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Social Research Methods in Higher Education: A Critical Analysis of Methodological Issues and Emerging Trends at the Zimbabwe Open University

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1. Introduction

The world today is witnessing an explosion of social science research. Unlike other disciplines in the natural sciences, social science research has attracted much attention due to its dynamism and complexity (Dube and Pare, 2003). As modern societies become more complex in their structure, needs and demands, social problems have also become more complex. As a result, several social theories and social research methods have been developed and continue to develop in an effort to understand diverse social problems. Presently, social research is in the process of rapid change. This chapter focuses on current methodological issues and emerging trends in social science research. It argues that the challenge for social scientists and researchers worldwide is to continue in the search for a unified consensus on what methodology might have the power and refinement to connect a proposed "grand theory" with the various midrange theories which, with considerable success, would continue to provide usable frameworks for increasing the overall knowledge of society. Social research is experiencing a paradigm shift that calls for the re-examination of current methodologies. The present review helps identify current methodological issues and trends in social science research. It is important that as social researchers, we should understand the philosophical, theoretical, and methodological debates influencing our work and careers, their implications for research and our place within them.

This discussion provides an academic forum for social scientists and researchers to reflect on the contemporary issues and emerging trends affecting their careers. This is important as this will help to shape the orientation of both old and young social researchers to be innovative and go beyond conventional boundaries. This chapter also puts young social scientists - who have not yet become 'attached' to certain sets of theories, concepts and methodology - in advantageous position to understand the current issues and emerging trends in social sciences research.

2. Aim/purpose of the chapter

This chapter serves two purposes. First, the chapter examines the historical, philosophical, and theoretical developments that have influenced social research methods worldwide.

Second, the chapter reports on current issues and emerging trends in social research with particular reference to social research at the Zimbabwe Open University.

3. Organization of the chapter

After defining social research, the chapter traces the historical and controversial development of social research covering the deductive – inductive debate, the positivist – constructivist debate, and the quantitative – qualitative debate. In order to help readers understand major issues and emerging trends in contemporary social research methods, this chapter examines the experiences of social researchers at the Zimbabwe Open University.

4. Types of sciences

Sciences are broadly divided into natural (or physical) sciences and social (or human) sciences. Natural sciences include disciplines such as geology, biology, meteorology. Social Sciences include various disciplines dealing with human life, human behaviour, social groups and social institutions. They consist of Anthropology, Behaviour Science, Commerce, Demography, Economics, Education, Geography, History, Law, Linguistics, Management, Political Science, Psychology, Public Administration, Sociology, and Social Work.

5. What is social science?

Literature defines social research as research conducted by social scientists (Ragin, 1994; Firebaugh, 2008). By the late 19th century, the academic social sciences were constituted of five fields: jurisprudence and amendment of the law, education, health, economy, trade and art. More specifically, social research examines a society's attitudes, assumptions, beliefs, trends, stratifications and rules. Popular topics of social research include poverty, racism, class issues, sexuality, voting behaviour, education, gender constructs, policing and criminal behaviour. Social research determines the relationship between one or more variables. Even though social research is most often conducted by social scientists or sociologists, it is an interdisciplinary study crossing into subjects like criminology the study of crime; politics, the study of power; economics the study of money and business; psychology study of the mind; philosophy study of beliefs and morals; and anthropology and the study of culture. Social Science research is a systematic method of exploring, analysing and conceptualising human life in order to extend, correct or verify knowledge of human behaviour and social life. In other words, Social science research seeks to find explanations to unexplained social phenomena, to clarify the doubtful, and correct the misconceived facts of social life. In a broader sense social research is the scientific study of society.

Social Sciences are not exact sciences like physical sciences, as they, unlike the latter, deal with human beings. Human nature and man's environment are so complex that it is more difficult to comprehend and predict human behaviour than physical phenomena. No two persons are alike in feelings, drives or emotions. No one person is consistent from one moment to another. The behaviour of human beings is influenced by biological, psychological, socio-cultural, temporal and environmental factors. It is difficult to see the underlying uniformities in the diversity of complex human behaviour.

Early German hermeneuticians, such as Wilhelm Dilthey, pioneered the distinction between natural and social science. Since the 1960s, a general weakening of deductivist accounts of science has grown side-by-side with critiques of scientism or 'science *as ideology*'. Writing in his book "*Constructing Social Research*", Charles C. Ragin (1994) says social research involves the interaction between ideas and evidence. He further argues that ideas help social researchers make sense of evidence, and researchers use evidence to extend, revise and test ideas. Social research thus attempts to create or validate theories through data collection and data analysis, and its goal is exploration, description and explanation. Social research seeks to find social patterns of regularity in social life and usually deals with social groups (aggregates of individuals), not individuals themselves.

6. What is research?

Research is the collection of information to test new ideas or to disprove old ones. Scientists become famous for discovering new things that change how we think about nature, whether the discovery is a new species of dinosaur or a new way in which atoms bond. Many scientists find their greatest joy in a previously unknown fact (a discovery) that explains some problem previously not explained, or that overturns some previously accepted idea. This is the essence of research. Natural/physical science research is the search for knowledge in order understand the physical world. On the other hand, social research is the search for knowledge about individual human beings and their societies.

7. Why do social research?

One might still wonder why societies and nations pay people who do social research. Why does a society devote some of its resources to this business of developing new knowledge about the social world, or what has motivated social researchers to devote their lives to developing this new knowledge? One realm of answers lies in the desire to improve people's lives. For example, geneticists try to understand how certain genes are passed from generation to generation; biologists trace the pathways by which diseases are transmitted; earth scientists try to develop better models to understand physical disasters such earth quakes floods.

The second realm of answers lies in a society's desires for economic development. Many earth scientists devote their work to finding more efficient or more effective ways to discover or recover natural resources like petroleum and ores. Plant scientists seeking strains or species of fruiting plants for crops are ultimately working to increase the agricultural output that nutritionally and literally enriches nations. Chemists developing new chemical substances with potential technological applications and physicists developing new phenomena like superconductivity are likewise developing knowledge that may spur economic development. In a world where nations increasingly view themselves as caught up in economic competition, support for social science research is nothing less than an investment in the economic future.

The third realm of answers lies in humanity's increasing control over our planet and its environment. Much science is done to understand how the toxins and wastes of our society pass through our water, soil, and air, potentially to our own detriment. Much science is also done to understand how changes that we cause in our atmosphere and oceans may change

the climate in which we live and that controls our sources of food and water. In a sense, such science seeks to develop the owner's manual that human beings will need as they increasingly, if unwittingly, take control of the global ecosystem and a host of local ecosystems. Lastly, societies support science because of simple curiosity and because of the satisfaction and enlightenment that come from knowledge of the world around us.

8. Philosophical assumptions of social research

In any discipline, there will always be a number of underlying philosophical predispositions in the projects of scientists. Some of these predispositions involve the nature of social knowledge itself, the nature of social reality, and the locus of human control in action. As social scientists, we must understand the three philosophical assumptions that influence social research. These are epistemology, ontology, and methodology. Epistemology means knowledge and how it is acquired (Bryman, 2001). It concerns clarification of the researcher's beliefs about how knowledge is created. There are two contrasting views: normative epistemology and interpretative epistemology. The normative view holds that research creates knowledge by building on the foundations of accepted and rationally defensible theory (positivism). The interpretative view is that research must set aside existing knowledge and discover new knowledge from internal coherence (constructivism).

9. Epistemology

Epistemology in the positivist paradigm supports the idea that the social world can be investigated through natural science methodologies. Hypotheses have to be tested by empirical approaches. Data need to be objectively analysed through scientific methods. In contrast, epistemology in the constructivist paradigm supports the idea that knowledge can be acquired by investigating the phenomena in many ways, because the social context is different from natural science.

10. Ontology

Ontological assumptions concern the nature of the world and human beings in social contexts (Bryman, 2001). Ontology in positivism assumes that social phenomenon is independent from other factors. It assumes that social phenomena can be defined and studied objectively apart from the people who make it. This means that different researchers can have different conclusions from one study.

11. Methodology

Methodological assumptions focus on analysis of the methods used for gathering research data (Louis Kohen, Lawrence Manion, Keith Morrison, 2001). In positivist paradigms, the scientific method (quantitative) is used to observe the phenomena. It uses mathematics calculations to generalize the finding and test the theory. In contrast, the constructivist paradigm uses qualitative methods (observations, fieldwork notes, interviews) to investigate the phenomena.

Social science scholars and researchers are moving away from the idea that social science should reflect the aims and methods of natural science through a critique of these methods

as inapplicable to social research. These assumptions are very important as they help the social scientist to have an appropriate philosophical orientation to his/her work.

12. Social research as a science: Issues to consider

One of the challenges social researchers have had to fight against is the negative perception that social research is not scientific in the same sense as natural sciences. This view raises a number of questions. What constitutes a 'science'? What are the nature of its methods? What is the type of data that it should collect? In order to resolve these questions, we need to understand the main ideas and debates about what constitutes scientific research.

A science is often thought of as being a coherent body of thought about a topic over which there is a broad consensus among its practitioners. Chalmers (1999) argues that science is based on hard facts, the facts are presumed to be claims about the world that can be directly established by a careful, unprejudiced use of the senses. Scientific study is based on what we see, hear and touch rather than on personal opinions or speculative imaginings. If observation of the world is carried out in a careful, unprejudiced way then the facts established in this way will constitute a secure, objective basis for science (Chalmers 1999). Scientific research consists of two primary functions (1) the development of theory and (2) the testing of substantive hypotheses that are deduced from theory. The scientist, therefore, is engaged in the use, modification, and or creation of theory. To this end when traditional theorists talked about science they often meant the "hard" or natural sciences. In the 19th century, any studies concerning societies where not considered as sciences in the true sense of the word. However, today social research is considered as scientific in every aspect.

Contemporary intellectuals have often disagreed about the extent to which the social sciences should mimic the methods used in the natural sciences. The founding positivists of the social sciences (Dodds, Lawrence, & Guiton, 1984); Kember & Dekers, 1987); Osman & Wagner, 1987) have argued that social phenomena can and should be studied through conventional scientific methods. On the other hand, proponents of social sciences (Campbell and Stanley 1963, 1966; Cook and Campbell, 1979) supported the idea that there is a need for an interpretive approach to the study of human action, a technique radically different from natural science. The fundamental task for the philosophy of social science has thus been to question the extent to which social research may be characterized as 'scientific' in relation to fundamental epistemological foundations. These debates rage *within* contemporary social sciences with regard to objectivity, subjectivity, inter-subjectivity, role of the social science researcher, the complexity of the matter, and practicality in the conduct of social research.

13. Objectivity

Objectivity is sine qua non of the scientific - method. It means the willingness and ability to examine evidence dispassionately. It is the first condition of research. Objectivity means basing conclusion on facts without any bias and value judgement. The conclusion should be independent of one's personal beliefs, likes, dislikes and hopes. Both the data and the inference drawn from their analysis must be free from bias and prejudices. Objectivity, along with generalization and explanation, are considered as fundamental characteristics of a science. It is often assumed that if our values do not enter into our research, the findings are objective and above criticism. Objectivity is, therefore, defined as the basic conviction

that there is or must be some permanent, ahistorical matrix or framework to which we can ultimately appeal in determining the nature of rationality, knowledge, truth, reality, goodness, or rightness (Bernstein ,1983). According to Durkheim (1964), the social scientist must study social phenomena in the same state of mind as the physicist, chemist or physiologist when he probes into a still unexplored region of the scientific domain. In order to achieve objectivity, the researcher must be detached from the topic under investigation. The challenge for social researchers is how they can be detached from their studies.

In the early days objectivity was associated with 'hard', experimental, standardizing and quantifying research methods whilst 'soft', interpretative, open and qualitative-descriptive methods have been considered as subjective. Positivist (quantitative) researchers speak of not becoming 'over involved' with participants. Over-identifying with the 'subject' of the research was said to prevent 'good' research. The researcher should be detached and hence objective. This idea that in order to achieve objectivity, a social researcher must be detached from the study was first challenged in American sociology in the 1960s and the critique was taken up in German discussions in the 1970s. In the middle of the 1980s, the debate between positivists and constructivists centred on the problems of validity and generalization of findings obtained with qualitative methods. The fact that a social researcher is part of the human society which he studies is believed to give rise to certain limitations. According to positivists, qualitative social research findings suffer from lack of validity and generalization. However, according to constructivist (qualitative) researchers the idea that 'rigorous research' involves the separation of researchers from the subject of their research was not only a mythical aim, but also an undesirable one which disguises the myriad of ways in which the researcher is affected by the context of the research or the people who are a part of it. If the aim of positivism is to collect and assemble data on the social world from which we can generalize and explain human behaviour through the use of our theories, then it shares with empiricism the belief that there are 'facts' which we can gather on the social world, independently of how people interpret them. Objectivity brings us to the understanding that there is a world out there that we can record and can analyse independently of people's and even our own interpretations of it. Thus objectivity is defined in terms of researchers' detachment from the social world, as well as the accuracy of their data collection instruments. Social researchers, simply need to refine their instruments of data collection in order that they are neutral recording instruments much as the ruler measures distance and the clock, time. Instead of seeing people in the research process as simply sources of data, social science researchers argue that research is a two way process that must employ both quantitative and qualitative methods and is influenced by both objectivity and subjectivity.

14. Subjectivity

Contrary to the contentions of positivists that social researchers must be detached from their investigations, Qualitative researchers such as Moustakas (1994) have argued that social researchers, cannot know this world independently of people's interpretations of it. The only thing that we can know with certainty is how people interpret the world around them. The central interest of social researchers, is focused upon people's understandings and interpretations of their social environments, part of which has been termed a 'phenomenological' approach to researching the social world (Moustakas 1994). Social

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research thus becomes more than a reflection of our opinions and prejudices: it substantiates, refutes, organizes or generates our theories and produces evidence which may challenge not only our own beliefs, but also those of society in general.

15. Social scientist as part of what is studied

The qualitative researcher does not stand outside or above the study, but is situated within the very processes being studied (Denzin, 2001). Social research reflects, despite the researcher's best intentions, the values and viewpoints of the inquirer and is theory-laden. In social research one cannot escape the reality that the researcher is an instrument that filters data through own paradigms. The researcher will always be subjective and the research intuitive and value laden. In reality, the social researcher is in actual fact a part of the study.

16. Complexity of the subject matter

The subject matter of research in social sciences, viz., human society and human behaviour is too complex, varied and changing to yield to the scientific categorization, measurement, analysis and prediction. Yet the actual practice of science shows that there are not only different perspectives on a given phenomenon, but also alternative methods of gathering information and of analysing the resultant data (Williams, 2000). The use of different perspectives in the study of science has led to the development of natural sciences and social sciences. Social sciences, however, does differ from natural sciences, in that people being studied may also actively participate in the study. Unlike objects in nature, humans are self-aware beings who confer sense and purposes on what they do. We can't even describe social life accurately unless we first grasp the concepts that people apply in their behaviour (Giddens, 1997).

17. Human problems

A social scientist faces certain human problems, which the natural scientist is spared. These problems are varied and include refusal of respondents, improper understanding of questions by them, their loss of memory, their reluctance to furnish certain information, etc. All these problems cause biases and invalidate the research findings and conclusions. Subjects and clients, as well as investigators, have personal values that are apt to become involved in the research process. One should not assume that these are freely exploitable. The investigator must have respect for the client's values. The quality of research findings depends upon the soundness of decisions made by the social researcher on such crucial stages of his research process as definition of the unit of study, operationalization of concepts, selection of sampling techniques and statistical techniques. Any mistake in any of these decisions will vitiate the validity of his findings.

18. The historical development of social research theory

Historically, social research has had to fight a continuous battle for recognition as an empirical process in the study of human activities. In the 19th century, Greek philosophers and theorists advocated for the scientific study of human society. The French philosopher Auguste Comte (19th century) was an important early figure in the development of social

science theories. He believed society could be studied scientifically and objectively at a time when most societal changes were explained in religious terms. It was during that time that many thinkers developed theories about society, followed later by methodologies for testing theories and developing new ones. Theory helps social scientists make sense of patterns observed in everyday society. It also helps keep researchers from being taken in by patterns that could just be flukes. Theory also helps shape social research and gives it direction. In this way, theory acts as a guide, pointing researchers to the most interesting issues of society, including its politics, economics and other interactions. Finally, theory helps researchers understand social phenomena in such a way that can suggest actions.

19. Inductive vs. deductive methods

Deductive reasoning was first described by the ancient Greek philosophers such as Aristotle. The deductive approach refers to the process of "drawing conclusions by applying rules or principles; logically moving from a general rule or principle to a specific solution" (Woolfolk, 2001, p. 286). Deductive methods involve beginning with a general concept or given rule and moving on to a more specific conclusion. Deductive reasoning is the process of reaching a conclusion that is guaranteed to follow, if the evidence provided is true and the reasoning used to reach the conclusion is correct. The conclusion must also be based on the evidence previously provided.

Not everyone from 300 B.C. to 1600 A.D. was willing to bow to the authority of Aristotle. Many scientists believed Aristotle's arguments were faulty. However, after 1600 A.D., it became apparent to several people - Galileo Galilei in Italy, Francis Bacon in England, Tycho Brahe in Denmark, and others - that there were no subtle logical errors in Aristotle's use of the deductive method. The problem was that the deductive method, while wildly successful in mathematics, did not fit well with scientific investigations of nature.

In order to use the deductive method, you need to start with axioms – simple true statements about the way the world works. Then you use these axioms to build your logical system of nature. If your axioms are true, everything that follows will be true, but Galileo and his contemporaries realized that the problem was that it was enormously difficult to determine "simple true statements about the way the world works". Although, the deductive approach allowed researchers to move from the general assumption to the specific application, it was not fruitful in arriving at new truth.

However, during the Middle Ages, the quest for knowledge led critical thinkers such as Francis Bacon, to challenge the authority of the religious dogma that dominated the search for truth. The acceptance of incomplete or false major premises that were based on old dogmas or unreliable authority was critically challenged. Bacon also recognized the obstacle that the deductive process placed in the way of discovering new truths and advocated direct observation of phenomena, arriving at conclusions or generalisations through the evidence of many individual observations. This was a reverse approach from the deductive process. Thus it was referred to as the inductive process. Since 1600, the inductive method has been incredibly successful in investigating nature - surely far more successful than its originators could have imagined. The inductive method of investigation has become so entrenched in science that it is often referred to as the "scientific method". The inductive method (usually called the scientific method) is the deductive method "turned upside down".

The deductive method starts with a few true statements (axioms) with the goal of proving many true statements (theorems) that logically follow from them. The inductive method starts with many observations of nature, with the goal of finding a few, powerful statements about how nature works (laws and theories). In the deductive method, logic is the authority. If a statement follows logically from the axioms of the system, it must be true. In the inductive (scientific method), observation of nature is the authority. If an idea conflicts with what happens in nature, the idea must be changed or abandoned.

This reliance on empirical evidence or personal experience was an important step in the direction of scientific inquiry. The deductive method of Aristotle and the inductive method of Bacon gave birth to two research paradigms – positivism and constructivism. Mertens (2005) argues that Aristotle's logical deductive approach to research heavily influenced the positivist (quantitative) paradigm and Bacon's inductive approach has been associated with the constructivist (qualitative) paradigm. Charles Darwin's idea of the integrated deductive – inductive process has led to the support for the pragmatic paradigm (the quantitative – qualitative approach). The earliest attempt to integrate the deductive – inductive methods was made by Charles Darwin in the nineteenth century. However since the time of Charles Darwin social researchers and scholars have been engaged in a polemic debate about the methodological appropriateness of each of these three approaches to social research.

20. The research paradigm debate

A research paradigm is a way of looking at the world. It is an assemblage usually comprising the researcher's ontology, epistemology, methodology and axiology (Moore, 2007). It is composed of certain philosophical assumptions that guide and direct thinking and action of the researcher. Researchers such as Lather (1992) and Lincoln and Guba (2000), have identified three major paradigms that have influenced social research: Positivism, Constructivist, and Pragmatism. The present discussion focuses on how these three paradigms have influenced the development of social research theory and social research methods. According to Guba (1978), most research work is guided by either positivism (quantitative) research paradigm or constructivism (qualitative) research paradigm or a mixture of the two paradigms (pragmatism). Each approach represents a fundamentally different inquiry, and researcher actions are based on the underlying assumptions of each paradigm (Patton, 1990).

21. Positivism

This was the dominant paradigm that guided early social research. It is commonly referred to as the quantitative paradigm. Positivism is based on the rationalistic, empiricist philosophy that originated with the deductive approach of Aristotle, John Lock, August Compte, and Emmanuel Kant (Mertens, 2005). The deductive method argues that knowledge must proceed from the general to the specific. Under a deductive methodology, a researcher begins with a hypothesis, then makes observations or collects data to test that hypothesis. Based on empirical evidence from the study, the researcher then decides whether to accept or reject the hypothesis. The deductive methodology, in short, tests theories and hypotheses. Positivism assumes that the social world can be studied in the same way as the natural world and there is a method for studying the social world that is

value free and that explanations of a causal nature can be provided and events or observations are influenced by a single theory or paradigm. The adoption of a positivist perspective is accompanied by a broad commitment to the idea that the social sciences should emulate the natural sciences (Lee 1989). Epistemologically, positivist studies are premised on the existence of *a priori* fixed relationships within phenomena capable of being identified and tested via hypothetic-deductive logic and analysis. Causal relationships, which are the basis for generalized knowledge, can predict patterns of behaviour across situations. Ontologically, positivist research assumes an objective physical and social world that exists independently of humans. The researcher is seen to play a passive, neutral role, and does not intervene in the phenomenon of interest. Keeping in spirit with this set of beliefs, a theoretically grounded positivist study is likely to be conducted with the ideas of establishing appropriate measures (qualitative and/or quantitative) for the constructs being studied; establishing or testing causal relationships; determining the domain to which the study's findings can be generalized; and demonstrating that the inquiry is value free. The criteria for judging the quality of such positivist studies, in opposition to interpretive and critical case studies, are related to the traditional validity and reliability tests used in the natural sciences (Yin 1994). Specifically, the primary criteria for classifying a theoretically-grounded article as positivist include the following:

- adoption of a positivist perspective clearly stated in the study,
- evidence of formal research hypotheses or propositions
- evidence of qualitative and/or quantitative measures of variables or constructs
- explicit purpose of theory testing or theory building
- concern for validity and reliability issues as used in the natural sciences

The positivist perspective has long been associated with "scientism" the view that the methods of the natural sciences may be applied to all areas of investigation, be it philosophical, social scientific, or otherwise. Positivist (quantitative) research reflects the traditional scientific approach to problem solving. It uses experimental methods and numerical data to test hypothetical generalizations. It assumes that there is a single reality that can be broken down into variables. The purpose of this type of research is to test hypotheses that have been developed before the research project started and to form conclusions that can be generalized to other situations. The emphasis in this approach is upon measurement, comparison, and objectivity. Proponents of the quantitative paradigm include Dodds, Lawrence, & Guiton, 1984); Kember & Dekers, 1987); Osman & Wagner, 1987). These researchers maintain that quantitative methods are inherently preferable to non-quantitative methods. However, among most social scientists and historians, orthodox positivism has long since fallen out of favour. Today, practitioners of both social and physical sciences recognize the distorting effect of observer bias and structural limitations.

22. Constructivism

This paradigm can be traced to the inductive approach propounded by Charles Bacon. The inductive method, in contrast with the deductive method, goes from the specific to the general. Under this methodology, social scientists observe social phenomena, identify patterns and then analyze them to reach broad conclusions and develop new theories, based on research findings. The proponents of constructivist paradigm were Campbell and Stanley (1963, 1966),

Cook and Campbell (1979). According to Cook and Campbell (1979), constructivist paradigm rejects the position that social events or observations are influenced by a single theory or paradigm. The basic assumptions guiding the constructivist paradigm are that knowledge is socially constructed by people active in the research process and that researchers should attempt to understand the complex world of lived experiences from the point of view of those who live it (Schwandt 2000). Smith and Manning (1982) suggest that qualitative research is better for initial exploratory research into unknown or unfamiliar phenomena. It enables the researcher to develop concepts, conjectures, interpretations and theories empirically grounded in the investigated systems. In the real world, events cannot be teased out from the context in which they are inextricably embedded, and understanding involves the relationships among all of the many parts of the whole. Thus qualitative methods - which emphasize both inner and outer knowledge of man in his world- are preferable (Filstead, 1970).

The constructivist paradigm emphasizes that research is the product of the researchers and cannot be independent of them. (Mertens, 2005). The most obvious distinction between quantitative and qualitative research is the form of data collection and presentation. The fundamental difference between constructivism and positivism, however, lies in the realm of theory. Data within positivism is theory-driven and designed to test the accuracy of the theory. Constructivism, on the other hand, is a method of research which has not referred explicitly to the theory guiding its data collection procedures. Theory is grounded in the study and develops as the study is conducted. Lincoln and Guba (2000) identify qualitative methods as the preferred methods for researchers working in the constructivist paradigm.

23. Pragmatism

So far we have discussed two main research paradigms: positivism (quantitative) and constructivism (qualitative) paradigms. Pragmatism is a paradigm that provides the underlying philosophical framework for mixed methods research (Maxcy, 2003; Patton, 2002; Tashakkori and Teddlie, 2003). This approach was first proposed by Charles Darwin. This research design involves methods that use mixed data (numbers and text) and additional means (statistics and text analysis). A mixed method uses both deductive and inductive scientific methods, has multiple forms of data collecting and produces eclectic and pragmatic reports. Pragmatic philosophers (Maxcy, 2003; Patton, 2002; Tashakkori and Teddlie, 2003) have rejected the scientific notion that social science enquiry was able to access the truth about the real world solely by virtue of a single scientific method. To this end, the most appropriate paradigm is the mixed research approach in which the researcher is not confined to one research method. A mixed research design is a general type of research that includes quantitative and qualitative research data, techniques and methods. All these paradigm characteristics are mixed in one case study. According to Mertens (2005) mixed methods can be applied at four different levels: problem identification, data collection, data analysis, and discussion of research findings. Greene and Caracelli (2002) argue that social researchers mix methods to a varying degree at various points in their research and still call their work mixed method research. However ZOU undergraduate researchers called their research work qualitative.

Two main types of a mixed method paradigm are: (1) mixed research method, and (2) mixed model design. A mixed research method is a research in which you use quantitative data for one stage of a research study and qualitative data for a second stage of a research. A mixed

model design is a research in which you use both quantitative and qualitative data in one or two stages of the research process. The mixing of quantitative and qualitative approaches may happen in every stage of the research. The advantages of a mixed methods paradigm are:

1. The strength of the research;
2. Use of multiple methods in a research helps to research a process or a problem from all sides;
3. Usage of different approaches helps to focus on a single process and confirms the data accuracy. A mixed research complements a result from one type of research with another one. This research does not miss any available data.

A quantitative component of a mixed research assumes the usage of deductive scientific method while qualitative component assumes inductive scientific method. Moreover, a quantitative approach collects quantitative data based on exact measurement applying structured as well as validated information collection. For instance, rating scales, closed-ended items and responses. This approach produces statistical reports with correlations.

A qualitative component uses qualitative information from interviews, field notes, open-ended questions etc. This approach considers a researcher to be the major means of information collection. At the end of a research this approach supposes a narrative report with context description, quotations taken from research material. The aim of a mixed method design is to summarize positive aspects of two approaches and produce a highly accurate data. Bryman (2001) argues for genuine integration, where qualitative and quantitative findings are mutually informative and talk to each other—a conversation—to construct a negotiated account. The triangulation metaphor has been a hindering factor; it should not be just a matter of testing data against each other, but about forging an overall or negotiated account of the findings that brings together both components of the conversation or debate.

24. Issues and emerging trends in social research: The case for Zimbabwe Open University

The present discussion makes reference to social research work by lecturers and students at the Zimbabwe Open University.

25. The Zimbabwe Open University: Background information

The Zimbabwe Open University (ZOU) is the largest state funded university, in Zimbabwe, established on 1st March 1999, through an Act of Parliament (Chapter 25:20), to cater for a substantial component of people who, by design or unintentionally, could not be accommodated in conventional universities, by offering them the opportunity to study in their homes and at their workplaces through distance education. During the time of this study (2005 - 2011, ZOU had approximately 18700 students, 1795 academic staff and 395 non - academic staff, four faculties, (1) the faculty of Arts and Education, (2) the faculty of Science, (3) the faculty of Commerce and Law and (4) the faculty of Applied Social Sciences, offering approximately 50 undergraduate degree programmes, 5 diploma courses, 10 masters' degrees and 5 doctoral degrees.

26. The research dissertation: Definition and structure

A dissertation is a research project undertaken by post graduate students in partial fulfilment of their master programmes. A research project is a purposeful collection of student work that exhibits to the student and others, the student's efforts, progress, or achievement in a given area (Reckase, 1995). The major goal of the research project is to assess the ability of students to apply knowledge to solve real-life problems. The dissertation is designed by the student in consultation with a tutor (project supervisor) under the overall guidance of the Regional Programme Coordinator (co-supervisor). Basically, there are two types of research projects - structured and unstructured. For a structured project, students are given topics to work on, what to look for and guidelines to follow. All Master programmes at the ZOU, require students to undertake unstructured research projects. The student identifies a research topic and works through the project with minimum guidance from the research supervisor. Unstructured research projects are self-directed and should be organized into five chapters involving a number of activities as illustrated in Table 1.

Chapter	Activities
1	- specifying the research problem - formulating the research topic or title - presenting background of the study - presenting statement of the problem - formulating hypotheses or research questions - discussing the significance of the study - stating delimitations and limitations - stating assumptions - defining key terms - outlining organization of the study
2	- Reviewing literature - Explaining constructs or key concepts - Explaining the theory of interest and rival theories - Analysing previous research studies
3	- designing the research: creating, adopting or adapting a research design and data collection methods - describing the population, sample and sampling techniques - collecting data
4	- analyzing and presenting data - discussing research findings
5	- summarizing major findings of the study - drawing conclusions - making recommendations - compiling references - compiling appendices

Table 1. The Dissertation Process, Chapters and Activities.

The dissertation is undertaken in the third and final year of the masters programme. Students are expected to work with their supervisors throughout the research project and to submit a typed dissertation report of approximately 15 000 - 20 000 words to their

Department one month before the end of their programme. Before embarking on their dissertation, the research topic must be approved by the project supervisor.

27. Research design and methodology

The present study adopted the mixed methodology research paradigm involving quantitative techniques in the conceptual analysis and qualitative techniques in the relational analysis of the dissertations. We employed the model developed by Caleb Kangai, Richard Bukalia, Farirai Musika and Barbra Mapuranga in an earlier study in 2011 that focused on research projects submitted by B. Ed students.

There are two general categories of content analysis: conceptual analysis and relational analysis. Both types of content analysis were applied. Conceptual analysis focused on establishing the existence and frequency of certain concepts in the dissertations. In this study conceptual analysis was undertaken by using open coding. Open coding is the part of analysis that pertains specifically to naming and categorizing phenomena through close examination of data (Mertens, 2005). In order to come up with a checklist of concepts and codes, the four researchers initially analysed 10 dissertations. Our analysis produced a checklist of six subcomponents of the dissertation: research questions, data form, research paradigm, research design, data collection instruments, procedures for data analysis and procedures for presentation and discussion of research findings. These concepts were categorized and coded as presented in Table 2.

Concept	Category	Code
Research Questions	Descriptive	D
	Explanatory	E1
	Exploratory	E2
Data Form	Numbers	N
	Words	W
Literature Review	Concepts/constructs	CS
	Context of the study	CX
	Theory	T
	Previous Research Studies	
Research Paradigm	Positivist (Quantitative)	P
	Constructivist (Qualitative)	C
	Pragmatic (Quantitative – Qualitative)	P(Q-Q)
Research Design	Experimental	E
	Non-Experimental	NE
Data collection instruments	Questionnaires	Q
	Interviews	I
	Observations	O
	Tests	T
	Documents / records	D/R
Presentation and discussion of findings	Qualitative	Q1
	Quantitative	Q2

Table 2. Checklist of Concepts, Categories and Codes.

28. Reliability of the methods

We checked the reliability of the coding a (90% agreement is suggested; .8 for Cohen's kappa). To establish the dependability of the categorization decisions, we worked in pairs. First one researcher coded all the items and the second researcher independently coded a 10% random sample of those items. The proportion of simple agreement between the coders was 0.95.

To conduct relational analysis of the dissertations we adopted and adapted the relational model developed by Kangai, Bukalia, Mapuranga and Musika (2011) in an earlier study (see figure 1).
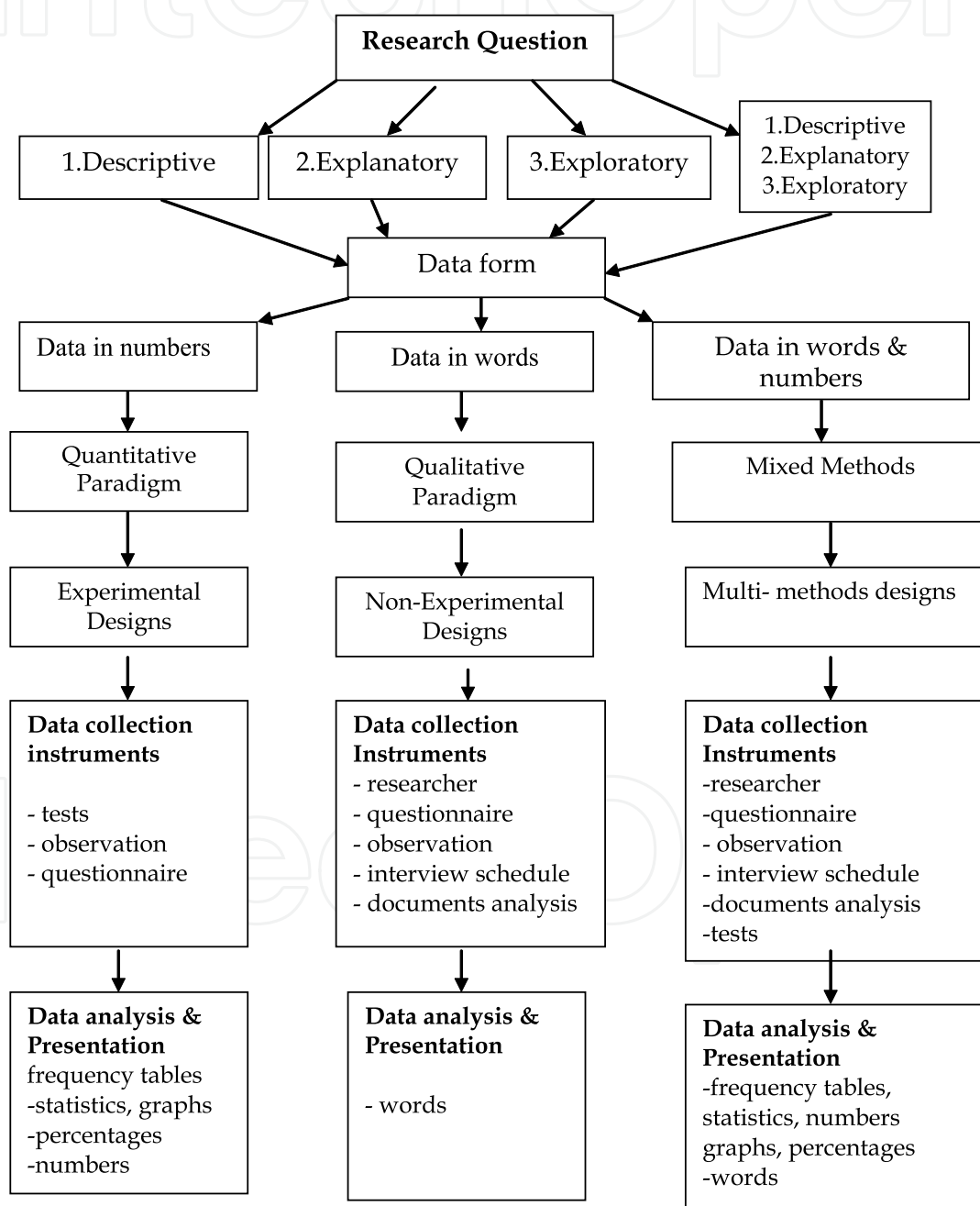

Fig. 1. Relational Analysis Model for Post – Graduate Dissertations Adapted from Kangai, Bukaliya, Musika and Mapuranga (2011).

The primary purpose of this analysis was to establish whether the dissertations submitted by post-graduate students met and satisfied the scientific enquiry research process. Although there is no universally accepted format for the research process, most studies adhere to the general sequence of scientific enquiry. Scientific enquiry is a sequential research process that is based on recognized methods in data collection, analysis and interpretation. The typical steps in the scientific enquiry are (1) Define a problem (2) state the hypotheses to be tested. (3) collect and analyse data (4) interpret the results and draw conclusions about the problem (McMillan and Schumacher, 1993). Different universities and even faculties in the same university may adopt adapt this process to suit their local conditions and needs. Students' dissertations at the ZOU are structured following eight stages. We analysed each of these subcomponents of the dissertation in order to establish the extent to which each was related to the other parts.

1. Define the research problem
2. State research questions/ Hypotheses
3. Review related literature
4. Describe and explain the research paradigm and design
5. Describe data collection instruments and procedures
6. Describe data analysis techniques and procedures
7. Data presentation and discussion of findings
8. References

29. Sample

Data for the current study was collected from a stratified random sample of 100 dissertations, which were submitted by ZOU postgraduate students between 2005-2010. The 100 dissertations were distributed as follows (See table 3).

Degree Programme	Dissertation	2005	2006	2007	2008	2009	2010
Master of Business Administration (MBA)	**50**	10	10	10	10	10	10
Master of Education (M.Ed)	**50**	10	10	10	10	10	10
Master of Science Special Education (MSc- SPED)	**50**	10	10	10	10	10	10
Master of Philosophy (MPhil)	**50**	10	10	10	10	10	10
Total	**200**	**40**	**40**	**40**	**40**	**40**	**40**

Table 3. Stratified Random Sample of Post- graduate Dissertations content analysed for the current study.

30. Conceptual analysis results

30.1 Dominant research questions and hypotheses

The first concept we analysed was the research questions or hypotheses that guided each study.

Degree Programmes	RESEARCH QUESTIONS							
	Descriptive		Explanatory		Exploratory		Hypothesis	
	N	%	N	%	N	%	N	%
MBA (50)	15	**30**	6	**12**	23	**46**	6	**12**
M.ED (50)	14	**36**	8	**16**	24	**40**	4	**8**
MSC.-SPED (50)	16	**32**	5	**10**	26	**52**	3	**6**
MPHIL (50)	13	**32**	9	**18**	23	**40**	5	**10**
Totals (200)	**58**	**29 %**	**28**	**14 %**	**96**	**48 %**	**18**	**9 %**

Table 4. Research questions most preferred by ZOU Post- graduate students.

Our findings indicate that most of the dissertations 182 (91 percent) employed research questions rather than hypotheses. Defining the research questions represents one of the most important steps to be taken in any empirical study **(Benbasat et al. 1987**; Eisenhardt, 1989; Mays and Pope, 1995; Miles and Huberman, 1994). Most of the reviewed dissertations (79 percent) specified clear research questions, 12 percent of the questions were not very clear, and 9 percent did not state research questions. The fact that 79 percent of the analysed dissertations were guided by very clear research questions is quite encouraging since a clear research question expresses the essence of an inquiry, allows one to easily link a study to its practical and theoretical contributions, and is the backbone of a solid research design (Mason, 1996). Exploratory questions (48 %) dominated in the dissertations compared to descriptive (29 percent). Yin (1994) explains that social research is most likely to be appropriate for *"how"* and *"why"* questions because these deal with operational links needing to be traced over time, rather than mere frequencies of incidence. In the present study, explorative research questions, *what* questions were the most frequent followed by *how* and *why* questions. Research studies which address a *what* question are most appropriate when the purpose of the study is to explore a new phenomenon (Yin 1994). Our findings support this contention. Indeed, *what* questions were most frequently posed in exploratory and descriptive studies. It is interesting to note that whilst descriptive questions dominated in research projects submitted by ZOU undergraduate students, (Kangai, Bukalia, Musika and Mapuranga, 2011), exploratory questions were more dominant in post graduate dissertations, although the shift is not very significant. Amongst post graduate students, descriptive research questions are still very popular. This finding agrees with Benbasat I. and Weber R. (1996) who argue that a descriptive study is less demanding than an exploratory or an explanatory one. For descriptive studies, little theory is said to be needed, causal links do not have to be made, and analysis is minimal. In a dominant research question used by ZOU undergraduate student was the questionnaire.

31. Context of the study

The **second** concept we examined was the context of the study. Placing the study in its theoretical context can be bewildering especially to beginning researchers. Beginning researchers often have the perplexing task of building a convincing argument in support of their current research. This is done by presenting background of the study. The background of the study starts by identifying the research problem and relating it to the prevailing theory. The background highlights the importance of the problem and explains why it is a

research problem in its present context. The context of the problem must identify the knowledge gap the present study aims to fill. The knowledge gap refers to the inadequacies of the existing theories in explaining the current research problem. Failure by findings of previous studies in explaining the present research problem also reflects the knowledge gap. The knowledge gap indicates a mismatch between the general theory and phenomenon under study.

A detailed description of the research context is necessary to assess the credibility of the research results and to determine their generalizability **(Benbasat et al.** 1987; Yin 1994). Several aspects of the research context are important. The first relates to the setting: a detailed account describing where the research was conducted and the specific period of time under investigation. Other key aspects are related to the moment data was collected in relation to the time the events occurred, whether there were one or more data collection periods, whether the researcher was able to gain sufficient access and spend enough time to develop an intimate understanding of the setting and the phenomenon of interest, and whether the researcher collected data during the course of the events (on-going) or *a posteriori*.

According to the present study, 26 percent of the dissertations clearly presented the context of the study, 57 percent were not very explicit about the context surrounding their research and 17 percent failed to place their studies in the appropriate conceptual and theoretical framework. First, we found that while most social researchers (98 percent) described to some extent where their research was conducted (site description), only 32 percent stated the specific period of time the study was conducted. Providing the latter information is important since the period defines the frame of reference under which phenomena are investigated (Pettigrew, 1989). Findings from social research are often time-bound and potentially confounded with time (Laudon 1989). The physical and social environment of a phenomenon is dynamic. Social values, attitudes, beliefs, customs, and norms change with time. Thus the time the study was undertaken is very important for the purposes of credibility, validity and generalization of the findings. Finally, we noted that only 19 percent of the articles reported how much time the researcher (s) had spent on the study, while 32 percent of the analysed dissertations provided no information about the nature of the data being collected.

32. Review of related literature

The **third** concept we analysed was the link between the study and prevailing literature. Prior theorizing constitutes an essential input in social research design (Lee, 1989; Yin, 1994). Markus, 1983). Literature review, besides reflecting important theoretical issues, also begin to tell researchers where to look for relevant evidence. Hence, positivist social research presumes that the theory of interest is stated explicitly in the first place and that predictions following from the theory are also explicitly stated (Lee 1989). However, in qualitative social research, the researcher may begin with no theory since the theory will develop from the study. Findings of the present study are encouraging with regard to these two desired attributes. Indeed, almost all of the 200 dissertations (76 percent) reviewed in this study stated explicitly the theory of interest while 87 percent stated clearly the various predictions deducted from the theory itself. As discussed above,

another valuable approach for social research is the consideration of rival theories (propositions) and the analysis of the evidence in terms of such rivals (Lee 1989; Yin 1994). Our finding on review of rival theories was disappointing as only 24 percent of all dissertations considered rival theories in their literature review. A review of rival theories will enable the researcher to identify the knowledge gap in the theory of interest. The knowledge gap refers to the inadequacies of the existing theory in explaining the current research problem. This means that students failed to present the scholarly debate surrounding their area of study.

The **fourth** concept for analysis was the research design. The results of our analysis are presented in table.

Research Paradigm	Number	Percentage
Quantitative Research	14	7%
Qualitative Research	40	20%
Mixed methods (Quantitative – Qualitative) Research	126	63%
No Mention of Research Paradigm	10	5%

Table 5. The Dominant Research Paradigm. N= 200.

Although Patton (2002) notes that the choice of qualitative methods might be appropriate in many social research studies because they are based on humanistic values. The present study shows that there is a trend towards the use of mixed methods as 63 percent of all the dissertations we reviewed employed quantitative and qualitative methods.

Another interesting finding was that 5% of the projects did not identify a paradigm. Leaders in the field of research do not all agree as to the need to acknowledge an underlying paradigm, nor do they agree on the role that such paradigms serve in the research process. Whilst Patton (2002) says research paradigms are unnecessary and possibly handicapping, Schwandt, (2000), argues that research paradigms are inescapable. The need for a paradigm is also supported by Mertens (2005), who maintains that a researcher's theoretical orientation (paradigm) has implications for every decision made in the research process, including choice of methods. Skrtic (1991), argues that the absence of a research paradigm, renders the research atheoretical since it rests on an unexamined and unrecognized theory. In an earlier content analysis of research project submitted by ZOU undergraduate students, Kangai, Bukalia, Musika and Mapuranga (2011) found that 22 percent of the students did not mention the research paradigm that influenced their studies. Our results indicate an improvement in post graduate research studies. Our findings agree with Patton (1999) and Lincoln and Guba (2000) who note that many changes have occurred in the status of paradigms and choice of methods over the last decade such that various paradigms are beginning to "interbreed".

33. The dominant research design

The **fifth** concept we analysed was the research design. We based our analysis on Borg and Gall's classification of research questions. According to Borg and Gall (1989) there are two categories of research questions- descriptive and relational. Descriptive questions lead to non- experimental designs and relational questions lead to experimental designs and the use

of both leads to mixed methods. We, therefore, identified and classified research designs as experimental, non-experimental or mixed methods (see Table 6).

Research Design	Number	Percentage
Experimental	2	1%
Non – Experimental	178	89%
Mixed Methods	20	10%

Table 6. The Dominant Research Design in ZOU Postgraduate Dissertations.

Our results show that 178 (89 percent) of post-graduate dissertations employed non experimental research designs. Only 20 (10 percent) of the dissertations used mixed methods and 2 (1 percent) used experimental designs. Our findings agree with McMillan & Schumacher (1993), Borg and Gall (1996), Mertens (2005)and (Kangai, Bukalia, Musika and Mapuranga, 2011) who have noted that descriptive surveys are the most basic of methods, popular and used pervasively in social research. Descriptive surveys are mainly used to describe peoples' characteristics such as their attitudes, beliefs, habits, values, demographics, behaviours, opinions, desires, ideas, and other types of information and do not help much in developing theory or testing theory. We have argued elsewhere (Kangai, Bukalia, Musika and Mapuranga, 2011) that the confinement of students' research projects to one or two research designs is a function of the lack of theoretical foundations in research methodology.

34. Data collection methods

The **sixth** concept we analysed involved data collection instruments. A major strength of mixed methods data collection is the opportunity to use many different sources of evidence to provide a richer picture of the events and/or issues than would any single method (Sawyer 2001; Yin 1994). A multi-method approach to research involves several data collection techniques, such as interviews and observations organized to provide multiple but dissimilar data sets regarding the same phenomena (Mingers, 2001). As shown in Table 5, most dissertations (62.5 percent) employed multi-methods followed by the questionnaire (21 percent) and interview (16.5 percent).

Method	Frequency of use	Percentage
Questionnaire	42	21 %
Interview	33	16.5 %
Observation	0	0 %
Documentation	0	0 %
Tests and Measurements	0	0 %
Multi-methods	125	62.5 %
Total	**200**	**100 %**

Table 7. Data collection instruments mostly preferred by ZOU Post-graduate research students.

This finding is consistent with the research paradigm most preferred by the students. In addition to using multiple data collection methods, the specific use of a combination of quantitative (e.g., questionnaires) and qualitative (e.g., interviews) data sources is often advocated (Reichardt and Cook, 1978; Kaplan and Duchon, 1988 and Patton, 1999). As Eisenhardt (1989) stressed, quantitative data can keep researchers from being carried away by vivid, but false, impressions in qualitative data, and it can bolster findings when it corroborates those findings from qualitative evidence. The use of both qualitative and quantitative methods of data collection is supported by Kirsch and Cummings (1996) who argue that explanatory and exploratory social research tend to rely more heavily on both multiple data collection methods and a mix of qualitative and quantitative data than do descriptive ones.

Our findings point to an emerging positive trend in the use of mixed methods as compared to other previous content analysis studies. For example, Mingers (2001) observed that *about half* of the studies included in their sample used multiple data collection approaches. Alan Bryman (2007) also did a content analysis of 232 articles, published between 1994 and 2003, with 'mixed' research methods. He found that only 18% of the articles succeeded to mix (integrate) qualitative and quantitative methods. He remarks (p. 8):

As a result of the efforts of methodologists and researchers, there is nowadays considerable understanding of a variety of issues, such a various ways in which quantitative and qualitative research can be mixed … However, at the same time, the fundamental issue of the degree to which mixed methods researchers genuinely integrate their findings has not been addressed to a significant extent. In other words, how far do mixed methods researchers analyze, interpret, and write up their research in such a way that the qualitative and quantitative components are mutually illuminating? "genuinely integrate".

The present finding represents an improvement in social research methodology over the past decade since 62.5 of our sample effectively employed mixed methods.

35. Data triangulation

The most important advantage of using multiple sources of evidence is the development of converging lines of inquiry (Patton, 1999; Yin 1999). The process of combining multiple data sources is called triangulation (Jick, 1979). Any finding or conclusion in social research is likely to be much more convincing and accurate if it is based on several different sources of information. However, our findings are disappointing in that fewer than one-third (30 percent) of the studies just mentioned using some form of data triangulation but did not elucidate how this was done and how the triangulation contributed to the validity and reliability of the findings. These findings are once again in line with those of Kangai C., Bukalia, R., Musika F. and Mapuranga, B. (2011) who showed that triangulation was rarely used by ZOU undergraduate research students.

36. Elucidation of the data collection process

Data Collection Process the **seventh** concept to be analysed. In addition to mentioning methods of data collection, it was quite encouraging to observe that more than 58 percent of all dissertations in our sample did elucidate how data was collected. This represents a very

important aspect of social research, since a clear description of the data sources and how data was collected enhances the reliability and validity of the findings (Benbasat, I. Goldstein, D. K. and Mead, M., 1987). However, the fact that 42 percent of the studies did not clearly elucidate how data was collected, is a course for concern. In social research, the reader must be able to tell what sources of information were used and how data was collected in order to judge the reliability of the information. The omission of such information undermines the credibility of social research studies.

37. Elucidation of the data analysis process

The **eighth** concept to be examined was the data analysis process. As Eisenhardt (1989) stressed, analyzing data is "both the most difficult and the least codified part of the process". It was, therefore, important to first assess the extent to which social researchers elucidated the data analysis procedures. In order to do so, we classified each article in the database as providing either "no information," "a brief description," or "a clear and detailed description" of the analytic procedures and/or rules followed.

Our findings show that a large number of dissertations (70 percent) did not explain how data was analysed, while 22 percent provided a brief description of the data analysis process, and 8 percent provided a clear and detailed description of analytic procedures. For example one researcher wrote, "Data collected was quantitatively analysed in tables". This represents another serious shortcoming since a clear description of the analytic procedures allows other readers to better understand the findings. In addition, since positivism considers qualitative data to be vulnerable to subjective interpretation and to surpass human ability to compile, a clear description of the data analysis process allows us to judge whether or not the results are the fruit of a systematic and rigorous process.

Our findings reveal that social researchers at the ZOU did not provide much information about the adoption of preliminary data analysis techniques. This represents another serious deficiency since technical rigor in analysis is a major factor in the credibility of qualitative findings (Patton 1999). Social research data can be analysed as it is being collected. Overlapping data collection with data analysis not only gives the researcher a head start in analysis but, more importantly, allows researchers to take advantage of flexible data collection. Indeed, a key feature of qualitative research, in general, and research, in particular, is the freedom to make adjustments during the data collection process.

38. Discussion of findings

The **ninth** and final concept we analysed was the discussion of research findings. Discussion of research findings must demonstrate a logical chain of evidence. To increase the reliability of the information presented in a case study, a key principle to be followed is the maintenance of a logical chain of evidence (Benbasat et al. 1987; Yin 1994). As Yin (1994) explained, the principle is to allow an external reviewer or observer to follow the derivation of any evidence from initial research questions to ultimate study conclusions. Furthermore, the observer should be able to trace the steps in either direction (from conclusions back to initial research questions or from questions to conclusions). The process should be tight enough so that evidence presented in the project or dissertation report is assuredly the same evidence that was collected during the data collection process. When this is achieved, social

research has addressed the methodological problem of determining internal validity. In order to assess whether the authors of the dissertations we analysed had maintained a chain of evidence, we used the relational model (see figure) to evaluated the extent to which we were able to move from one portion of the study to another, with minimal cross-referencing to methodological procedures and to the resulting evidence. Hence, for all of the articles included in our sample, we were able to trace the steps from initial research questions to conclusions in only 44 percent of them.

39. Comparison with related literature

When building theories from social research, it is of utmost importance to compare the emergent concepts, theories or hypotheses with the extant literature. Examining literature that conflicts with the emergent theory is likely to enhance confidence in the findings of the study (Eisenhardt, 1989). Literature discussing similar findings is important as well because it ties together underlying similarities in phenomena normally not associated with each other. The result is often a theory with stronger internal validity, wider generalizations and higher conceptual level. Notwithstanding the potential benefits associated with such a tactic, Table 8 reveals that only 11 percent of all exploratory case studies related their findings to conflicting literature while 37 percent of them discussed similar literature. In short, tying the emergent constructs, hypotheses, or theories to extant literature is crucial in theory building since the results usually rest on a small number of cases.

40. Summary of key findings

Table presents a synthesis of the key findings and of the present content analysis of social research methodologies applied by ZOU post-graduate students.

CONCEPT	STATUS					
1. Research questions	Clear	79%	Not clear	12%	Not stated	9%
2. Dominant research question	Exploratory	48%	Descriptive	29%	Explanatory	14%
3. Literature review	Analysed theory of interest	67%	Analysed rival theories	24%	Analysed unrelated theories	9%
4. Context of the study	Clearly presented	26%	Poorly presented	57%	Not presented	17%
5. Dominant research paradigm	Quantitative	7%	Qualitative	20%	Mixed methods	63%
6. Dominant research design	Experimental	1%	Non Experimental	89%	Mixed methods	10%
7. Data collection methods	Quantitative	16.5%	Qualitative	21%	Multi-methods	62.5%

CONCEPT	STATUS					
8. Data analysis procedures	Clearly Explained	8%	Poorly explained	70%	Not explained	22%
9. Discussion of Research findings	Clearly Related to research questions, theory and other studies	32%	Poorly Related to research questions, theory and other studies	66%	Did not relate to research questions, theory and other studies	2%
10. The research process	Logical chain from research question to the conclusions clearly established	44%	Logical chain from research question to the conclusions poorly established	48%	No Logical chain from research question to the conclusions	8%

Table 8. The Status of Social Research by ZOU Post-Graduate Students: Methodological Issues and Emerging Trends.

Table 8 summarises major issues and emerging trends in social research. Our exhaustive assessment reveals that while modest progress has been made with respect to some specific attributes or criteria, there are still significant areas for improvement. In particular, the following 10 key findings should engage further reflection and action among the social research community: Little progress has been made over the years in several areas and our challenge as social researchers is to refine our tools and double our efforts in search of appropriate and quality research methodologies.

41. Conclusions

41.1 Clear research questions

It is encouraging that 79 percent of the research questions are clearly stated. However, it is a requirement that all research should be guided by clear research questions or hypotheses as 12 percent questions were not clear and 9 percent of the studies did not state research questions.

More attention should be paid to the definition of initial research questions given that, without a research focus, it is easy to become overwhelmed by the volume of qualitative data often collected in case research. Without a clear research question, it is more difficult for the reader to understand the focus of the study and how it relates to a larger domain or area.

42. Type of research question

As expected, *what* questions were mostly adopted in exploratory research.

43. Literature review

It is disturbing that although most studies (76 percent) analysed the theory of interest as well as the various predictions following from the theory itself. However, failure by some dissertations to consider rival theory and in some cases, to review related literature, is a serious deficiency affecting the quality of social research. Exploratory social researchers must continue to define *a priori* constructs in order to help them make sense of occurrences, ensure that important issues are not overlooked, and guide their interpretation and focus when conducting theory-building research. Social research must consider rival theories in order to increase predictive power.

44. Context of the study

Most social researchers (57 percent) were not explicit about the context of their study (time period, time spent at site, nature of data, etc.). More information about the context is needed to increase the credibility of the results and to determine whether they are generalizable. Contextual information also helps the external observer to get a better sense of the "bigger picture."

45. Data collection

Qualitative social research offers the opportunity to use many different sources of evidence. Seizing this opportunity represents one of the intrinsic advantages of the mixed methodology. Data collection instruments and procedures must be clearly described and explained. One shortcoming we identified in the present study was that (62.5 percent) of the dissertations did not elucidate how data were collected. Most dissertations omitted data collection plans and procedures. Multi-methods represented the most widely used data collection method in post graduate dissertations. However, researchers rarely described how questionnaires, interviews, observations or other methods were conducted (eg. sampling, number of interviews and interviewees, profile of interviewees, transcription, use, and validation of an interview guide, etc.). While reviewing documentation was used in several studies, most authors did not elaborate on how documents were used in the analysis and how they contributed to the findings. A clear description of the data sources and the way they contribute to the findings is an important aspect of the reliability and validity of social research findings.

46. Data analysis

Another major deficiency we discovered in the post graduate dissertations we analysed was that 70 percent of all surveyed dissertations failed to provide a clear and detailed description of the data analysis plans, procedures, and rules. Clear descriptions of the analytic procedures used allow the reader to better understand the findings and judge the extent to which they are the fruit of a systematic and rigorous process.

47. Discussion of research findings

Any research is guided by either research questions or hypotheses, Literature review is usually conducted in order to identify the knowledge gap to be filled by the present study, and related

previous research studies are analysed so as to what knowledge other researchers have contributed in the same field of study. When data have been collected and analysed, the findings must be presented and discussed in a logical manner. Readers are interested to know the extent to which the findings address the demands of the research questions. The findings must be discussed in the context of the prevailing theory and the rival theories. This helps readers to assess the contributions of the study to the existing theory (body of knowledge). The findings must also be compared with findings of related previous studies. This places the study and the findings in the relevant field. Our findings from the current analysis of postgraduate dissertations, revealed that most student (66) failed to relate their findings to the research questions, prevailing theory and the previous studies. This deficiency makes it difficulty to assess the significant contribution a particular research has made in a particular discipline. Only 24% of all dissertations related their findings to conflicting literature while 76% discussed similar literature. There is need to compare findings to both similar theories and rival theories. Comparison of findings with both conflicting and similar literature increases the confidence in the research findings i.e. generalization and validity. Hence, this practice must be more widely applied in social research.

48. Conclusions

Findings from the present case study of social research at the ZOU have a bearing on the current 'quantitative – qualitative' paradigmatic debate. Our findings support proponents of mixed methods (Patton, 1990; Strauss & Corbin 1990) who believe that qualitative and quantitative research methods can be effectively combined in the same research project. In fact, Patton (1990) advocates for a "paradigm of choices" that seeks "*methodological appropriateness* as the primary criterion for judging methodological quality. Mixed methods, Patton (1990) argues, will allow for a "situational responsiveness" that strict adherence to one paradigm or another will not. Our findings also show that many changes have occurred in the status of paradigms and choice of methods over the last decade such that various paradigms are beginning to "interbreed". In support of mixed methods, Russek and Weinberg (1993) claim that by using both quantitative and qualitative data, scial research can give insights that neither quantiattive nor qualitative research paradigm could provide alone. However, it is important to note that the field of social research has not yet reached the point of full integration of paradigms.

49. Recommendations

For the further maturation of our field, we believe that a careful consideration of the recommendations listed below is likely to enhance the overall rigor of social research. Specifically, for each of the areas considered in the present review, we encourage social researchers to:

- Identify clear research questions
- Clearly explain the context of their research problem including the knowledge gap to be filled by their research
- Take advantage of pilot cases in order to help refine the design and the data collection plans
- Consider both the theory of interest and rival or alternative theories in order to increase the validity and predictive power of social research

- provide detailed information with respect to the data collection methods (e.g., interviews, questionnaires, direct observation, etc.) and procedures (e.g., sampling strategies, number of interviews interviewees, use of an interview guide, instrument validation, etc.)
- Effectively use tables to summarize information about the data collection process
- Triangulate data in order to increase internal validity of the findings and provide clear explanations on how the triangulation process is achieved
- Provide clear descriptions of the analytic methods and procedures (especially the dominant mode of analysis) and provide external observers with sufficient relevant information so they can follow the derivation of evidence from initial research questions to conclusions and vice-versa.
- a means of reflecting on the data
- compare findings with extant literature (both similar and conflicting) in exploratory so as to increase the confidence in the findings.

Although adhering to all of the rules of social research is encouraged, it does not necessarily make a social research good *de facto.* The present study has focused on content analysis using the combined conceptual and relational model as *just one of many approaches to assess the high quality social research.* Other key aspects of quality could be considered in the future. Relevance and contribution of social research to new knowledge could be investigated. Use of computers in social research is also another fertile ground for research. Surveying researchers about their perceptions on social research could also provide valuable information.

In conclusion, it is clear that current research standards have evolved and are more demanding of social researchers than they were in the early 1980s. However, social researchers face the challenges of designing a study in a systematic and manageable yet flexible manner and integrating the results into a coherent document (Marshall and Rossman, 1995). Again, in the future, social researches need to be better organized and documented as a way to help us learn, get meaningful results, and develop a cumulative body of knowledge in our field. This calls for conceited effort by all genuine social researchers, social scientists and social scholars worldwide, to double our efforts towards the development of this field and to share the knowledge, thus created, through publications.

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