, 2005; Trochim, 2006). Since the purpose of a quantitative research is to establish universal general laws which may be generalised to the targeted population, the student must use probability sampling methods to select a representative sample from a heterogeneous population so as to eliminate research bias and validate the process (Lincoln & Guba, 1985; McCombes, 2020). The use of predetermined research designs in the RM makes the research process rigid and easily replicable (Hoberg, 1997; Schulze, 2002).

On the contrary, a postgraduate student who holds a subjective and relativist view of the social world would commence from the assumption that humans are “initiators of their own actions with free will and creativity, producing their own environments” (Cohen et al., 2007, p. 8). Such an orientation would enable the student to utilise naturalistic research methods involving narratives, ethnography, phenomenology, case study and grounded theory among many to investigate phenomenon (Creswell, 2018). These methods enable the student to understand the way in which the individual creates, modifies and interprets the world in which he or she lives in (Denzin & Lincoln, 2011). In concurrence, Burrell and Morgan (1979, p. 4) assert that “emphasis in this regard would be to understand and explain the unique case of the individual rather than the general and universal.” Its emphasis on the particular and individual in understanding human behaviour compels the student to adopt an idiographic approach which is qualitative in nature (Cohen et al., 2007).

Whether consciously or not a postgraduate student who engages in any research enterprise brings these contrasting views of social reality which in turn, influence the formulation of the RP selected, RM, research methods/designs, data collection and analysis procedures to be employed (Dissertation, 2019). Such knowledge does not only influence the conceptualisation of Chapter 1 but its relationship to subsequent Chapters as well.

### *The conceptual framework*

Nowadays, the debate on paradigms which characterised the 1960s seems to have taken centre stage in the conceptualisation of Chapter 1 in relation to its subsequent Chapters. A paradigm in this context is viewed as, “a model or framework for observation and understanding, which shapes both what we see and how we understand it” (Babbie, 2014, p. 31). Similarly, Bryman (2004, p. 453) perceives it as “a cluster of beliefs and dictates which, for scientists in a particular discipline influence what should be studied, how research should be done [and] how results should be interpreted.”  Going by these perceptions, the use of a paradigm in a research process does not only offer students logical frameworks for creating theory but helps them view social reality differently (Babbie, 2014). Besides, it also enables them to justify whatever route one would have taken in the exploration or explanation of phenomenon (Armitage, 2007). Furthermore, it

opens up new understandings, suggests different kinds of theories and inspires different kinds of research culminating in a basic structure underlying a particular philosophical thought which the postgraduate student intends to utilise in an attempt to develop knowledge (Babbie, 2014). While there are several paradigms which may be utilised to justify whatever ontological and epistemological position one would have taken in the research process, this review will focus on positivism and constructivism in an attempt to examine the relationship of Chapter 1 to subsequent Chapters in a dissertation or thesis.

### *Positivism*

According to its proponents, positivism is premised on the fact that "all genuine knowledge is based on sense experience and can only be advanced by means of observation" (Cohen & Manion, 2007, p. 10). Students who subscribe to this philosophy would study phenomena under investigation logically and rationally using the objective methods alluded to earlier on in both natural and social sciences (Babbie, 2014; Brannen, 1992; Cohen & Manion, 2007; Cohen et al., 2007; Creswell, 2018). This orientation would be based on one's view of objective reality and would utilise deductive reasoning in its quest for the truth. It is this traditional philosophical thought which has dominated the scientific research process over time. Theories or hypotheses are tested or verified for acceptance, modifications or rejections which are a hallmark for a quantitative approach in a research endeavour (Soiferman, 2010).

### *Constructivism*

Constructivism emerged as a reaction of the positivist movement and was born out of the painful work of anthropologists, sociologists and psychologists as social scientists preferred a holistic approach in studying human behaviour (Cohen & Manion, 2007; Cohen et al., 2007). Its proponents believed in learning from the direct experiences of an individual and how one interacted with others in a given natural environment resulting in the subjective meanings derived from such situations (Babbie, 2014; Cohen & Manion, 2007; Cohen et al., 2007; Flick, 2007a). The postgraduate student with this kind of orientation would employ naturalistic research methods to inductively investigate phenomenon with the intention of generating or developing a hypothesis or theory or pattern of meaning grounded in the data gathered utilising a qualitative RM (Creswell, 2018).

Within this realm of research, postgraduate students need to be advised that methodology and methods of the research process must not be determined by the paradigm dichotomy but by what one would want to know and how to know it (Soiferman, 2010). The way how the RP is formulated, which is at the heart of every research enterprise should determine the research process to be employed. However, where one's ontological and epistemological philosophical assumptions informs the RM and methods of the research process, one must refrain from encroaching in the paradigmatic domain of the other unless when using mixed methodologies (Cohen et al., 2007; Lincoln & Guba, 1985). Therefore, depending upon the theoretical position the student takes in the research process he or she must either use a qualitative or quantitative approach or both to investigate phenomenon under study. Research approaches in this study are viewed as "plans and procedures for research that span the steps from broad assumptions to detailed methods of data

collection, analysis and interpretation" (Creswell, 2018, p. 3). This perception implies that when students decide on what research approach to adopt for their studies, then the philosophical assumptions they bring to the research arena would inform the whole research process from Chapter 1 to Chapter 5 in a neat fashion. By the same token , the nature of the RP, the technical knowhow, resources available and audience would also determine the approach to be used (Cohen et al., 2007; Creswell, 2018).

## Methodology

The ontological and epistemological assumption underlying this study was constructivism utilising a qualitative approach as it sought to gain the subjective and multiple views of postgraduate students (Babbie, 2014; Cohen & Manion, 2007; Creswell, 2018) on how they conceptualised Chapter 1 of their dissertations and theses under the tutelage of their supervisors based on prescribed university guidelines in an attempt to answer the following research question: *"How does Chapter 1 relate to other Chapters in a dissertation or thesis?"* A qualitative approach utilising an inductive content and thematic approach of analysis and interpretation of data was employed based on observations made because the study sought to develop a theory grounded in data gathered on the phenomenon under investigation (Charmaz, 2014; Guba & Lincoln, 2005).

A grounded theory design of inquiry was used to systematically gather and analyse data with the intention of developing a theory which would be used to understand the relationship of Chapter 1 to its subsequent Chapters in a dissertation or thesis (Charmaz, 2014; Creswell, 2018).

The population of the study comprised different dissertations and theses of universities in the Faculty of Arts and Education, as attempts were made to understand and discover insights relevant to the phenomenon being investigated. University libraries were the major source of such documents as they contain legitimate projects which have undergone rigorous and vigorous supervision before they are marked by internal and external Examiners. Thereafter, based on the recommendations of the Examiner, are fine-tuned by the student before they are re-submitted to the parent university for archival purposes. This process makes the selected documents credible, authentic, accurate and representative of their institutions (Lincoln & Guba, 1985). Since the documents were in the public domain, access to these by the researcher was unrestricted (Flick, 2007a).

Non-probability sampling methods involving purposive and theoretical techniques were employed for this study. Two dissertations and 2 theses utilising a qualitative and quantitative RM were purposively selected for analysis based on the core categories which were developed premised on the central phenomenon of the RP (Denscombe, 2014). The established preconceived notions were used to analyse and compare other projects selected continuously until theoretical saturation was achieved (Charmaz, 2014; Denscombe, 2014). Theoretical saturation was realised when no other new insights or additional data emerged (Glaser & Strauss, 2007). Resultantly, thirty projects (i.e., fifteen qualitative and fifteen quantitative) were sampled comprising twenty dissertations and ten theses for an in-depth study of the phenomenon within a period of three months. Master's projects were about 200 pages or less in length whereas PhD ones were

approximately 400 pages or less. The projects scrutinised ranged from 2018 to 2019. Complementing these documents were 5 theses Examination Reports and 4 defence workshop minutes. For that reason, the findings are particularised to universities studied as opposed to generalisation which is left to the reader to do so in comparisons with other universities (Yin, 2012).

Document analysis was used to generate data for this study since it was a desktop research. According to Flick, (2007a, p. 255) documents "are standardised artefacts" which can either be in print or electronic form and can be used to generate data, review and evaluate it systematically. For this study, classical primary literature related to the phenomenon was reviewed intensively and extensively as guidance and depth were sought (Cohen et al., 2007). The data obtained from the two dissertations and two theses chosen for the trial run were analysed, compared and enabled the researcher to establish the framework of analysis based on the core categories unearthed. The core categories were compared with literature surveyed and later fined-tuned (Charmaz, 2014). In that way the document analysis protocol was developed (Bowen, 2009). The triangulation of data from literature sources and that gleaned from the projects studied made the instruments credible and dependable in the data generation process (Yin, 2012). In keeping with ethical issues, a waver was sought from the (Ngwenya, 2015) as the study involved non-humans. Despite that, issues of confidentiality, privacy and anonymity with regards to documents used were observed. To focus the study on the major components of Chapter 1 in relation to the subsequent Chapters, the following framework for the data generation process was constructed (see Table 1).

**Table 1.** Data generation framework for chapter 1 in relation to subsequent chapters

| Chapters | Core Category |
|---|---|
| **1.Introductory Chapter** | 1.1 Background to the study.<br>1.2 Clearly stated RP.<br>1.3 Stating specific Research Objectives (RO).<br>1.4 Deriving Research Sub-Problems (RSP) from RO.<br>1.5 Deriving Research Hypotheses (RH) from the RO or RSP.<br>1.6 Significance of the study.<br>1.7 Appropriateness of the paradigm which informs the RM in the preview.<br>1.8 Organisation of the study. |
| **2.Review of Related Literature** | 2.1 Relevance of the Conceptual/Theoretical Framework.<br>2.2 Relevance of literature reviewed in addressing the RP.<br>2.3 Relation of literature surveyed to the Background of the study.<br>2.4 Relationship of the studies reviewed to RO, RSP or RH and RP.<br>2.5 Reviewing similar studies meant to fine-tune the RP, RM, instruments, data analysis procedures and justifying them. |

| | |
|---|---|
| **3.Research Methodology** | 3.1 Elaborating the preview of the RM contained in Chapter 1.<br>3.2 Justification of paradigm used to inform the RM to answer the RP.<br>3.3 Appropriateness of approach used informed by paradigm chosen.<br>3.4 Revealing how variables in a quantitative research are going to be treated.<br>3.5 Demonstrating how the research methods, sampling method, data collection and data analysis procedures are informed by the paradigm and approach used.<br>3.6 Demonstrating how the RP/RSP is resolved within the RM. |
| **4.Data Presentation and Interpretation** | 4.1 Findings/results are presented guided by the RO, RSP or RH.<br>4.2 Appropriateness of themes used to present data and explore phenomenon as derived from RO or RSP in a qualitative study.<br>4.3 Appropriateness of reporting and analysing data in quantitative studies based on RSP or RH anchored on variables.<br>4.4 Literature surveyed used as evidence of data unearthed. |
| **5.Summary, Findings, Discussion, Conclusions and Recommendations** | 5.1 Discussion of findings/results centred on RO, RSP or RH depending on the approach used.<br>5.2 Discussion achieves RO, answers the RSP or confirms or disconfirms RH.<br>5.2 Literature surveyed in Chapter 1's background and 2 is either confirmed or disconfirmed.<br>5.3 Findings/ results reflect the Conceptual/Theoretical Framework discussed either in Chapter 1 or 2.<br>5.4 Conclusions are drawn from literature surveyed in Chapter 2 and the empirical investigation conducted in Chapter 3 reported in Chapter 4 guided by the RO/RSP or themes.<br>5.5 Recommendations are based on the conclusions made and reflect on the significance of the study discussed in Chapter 1. |

The interactive process used to analyse qualitative data captured combined elements of content and thematic analysis (Bowen, 2009). First, Chapter 1 of a selected project was thoroughly read. Data generated was then segmented and coded into core categories and subcategories based on the central phenomenon of the RP (Bowen, 2009). The other projects' first Chapters were scrutinised to establish the relationship between the categories identified and the phenomenon under investigation. Subsequent dissertations and theses were reviewed and evaluated against the predetermined categories which enabled the researcher to gain deeper insights of the RP and develop empirical knowledge (Pamberton, 2012). The empirical data was compared and contrasted and emergent themes were used to fine-tune the core categories (Flick, 2007a). Similar patterns were clustered into themes and dissimilar ones were interrogated further for clarification. Each theme which was grounded in the data gathered was used as a unit for analysis (see Table 1) from which theory was generated (Charmaz, 2014; Flick, 2007a).

## Findings

The findings of the study are reported below based on the five traditional Chapters of a dissertation or thesis using the Framework of Analysis portrayed in Table 1.

### *Chapter 1: Introductory chapter*

The scrutiny of the first Chapters of the different dissertations and theses where benchmarked on the core categories exhibited in Table1. Generally, all postgraduate students were able to give their project a brief title, motivate the background to the study to establish the gap they intended to investigate informed by both primary and secondary sources of literature reviewed (cf. 1.1). In the process some students failed to link their desired RM, designs/methods and instruments to those reviewed in similar studies (cf. 2.5). Furthermore, the review revealed that most students expressed their RP in non-ambiguous terms either as a statement or question (cf. 1.2). While experienced researchers advise students to use the latter (Leedy & Ormrod, 2019), those students who expressed their RP in a statement failed to break it down in clearly stated researchable RSP (cf. 1.4). At the worst, some RSP responded to “yes” or “no” questions which signified the end of the research enterprise.

Interesting to note was that the majority of postgraduate students were able to express their research objectives (RO) in measurable terms. It is only 2 students out of the thirty investigated who used the term “develop” to express one of their RO. The term was found to be inappropriate in cross-sectional studies as development requires a longer period of time for it to be measured.

The major challenge which was revealed by the majority of postgraduate students and had a bearing on subsequent Chapters was their failure to craft their RO, RSP and RH on a one-to-one correspondence so as to demonstrate their relationship and centrality to the whole research process (cf. 1.4; 1.5). Those who attempted to do so, the structure of their subsequent Chapters were predictable together with the framework of analysis and interpretation of data (cf. 2.4; 3.6; 4.2; 4.3). Furthermore, the RO, RSP and RH became the benchmark on which conclusions and recommendations of the study were drawn and made respectively (cf. 5.2; 5.4).

Noteworthy were the significance of the study (cf. 1.6) and the preview of the RM (cf. 1.7) as highlighted in Chapter 1. The former impacted on the recommendations (cf. 5.5) which were made while the latter was elaborated in Chapter 3 (cf. 3.1). Supplementing this data was the organisation of the study (cf. 1.8) which gave the synopsis of the whole project, giving it a gestalt view (Ngwenya, 2015). Debatable though within this context was whether RO should be in both methodologies as revealed in most documents reviewed since some researchers argue that RH may stand alone as they are considered the working tools of every quantitative study (Cohen & Manion, 2007; Dissertation, 2019).

### *Chapter 2: Review of related literature*

Although the majority of projects scrutinised had the Conceptual/Theoretical Framework in Chapter 2, some had it in Chapter 1. This difference was considered insignificant to this study as its placement was determined by the various formats of autonomous academic bodies of various universities. Interesting to note in this context was that the Conceptual

Framework was associated with quantitative studies and the Theoretical one with qualitative studies, although one PhD student used both in his thesis. In the former the students were able to identify and explain the relationship between the independent and dependent variables as expressed in their RP which guided their study (cf. 2.1; Miles & Huberman, 1994). These were further broken down into measurable RH (cf. 2.4). In their explanation of the concepts, they demonstrated how the independent variable would affect the dependent one in their study, although they failed to relate the discussion to the studies reviewed (cf. 2.5).

On the contrary, those whose qualitative study was associated with the Theoretical Framework used, the majority of them were able to demonstrate how their study was embedded in the theory adopted and ably linked their RM to it with some justifications (cf. 2.1). Similarly, those who deviated from the RM reviewed in the theory as demanded by their RP did so with some justifications as well (cf. 2.5). However, the majority of them failed to reveal how their empirical investigation would contribute to the body of knowledge or practice based on the theory (s) adopted (cf. 2.2). Of concern in this context, were those who attempted to align their study to more than one theory. One Master's student had four of these. The narration sounded disjointed and unrelated to the study which left the reader in suspense, an observation which was also raised in one of the defence workshop minutes.

Generally, it was interesting to observe that most students were able to chart the body of knowledge needed to motivate their RP and establish the gap they intended to investigate using a variety of primary and secondary sources with some of them being current (cf. 2.2). Of concern though was that, only a minority of them were able to show the link between literature being surveyed and that reviewed in the background (cf. 2.3). Besides that observation, most of them are commended for ably giving their study a theoretical framework based on historical developments of their RP informed by the classical literature reviewed. Significantly lacking in their review was how the RM utilised in previous studies refined the RM they adopted (cf. 2.5).

Further scrutiny of the documents revealed that most postgraduate students attempted to centre their literature survey on the RP and its major components (RO, RSP, RH) or the themes derived from the RSP (cf. 2.4). Those who deviated from this norm had their reviews punctuated with irrelevancies (cf. 2.2) which attracted the following comment from one of the Examiners:

> *The candidate is commended for having reviewed a variety of primary and secondary sources for his study with some of them being current. However, the candidate seems to have been overwhelmed by the amount of literature he had and lost focus in the process. Some chunks of literature reviewed were merely written for their own sake without critically examining them in relation to the research problem (Thesis Examination Report, 2019).*

Conspicuously missing too in most projects was how the Conceptual/Theoretical Framework were deepened by the literature surveyed (Cohen & Manion, 2007; Creswell, 2018; Dissertation, 2019).

### *Chapter 3: Research methodology*

When the RM described in this Chapter was cross-checked against the preview (cf. 1.7), it was discovered that it was in sync with what had been proposed earlier on (cf. 3.1). Also based on their social view of reality, through their RP, postgraduate students tried to demonstrate how the philosophical assumption they brought to the research arena informed their RM, designs/research methods, population and sampling methods, instruments, data collection and data analysis procedures utilised for their study (cf. 3.2).

Confusions only arose when it came to the research instruments, sampling methods and data analysis procedures utilised, which were not resonating with the RM adopted to resolve the RP. Some students used a closed-ended questionnaire to gather qualitative data and others used non-probability sampling methods (i.e., purposive and convenience) to select respondents for a quantitative survey. Discrepancies were also observed when it came to data analysis. They revealed serious encroachment on paradigmatic assumptions informing their research enterprise. For example, uncertainty reigned on whether to use statistics or thematic data analysis techniques to analyse qualitative data. Some of them despite having stated that they would use a thematic approach to analyse data in Chapter 1 (cf. 1.7) and Chapter 3 (cf. 3.3), they went ahead and presented their data in tables and graphic form before analysing it in Chapter 4 (cf. 4.2) which was not compatible with the RM chosen to address their RP. In a similar fashion, students who adopted a quantitative RM went on to present and analyse their data in text form perhaps trying to avoid statistical packages which are compatible with a quantitative study for reasons best known to them. Based on these findings, the researcher surmised that students who demonstrated such weaknesses worked on their Chapters in isolation not in relation to the other as alluded to earlier on in the analogy of a thread. Informed by this view, the researcher was convinced that, had they revisited Chapter 3, such flaws would have been avoided. Such a scenario is worsened by lack of thorough supervision or the supervisor's ignorance of the impact of paradigms on the research process. On a positive note, PhD students seemed to be conscious of these paradigmatic differences which informed the RP and RM of their studies.

### *Chapter 4: Data presentation and interpretation*

The documents reviewed revealed that most Master's students failed to demonstrate the relationship which exists among the RO, RSP and RH (cf. 4.1) as they failed to link this to how they reported their findings/results (cf. 41). Commendable within this context were some students who used the qualitative RM who reported and interpreted their data guided by the themes which were derived from the RSP (cf. 4.2) while those who adopted the quantitative one, were guided by the RSP and the RH (cf. 4.3). In the process some evidence drawn from literature surveyed (cf. 1.1; 2.2; 4.4) was used to support their findings/results (cf. 5.2). Problems only arose from those who were overwhelmed by the data at hand and whose RO was not in sync with the RSP or RH. On further scrutiny it was discovered that these components were not their main focus on the research instruments developed to collect/generate data. The lack of interconnectedness between the way instruments were developed and data reported created tone contradictions between what the student intended to investigate through Chapter 1, literature surveyed, data analysis and interpretation of the results/findings.

### *Chapter 5: Summary, findings, discussion, conclusions and recommendations*

The documents reviewed demonstrated that all Chapters converge in Chapter 5 directed by the RP, the RO, RSP, RH and RM through summaries delineated (cf. 5.1). The findings/results of the empirical investigation were structured and organised centred on either the RO/RSP or themes derived from the RSP (cf. 5.1). These were either confirmed or disconfirmed using related literature reviewed which controlled the investigation (cf. 5.2). In the process, the RO/RSP or themes became the benchmark upon which the postgraduate student's technical skills and findings/results were evaluated on and effort appreciated by the research community. However, some projects which were haphazardly structured had either the RO or RSP not addressed. Glaringly missing in most of the documents reviewed were conclusions which were drawn from literature surveyed which were supposed to be contrasted and compared with those derived from the empirical investigation (cf. 5.4). The few who were able to do so managed to identify the discrepancy and explained it within the context of their research endeavour. Ignored in most cases, was a reflection to the Theoretical Framework which was reviewed in Chapter 1 or 2 (cf. 5.3).

Further examination of the documents revealed that the majority of postgraduate students failed to state whether the RSP or RO were answered or achieved respectively (cf. 5.2). Even some of the recommendations suggested were neither drawn from the conclusions of the research nor linked to the significance of the study (cf. 1.6; 5.5). Little wonder that one Master's student suggested 30 recommendations based on her empirical investigation which was deemed not feasible when resources are factored in. Those not drawn from the conclusions of the study could not be linked to Chapters 1, 2 and 4.

## Discussion

The examination of the relationship of Chapter 1 to its subsequent Chapters has revealed that Chapter 1 must completely outline the research process of the whole dissertation or theses centred on the RP and its major components (RO, RSP, RH) with literature briefly used to frame the inquiry if the subsequent Chapters are to be predictable and controllable (Pemberton, 2012). The brief historical overview embedded in it must attempt to answer the questionon what is known on the phenomenon and what has created the problem (Dissertation, 2019). In addition, the RM which is elaborated in Chapter 3 must also be briefly highlighted in Chapter 1 as a way of equipping students with the prerequisite skills needed for the entire research process at the initial planning stages if they are to be empowered to proceed with subsequent Chapters independently or with little supervision.

Chapter 2 must provide the theoretical framework on which the research endeavour is grounded on (Dissertation, 2019). In a similar fashion, the RO, RSP or themes/RH derived from the RSP must help the student build the related literature review in an incremental manner section by section (Pemberton, 2012). It must commence from a broader perspective and narrow down to the literature connected to the purpose of the study to give it relevance guided by the RSP (Creswell, 2018; Pemberton, 2012). Similarly, the RM used in reviewed studies meant to address similar RP, must be used to fine-tune the research approach, the research methods/designs, the instruments, and data analysis procedures to be employed in the study. To minimise tensions when it comes to presentation of findings/results instruments used in the data collection/generation phase must be developed based on RO/RSP, RH and the literature reviewed (Pemberton,

2012). In the process, students must guard against paradigmatic encroachment.

When it comes to Chapter 4, the postgraduate student must re-read Chapter 1 and Chapter 2 so that the discussions of the findings/results are structured and organised based on the RSP or themes/RH and related to the literature reviewed. Likewise, when it comes to Chapter 5, the discussion and conclusions drawn must be sequenced in a thematic manner so that recommendations suggested are based on the themes or RSP and the significance of the study (Dissertation, 2019; Pemberton, 2012). In that way, the symbiotic relationship which exists between Chapter 1 and its subsequent Chapters would have been demonstrated.

For postgraduate students to be able to demonstrate the technical skills needed in producing quality dissertations or theses as suggested in this study, they would need orientation and training (Claudius, 2016). In that way, some flaws highlighted in this study would be minimised or eliminated, particularly in the conceptualisation of Chapter 1 which sets the stage for the whole research process.

## Conclusion

Lack of the symbiotic relationship which exists between Chapter 1 and its subsequent Chapters makes the research effort at postgraduate level a daunting and frustrating task. Resultantly, some students have abandoned their academic pursuits due to the demands of the research enterprise at Master's and PhD level which becomes costly in terms of time and resources they would have invested. Others fear to venture in this enterprise. Challenges or fears envisaged at this level whether real or imagined would be minimised if not eliminated if postgraduate students would be oriented to meticulously conceptualise Chapter 1 based on its RP and major components informed by one's ontological and epistemological assumptions brought to the research arena, which in turn, have a bearing on the RM, research methods/designs, instruments, data analysis and interpretation, conclusions drawn and recommendations made. Such an approach would not only enhance the quality of the research output at this level, but produce students who are research minded and armed with prerequisite and technical skills needed in the research endeavour.

## Statements and Declarations

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### Conflict of interests

The author has no competing interests to declare that are relevant to the content of the article.

### Author's contribution

This is my original work of an empirical investigation which I worked on independently. Sources of ideas have been acknowledged using the appropriate style.

### Data availability

After approval and published, the work will be available in the public domain for other scholars to use or critique it.

## References


- Armitage, A. (2007). *Mutual research designs: Redefining mixed methods design.* Paper presented at the British Educational Research Association Annual Conference, institute of Education, 5-8 September. London: University of London.
- Babbie, E. (2014). *The basics of social research* (6th ed). Vienna, Australia: Wadsworth CENGAGE Learning.
- Beck, R.N. (1979). *Handbook in social philosophy.* New York, NY: Macmillan.
- Bitchener, J., & Basturkmen. H. (2006). Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section. *Journal of English for Academic Purposes*, *5*(1), 4-18.
- Bowen, G.A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27-40.
- Brannen, J. (1992). *Mixed methods: Qualitative and quantitative research*. Aldershot: Avebury.
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organizational analysis*. London, UK: Heinemann Educational.
- Cadman, K. (1997). Thesis writing for international students: A question of identity? *English for Specific Purposes*, *16*(1), 3-14.
- Charmaz, K. (2014). *Constructing grounded theory*. Thousand Oaks, CA: Sage.
- Claudius, K.S. (2016). Challenges of writing theses and dissertations among postgraduate students in Tanzanian higher learning institutions. *International Research Studies in Education, 5*(3), 71-80.
- Cohen, L., & Manion, L. (2007). *Research in education* (6th ed). New York, NY: Routlege.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed). London, UK: Routledge.
- Creswell, J.W. (2018). *Research design: Qualitative, quantitative and mixed methods approaches* (5th ed). Thousand Oaks, CA: Sage.
- Denscombe, M. (2014). *A good research guide: For small-scale social research projects* (5th ed). Berkshire, England: Open University.
- Denzin, N., & Lincoln, Y. (Eds.) (2011). *Handbook of qualitative research* (4th ed). Thousand Oaks, CA: Sage.

- Dissertation. (2019). *Chapters 1-5: Section Guidelines Rubric-Verson1*. Received fromhttps://www.stu.edu/biscayne/wpcontent/uploads/sites/4/2019/08/DISSERTATIONChapters1-5SectionRubric-8_19.pdf
- Flick, U. (2007a). *An introduction to qualitative research* (4th ed). London, UK: Sage.
- Glaser, B.G., & Strauss, A.L. (2007). *The discovery of grounded theory: Strategies for qualitative research.* New York, NY: Aldine.
- Glatthorn, A.A., & Joyner, R.L. (2005). *Writing a winning thesis or dissertation: A step-by-step guide.* Thousand Oaks, CA: Sage.
- Guba, E.G., & Lincoln, Y.S. (2005). *Paradigmatic controversies and emerging confluences.* Thousand Oaks, CA: Sage.
- Hoberg, S.M. (1997). *Quantitative and research methodology: Sampling strategies in perspective* Pretoria: University of South Africa.
- Kivunja, C. (2016). How to write an effective research proposal for higher degree research in higher education: Lessons from practice. *International Journal of Higher Education, 5*(2), 163-172.
- Leedy, P.D., & Ormrod, J.E. (2019). *Practical research: Planning and design* (12th ed). New York, NY: Macmillan.
- Leedy, P.D. (1980). *Practical research: Planning and design* (1st ed). New York, NY: Macmillan.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Mafa, O., & Mapolisa, T. (2011). Supervisors' experiences in supervising postgraduate education students' dissertations and theses at the Zimbabwe Open University (ZOU). *International Journal of Asian Social Science*, *2*(10), 1685-1697.
- Maxwell, J.A. (2005). *Quantitative research design: An interactional approach* (2nd ed). Thousand Oaks: Sage.
- McCombes, S. (2020). *Understanding different sampling methods.* Received from https://www.scribbr.com/methodology/sampling-methods/
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis: An expanded source book* (2nd ed). Thousand Oaks, CA: Sage: 1994.
- Mouly, G.J. (1978). *Educational research: The art and science of investigation*. Boston, MA: Allyn and Bacon.
- Ngwenya, V.C. (2015)
- O'Leary, Z. (2014). *The essential guide to doing your research project* London: Sage.
- Paltridge, B. (2002). Thesis and dissertation writing. An examination of published advice and actual practice.*English for Specific Purposes, 21*,125-143.
- Permberton, C.L.A. (2012). A "how-to" guide for the education thesis/dissertation process.*Kappa Delta PI Record,* (48), 82-86.
- Schulze, S. (2002). *Research methodology*. Pretoria: University of South Africa.
- Soiferman, L.K. (2010). *Compare and contrast inductive and deductive research approaches*. Manitoba: University of Manitoba.
- Tashakkori, A., & Teddlie, C. (2003). *Mixed methodologies: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Trochim, W.M.K. (2006). *The qualitative debate: Research methods knowledge base.*Received from

https://www.socialresearchmethods.net/kb/qualmeth.php

- Wang, T., & Li, L.Y. (2008). Understanding international postgraduate research students' challenges and pedagogical needs in thesis writing. *International Journal of Pedagogies and Learning, 4*(3), 88-96.
- Yin, R.K. (2012). *Application of case study research* (3rd ed). Thousand Oaks, CA: Sage.