

THE EPISTEMOLOGICAL FOUNDATION OF QUANTITATIVE AND QUALITATIVE RESEARCH METHODOLOGIES: A CRITICAL ANALYSIS

Prof. Dr. Muhammad Mumtaz Ali

Department of Usuluddin and Comparative Religion, Kulliyah of IRK&HS International Islamic University, Malaysia

Abstract: There is an assumption in the discourse on research methodologies of social sciences and religious studies that the quantitative and qualitative research methodologies are neutral and universally acceptable as valid methods of research. Hence, they are studied extensively and applied in both pure and applied research programs without reservation especially in social sciences and religious studies. This paper examines critically the epistemological foundation of quantitative and qualitative research methodologies to ascertain the validity of this assumption. For this, the paper explores the epistemological foundation of quantitative and qualitative research methods. It is followed by an examination of the epistemological foundation of research methodologies of modern research. Finally, the paper assesses how for the application of these methodologies is irrelevant to Islamic tradition especially to Islamic research.

Keyword: Science, Method, Methodology, Research, Quantitative, Qualitative

INTRODUCTION

Contemporary literature on research methodology emphasises the study and application of quantitative, qualitative and experimental methods to research. These are considered the major methods of inquiry. Further, these methods have been refined and enhanced in response to an ever-widening range of applications. However, we need to know whether these methods are neutral or based on some paradigm, cosmology, epistemology and ontology. If they are based on some specific epistemology and ontology, then we need to know whether they can be considered universal. We also need to know whether these paradigms are based on the truth and reality of life, society and the world. It is necessary because they are popular and practised by the majority of researchers in social sciences and religious studies. These methods, in fact, include a wide range of procedures and processes. Furthermore, scholars argue that the quantitative method is generally followed by positivists.

In positivist/scientific research, the researchers apply for gaining knowledge scientific methods of enquiry and consider it objective approach. Methods associated with this paradigm include observations, experiments and surveys where quantitative data is the norm. The positivist approach is popular in the social sciences, as it is believed; researchers are able to assess results without involving personal value judgements¹. Contrary to this the methodological naturalism is used as a strategy for studying the world in which scientists do not depend on supernatural causes. There is not even a remote possibility. They pursue this strategy due to two main reasons. First, according to some scientists, the existence of supernatural is not real because it has no sound observable proof: they depend on the assumption that God does not exist. For example, atheism claims that there is no life after death. Second, for some other scientists, it is possible to believe that supernatural causes such as the existence of God and angels may be true, but they assume that any supernatural approach would be arbitrary or haphazard because it is impossible to study them scientifically². It is true that both methods are deeply rooted within certain paradigms. There are some differences. The quantitative method employs measurement while the qualitative does not. The differences are, however, deeper than the superficial. Both methods differ with respect to their epistemological and ontological foundation. Epistemology is specific about a particular way that we apply to know things when ontology is about what things are. Epistemology and ontology are both important elements for the philosophy of modern view of knowledge. If they are overlapping, they have clear distinction³. One is inclined towards senses and the other to reason. The quantitative method emphasises quantification in the collection and analysis of data. The qualitative method pays attention to meaning than quantification. These two methods no doubt entail different research strategies but each carries its own striking features in terms of the role of theory and epistemological issues⁴. The fact is that “All research work is based on a certain vision of the world, employs a methodology, and proposes results aimed at predicting, prescribing, understanding or explaining. By recognising these epistemological presuppositions, researchers can control their research approach, increase the validity of their results and ensure that the knowledge they produce is cumulative”⁵. If this is the truth and reality of quantitative and qualitative methods, then we need to know and recognise the details of their epistemological foundations. This exploration into the epistemological foundation will help determine the possibility and validity of the universality of the methods and the suitability of their application in Islamic research.

THE FOUNDATION

The aim of exploring the foundation of quantitative and qualitative methods is to make researcher to understand the epistemological dimensions, by providing the tools necessary to answer some questions: How knowledge is

generated? What the nature of the produced knowledge is? What is the value and status of this kind of knowledge?⁶ In answering these questions, inspiration is drawn from three major epistemological positions usually identified with organisational science, namely the positivist, the interpretivist, and the constructivist paradigms. It is the fact that based on this; researchers generally evaluate and claim for the scientific validity of their results and grant them the epistemological validity and legitimacy of their work. Reflection on such questions demonstrates and elaborates the actual epistemological positions of researchers.⁷ Ontology and epistemology are the bases of two different approaches to viewing research philosophy. Ontology as science deals with the nature of reality. "Ontology is a system of belief that reflects an interpretation of an individual about what constitutes a fact".⁸ The difference does not lie only in the presence of mere numbers or meaning but somewhere else. Differences are more than quantification and meanings. This illustrates that all the known research methods are philosophically and epistemologically based on modern philosophical thought and worldview. Hence, treating them as universally acceptable is not realistic. From the point of view of integration of knowledge or relevantisation of religious sciences, there is a need to consider the suitability of these methods for Islamic research. Can we apply them blindly?

Is it not the truth and reality that quantitative, qualitative and experimental methods are based on certain paradigms [positivists and naturalist]? Unless by all traditions they are accepted they cannot be considered as universal. The assumption of their universality is not questioned. However, we need to be conscious of the fact that we cannot apply them as it is. They either need to be replaced or modified. I am suggesting replacing both methods with a different method. It may be called the 'Scientific Rational Method' which is based on truth and reality of life, society and the world drawn from the worldview of Islam.

The quantitative and qualitative methods differ with each other in terms of objectives and techniques. "They have different objectives, concepts, research designs, and methods of sampling, collecting data and data analysis as well as instrumentation".⁹ Some scholars regard them as kinds of research, but I would suggest that we should designate them as approaches to research instead of calling them methods. The reason is that the terms 'qualitative' and 'quantitative' do not reflect the true meaning of methodology or method. "It is much more useful to see these terms as simply adjectives for types of data and research".¹⁰ In modern research, researchers need to choose one of the methods according to the topic, nature and field of research. The general perception about both methods is that the "quantitative research specifies numerical assignment to the phenomena under study, whereas qualitative research produces narrative [account or story] or textual descriptions of the

phenomena under study”.¹¹ It is further asserted that the quantitative method to research is designed based on a sample used for investigation. The quantitative method includes the experimental techniques, survey techniques, field research, and the use of available data. It is a major method of data collection. As I have said earlier in positivist tradition the quantitative research is often considered as an objective search for truths. In this search researcher relies on hypotheses, variables, and statistics. They are applied generally at large scale, but without much depth¹². Qualitative research, on the other hand, works at accepting multiple realities through the study of a small number of in-depth cases but rejects positivists ‘rules’¹³. Nonetheless, “the use of the terms ‘quantitative’ and ‘qualitative’ particularly in relation to methodology can be confusing, divisive, and highly limiting”.¹⁴ Therefore, it is better to refer to them as philosophical paradigms instead of methodology or method. One of the biggest problems of quantitative research is that it assumes that “the study of society is no different from the scientific study of any other element of our world”¹⁵ especially the physical.

THE QUANTITATIVE METHOD

The term ‘quantitative’ refers to numbers. Hence, it is assumed that it depends on numerical data and accuracy. But, it is based on a positivist notion of inquiry that emphasises experimental and observational notions which include cosmological and ontological positions. The positions based on conjecture and speculation. The data collected based on a quantitative method is analysed statistically which assumes that reality is countable and measurable. For the quantitative method, the research problem is stated hypothetically. The quantitative method requires measurable variables and verification in order to test theories. It identifies facts and states the relationship between the variables. This is the reason that the experimental and quasi-experimental techniques are used in the quantitative method.

The components and process of quantitative method are highlighted in a superficial way. For example, researchers give importance to a useful starting point and emphasise on theory, hypothesis, research design, selected research sites, selected respondents, collection of data, analysis of data, formation of laws and conclusion. But the truth and reality are that this method is deeply rooted within the framework of positivism. It is not concerned with the truth and reality of life, society and the world based on Islamic revealed knowledge. It depends on assumptions, conjecture and speculation about life and the world. Being based on assumptions and conjecture, it serves materialistic objectives of life and society. It does not help to understand the problems of life, society and the world in a real sense as they are understood in accordance with truth and reality.

We find some criticism against this method. But the criticism is not fundamental. The quantitative method works along with its positivistic

epistemological and ontological foundations. Therefore, it fails to distinguish people and social institutions from the world of nature. Its reliance on instruments and procedures hinders the connection between research and everyday life. Its analysis of relationships between variables creates a static view of social life that is independent of people's lives.¹⁶ The quantitative method is characterised as an objective positivist investigation to the study of the truth and reality of certain phenomena based on hypotheses, variables, and statistics but without realising that its claim to positivist traditions demonstrates its subjective approach. It is based on assumptions about the world and human beings such as the assumption that the study of social phenomena is not different from the study of the physical phenomena.

THE QUALITATIVE METHOD

There are different reasons for applying the qualitative method. For example, when the quantitative method fails to explain things in the real world, the qualitative method is adopted. But the qualitative method also works within certain premises, particularly within the purview of naturalism. The qualitative method hence fails to explain many things such as the motives of people. This omission in scope is addressed by the quantitative method which uses interviews and in-depth observations as techniques considered "more appropriate for investigating individual or group phenomena that involve emotions, motivation, and empathy, which cannot be fully captured by the numbers from a quantitative study".¹⁷ Nevertheless, the qualitative method is not based on the truth and reality of life, society and the world as understood in the light of the Islamic revealed knowledge. Its claims for an in-depth understanding of a problem, therefore, remain nothing but claims. It cannot help to understand any problem comprehensively and holistically and, therefore, fails to reach the root causes of problems.

There are many qualitative approaches and each is "shaped by different epistemological origins, philosophies about the nature of scientific inquiry and its outcomes and varying prescriptions for methodological rigour".¹⁸ These aspects of the qualitative method are often overlooked and undermine its claim for universal application. There is no single accepted way of following the qualitative approach. Its use depends upon several factors such as the researcher's "beliefs about the nature of the social world and what can be known about it {ontology}, the nature of knowledge and how it can be acquired {epistemology}, the purpose{s} and goals of the research, the characteristics of the research participants, the audience for the research, the funders of the research, and the position and environment of the researchers themselves".¹⁹

The qualitative method also depends on careful observation. Some aspects of the quantitative method such as interviews, questionnaires and participant observations are also used in the qualitative method. In the

qualitative method, the data is collected through interviews and in-depth participant observation. However, such in-depth observation does not perceive the things behind the physical existence. In fact both the methods in the name of in-depth observation just focus on mechanical aspects of things; do not go beyond to realize the metaphysical truth and reality. No doubt, the qualitative method is applied to get information from individuals and groups that involve intention, emotion, motivation etc. But the qualitative method is viewed as an alternative to quantitative method both stand to produce knowledge within the framework of the positivist and naturalist epistemologies. Furthermore, the qualitative method uses both inductive and deductive reasoning. It emphasises the value of depth over quantity. It looks into social complexities and explores and understands the interconnections. This understanding is confined to the mechanism of the things or the social phenomena and ignores the metaphysical truth and reality of things. The reality is that the epistemological and technical dimensions are integrally interrelated. Artificially they cannot be separated and always work together.

Mostly, the philosophical dimension dominates the technical aspects. As it follows the techniques of content and textual analysis, it depends on library research. It collects data from existing literature, books, reports and documents but fails to identify the paradigmatic aspects of those materials. It also collects data through other techniques the goal of which “is to gain an intimate understanding of people, places, cultures, and situations through rich engagement and even immersion into the reality being studied”.²⁰ The meaning of reality is simply the happenings in society. It follows a certain process which includes the identification of general questions, selection of relevant sites, collection of relevant data, interpretation of data, conceptual and theoretical frameworks, etc. All these need to be understood with their paradigmatic implications. For the qualitative method to maintain the quality of its research, it focuses on concepts and words. What are those concepts and even words? These concepts and meanings of words are developed and interpreted at present from the point of view of the modern perspective of life and society. Unless the user of the qualitative method is conscious of their true meaning, he or she cannot escape from their paradigmatic implications. Despite these flaws in qualitative and quantitative methods, they are followed by all almost blindly; nobody looks into their historical origin, development and foundation.

THE ORIGIN AND HISTORICAL DEVELOPMENT OF QUANTITATIVE AND QUALITATIVE METHODS

Modern research using the qualitative method aims at grasping the subjective meaning of issues from the perspective of the participants. If it is related to social research and the content of a text, then it is applied to know the concrete meanings of a situation or content of a text. It is not applied to know the cause

and effect like the experimental method but is adopted to describe or explain the complexity of situations. The aim is to know or discover new meanings or aspects of a text or situation. However, in my assessment, the qualitative method is more than that. Hence, for a better and realistic understanding of the real meaning of the qualitative method, we need to know more about its historical background, traditions, philosophical underpinnings, along with the specifics of how to do it. The qualitative method “was developed to overcome some of the perceived limitations of the prevailing methods used to study human behaviour”.²¹ Modern researchers are interested to know the truth of everything especially social phenomena objectively based on evidence. Rene Descartes in his celebrated work, *Discourse on Methodology* “focused on the importance of objectivity and evidence in the search for truth”.²² The idea of truth and objectivity are defined and explained within the positivist and naturalist framework, but when we apply the qualitative method, we never question the idea of truth and objectivity. The notion of ‘objectivity’ in both methods by most of scholars and researchers is taken as something *sacred*.

In using the quantitative method, a key concept is that every researcher should attempt to distance him/herself from any influence that might corrupt his/her analytical capacity. Philosophers such as Isaac Newton and Francis Bacon argued that knowledge about the social world can be acquired through direct observation rather than from abstract propositions. Based on this, David Hume argued that all knowledge of the social world like the physical world can be derived through the senses, as the knowledge of the social world originates based on our experience and is derived through the senses.²³ Evidence based on an objective and unbiased observation was also considered a necessary criterion for truthful and realistic {scientific} understanding. Following this line of action, Auguste Comte argued that the true and realistic {scientific} understanding of the social phenomena like physical phenomena is also possible. This school of thought or paradigm became known as ‘positivism’ and influenced the process of research throughout the 20th century. This led to the development of the qualitative approach. In the modern world, positivism is viewed as the embodiments of the quantitative method and the scientific experiment. In positivism “The focus is on using a priori hypothesis, controlled experimental methods, and inferential statistics to predict phenomena and interpret results in order to discover an objective truth”.²⁴ In this debate, neither observation nor interpretation is free from perspectives. Observation is not comprehensive, holistic or free from perspective. Both observation and reflection work within the premises of perspective.

Immanuel Kant through his *Critique of Pure Reason* contributed towards the development of the qualitative approach. Kant argued that the knowledge or understanding of the social world requires emphasising the

importance of the human interpretative aspects of knowing. He acknowledges the significance of the investigator's interpretations and understanding of the social phenomenon as part of the qualitative method.²⁵ Later, the French philosopher Wilhelm Dilthey joined the debate and emphasised the importance of 'understanding' and 'lived experience'. He was of the opinion that self-determination and human creativity play very important roles in guiding our actions. Hence, he asserted that in social research the role of 'lived experience' should not be ignored.²⁶ Max Weber argued that an analysis of material conditions for a full understanding of people's lives is not sufficient. Rather, researchers must understand the meaning of social actions within the context of the material conditions in which people live. "He proposed two types of understanding: direct observational understanding, and explanatory or motivational understanding".²⁷ The school of thought within the qualitative method discourse that stresses the importance of interpretation as well as observation in understanding the social world became known as 'interpretivism' and became an integral part of the qualitative method.

Some other scholars argued that there is no single accepted way of applying the qualitative method. There are many more ways to know about the world other than direct observation. The qualitative approach "depends upon a range of factors such as researcher's belief about the nature of the social world and what can be known about it {ontology}, the nature of knowledge and how it can be acquired {epistemology}, purpose{s} and goals of the research, the characteristics of the research participants, the audience for the research".²⁸ All these have been understood and explained within the perspective of the modern world. It is also reminded that in the qualitative method "different methodological approaches are underpinned by particular philosophical assumptions and that researchers should maintain consistency between the philosophical starting point and the methods they adopt. Indeed, maintaining consistency is seen as one way of producing more 'valid' findings".²⁹ What are those philosophical assumptions? Do they represent the truth and reality of life and the world in their true sense? Can the idea of truth and reality used in qualitative method be separated from the qualitative techniques? Qualitative research is generally associated with some set of beliefs. Those who follow a qualitative method tend to place and value the importance of human interpretation along with 'direct observation' for the understanding of the social world without any reference to the truth revealed by Islamic revealed knowledge.

For a better understanding of people's 'lived experience', the researcher should combine interpretation and observation. For a long time, this emphasis has been an integral part of the qualitative method. The combination of observation and interpretation was considered necessary to know the

meaning of social actions within the context of the material conditions in which people live.

...facts and values are not distinct and findings are inevitably influenced by the researcher's perspective and values, thus making it impossible to conduct objective, value-free research, although the researcher can declare and be transparent about his or her assumptions. The methods of the natural sciences are not appropriate because the social world is not governed by law-like regularities but is mediated through meaning and human agency; consequently the social researcher is concerned to explore and understand the social world using both the participant's and the researcher's understanding.³⁰

In both methods, inductive and deductive reasoning are used. They are not only different from one another in terms of the techniques of data collection and analysis, but also with regard to their philosophical and paradigmatic foundations. In modern research, researchers examine the social and natural facts as they exist. Those who follow the modern research approach also claim that we should study and examine social phenomena as social facts in much the same way as that chemist studies and examines chemical facts and biologists study biological facts. In other words, it is expected that social scientists should apply the methods/approaches of natural sciences to examine social facts. For the study of some aspects of the natural world, the natural scientists depend on the techniques of observation, experimentation and measurement of natural facts. Similarly, in social sciences, the social scientists should depend on the techniques of observation and measurement of social facts which must be conducted objectively. The goal of research is to discover the social laws that govern social behaviour. This paradigmatic understanding is integral to quantitative and qualitative methods.

According to other scholars of modern research, the subject matter of natural sciences [natural facts] and the subject matter of social sciences [social phenomena] are different. Therefore, the methods adopted for their studies should be different. Human beings have different qualities from natural facts and hence are different from each other. Social scientists cannot depend on the same method adopted by natural scientists. Social scientists study other things and hence their method must be different. Due to this reason, the qualitative method is preferred by social scientists. The qualitative method focuses on the nature of behaviour in an objective manner as well as on its subjective meaning or quality. To a certain extent, it uses numbers to quantify certain kinds of data but it mainly depends on that kind of data which is difficult to be counted. The qualitative approach to research is said to be subjective.

Qualitative research is concerned with individuals' own accounts of their attitudes, motivations and behaviour. It offers richly descriptive reports of individuals' perceptions, attitudes, beliefs, views and feelings, the meanings and interpretations given to events and things, as well as their behaviour; displays how these are put together, more or less coherently and consciously, into frameworks which make sense of their experiences; and illuminates the motivations which connect attitudes and behaviour, or how conflicting attitudes and motivations are resolved in particular choices made. Although qualitative research is about people as the central unit of account, it is not about particular individuals *per se*; reports focus rather on the various patterns, or clusters, of attitudes and related behaviour that emerge from the interviews.³¹

In modern research, the quantitative method employs measurement and the qualitative method does not. The data for quantitative method are said to be objective. In the quantitative method, the data are gathered through participant observation, interviews and questionnaire. Whereas, the data for qualitative method are gathered through interviews, questionnaires, observations, and documents such as books, diaries, reports or other documents. It is important to note that in both methods, researchers use the techniques of interviews, questionnaires and observation. However, researchers who apply the qualitative method prefer open-ended interviews, observations, and documents.

It is argued that humans are not merely physical objects. Therefore, their study and understanding require the study and understanding of the language they use and the social contexts in which they live and the values that they practice. In the quantitative method, researchers prefer questionnaires, structured interviews, and observations. In the qualitative method, the interpretation and understanding of data is a major technique of analysis. In the qualitative method, data analysis involves various techniques such as coding, categorising, and assigning meaning to the data, which are usually words or images. These technical dimensions are not the only components of both methods; there are many more dimensions such as cosmological, ontological and epistemological which are also integral to these methods and cannot be ignored.

THE DIFFERENCES BETWEEN QUANTITATIVE AND QUALITATIVE METHODS

We need to understand that the quantitative and qualitative methods have epistemological differences. Their research designs are influenced by a paradigm or worldview and by who or what will be studied, research strategies, and research techniques. They also have different theoretical and

methodological viewpoint. The quantitative method stands to explain certain phenomena, social and human, based on numerical data which is analysed by means of mathematically-oriented calculations, especially statistics. It is also used to study social phenomenon or human problems. It “seeks to develop explanatory universal laws in social behaviours by statistically measuring what it assumes to be a static reality. It emphasises the measurement and analysis of casual relationships between isolated variables within a framework which is value-free, logical, reductionist, and deterministic, based on a *priori* theories”.³² It focuses more on outcomes, generalisation, prediction, and cause-effect relationships through deductive reasoning. It is considered from an epistemological point of view the most appropriate method for the study of society and its manifestations. It applies the natural science and positivist method into the study of social phenomena exhibiting a preoccupation with operational definitions, objectivity, reliability, causality, and the like.³³ It is based on “a belief that the study of society is no different than the scientific study of any other element of our world”.³⁴ The quantitative method emphasises fixed measurements, hypothesis, testing and fieldwork. The application of all these aspects, however, does not validate the use of the quantitative method without examination, and if necessary could require modification or replacement.

The qualitative method does not apply the procedures and techniques applied in the quantitative method. It is based on epistemological assumptions. For example, it is assumed that social phenomena are so complex and interwoven that they cannot be reduced to isolated variables, so it is not appropriate to use the term variable when defining the qualitative method.³⁵ Its main characteristics can be explained in terms of its focus on emergent, inductive, interpretive and naturalistic aspects which are applied “to the study of people, cases, phenomena, social situations and processes in their natural settings in order to reveal in descriptive terms the meanings that people attach to their experiences of the world”.³⁶ It does not belong to a single discipline in human science. Its emphasis is on quality rather than quantity. The qualitative method uses several techniques such as descriptive, case studies, field research, ethnography, participant observation, biographical sketches, life history, and oral history, narratives, content, textual and contextual. We cannot approve its application without eliminating its cosmological, ontological and epistemological implications.

Most scholars have used these qualitative and quantitative as synonyms like ‘method’ and ‘methodology’ which are often used interchangeably. “The terms ‘positivist’ and ‘empiricist’ often denote the same fundamental method/approach as ‘quantitative’, while ‘naturalistic’ field research, ‘ethnographic’, ‘interpretivist’, and ‘constructivist’ are sometimes used instead of ‘qualitative’”.³⁷

The relationship between epistemology and method is not highlighted in our formal teaching of courses on research methodology. There exists a clear connection between these two. Indeed the “entire notion of a philosophical foundation to research was missing” in books on research methodology.³⁸ Throughout undergraduate and postgraduate education the emphasis is on research methods and techniques “instead of the entire construction of the research process”.³⁹ This gap still exists. We need to be explicit on the understanding of the epistemological foundations of research as we cannot build any system or method based on incorrect views of life, society and the world. The epistemological foundation shapes our study and guides the research design. One of the basic arguments of the constructionist epistemological approach is that “The epistemological idea of social constructionism originated as an attempt to come to terms with the nature of reality. It emerged some thirty years ago and has its origins in sociology and has been associated with the postmodern era in qualitative research”.⁴⁰ The basic idea is that the “reality is socially constructed by and between the persons who experience it. It is a consequence of the context in which the action occurs and is shaped by the cultural, historical political and social norms that operate within that context and time: And that reality can be different for each of us based on our unique understandings of the world and our experience of it”.⁴¹

In positivist epistemology, reality is viewed “as universal objective, and quantifiable...therefore...it is argued that reality is the same for you as it is for me and through the application of science we can identify and see that shared reality”.⁴² In this epistemology, an individual is not seen as a perceiver or constructor of his or her reality. The constructionist epistemology views the individual as a sense-maker. Everyone is able to understand or make sense of reality as he or she sees and experiences it. Modern science as a dominant norm or paradigm is taken-for-granted in modern research. It is above question and criticism. It “believes that scientific endeavour is objective and value-free it fails to realise that these assumptions are in fact a statement about the nature of knowledge and therefore is in fact an epistemology”.⁴³ All this requires a clear understanding of the epistemological undercurrents which have been neglected in our discourse on research methodology. The comprehension of the basis and foundation of any method is, therefore, necessary to articulate any view of research method and methodology. When the link between epistemology and method becomes clear, the entire process of research also becomes more sensible. It is also linked to the worldview: I need to know who I am as a person and researcher.

SOCIAL RESEARCH PARADIGMS: ONTOLOGICAL AND EPISTEMOLOGICAL STANCES

All aspects of the quantitative and qualitative methods are based on some paradigms of ontology and epistemology. Various types of ontology and epistemologies affect the process of research. These have been discussed in the available literature on research methodology. Some of them are dealt below.

Ontological Positions: What is the truth and reality of the world and what can we know about it? What is real? What types of things are there in the world? Within social research, the ontological questions that are raised include: “whether or not social reality exists independently of human conceptions and interpretations; whether there is a common, shared, social reality or just multiple context-specific realities; and whether or not social behaviour is governed by ‘laws’ that can be seen as immutable or generalisable;...whether there is a captive social reality and how it should be constructed”.⁴⁴In response to these questions, there emerged several theories.

Realism believes that there is an external reality to which scientists direct their attention. This reality is separated from our descriptions of it. In other words, an external reality exists independent of our beliefs or understanding about it. “In other words, there is a distinction between the way the world is and the meaning and interpretation of that world held by individuals”.⁴⁵ The truth is out there and whether we can see and understand it or not is the concern of researcher. A clear distinction exists between beliefs about the world and the way the world is. It is divided into empirical realism and critical realism. Empirical realism believes that through the use of appropriate methods, reality can be understood. It is often assumed by realists that there is a perfect correspondence between reality and the term used to describe it. Critical realism believes that reality possesses the natural order and the events and discourses of the social world. We will be able to understand them and so change the social world if we are able to identify the underlying structures that generate those events and discourses. They can only be identified through the practical and theoretical work of the social sciences.⁴⁶Materialism “holds that there is a real world but that only material features of that world hold reality”.⁴⁷ In other words, only the material or physical world is considered as ‘real’ world and the mental phenomena such as beliefs arise from the material world are taken as truthful.⁴⁸Idealism believes that no external reality exists independent of our beliefs and understanding. In other words, there is no external reality which exists independent of people’s beliefs or understanding about it. Reality is only knowable through the human mind, and it contains in it socially constructed meanings.⁴⁹ According to relativism there are no universal truths. Truth, morals and cultures can only be understood in relation to their socio-historic context. Reality is only known through socially constructed meanings. There is no single shared social reality; only a series of alternative perceptions exist that are socially constructed.⁵⁰

Epistemological Positions: What are the ways through which we come to understand the world, and how a particular way of knowing might influence the research process? What rules are we supposed to follow for understanding what exists is the basic question of epistemology. How can one know reality or about it and what are the basis of knowing or knowledge? How can one be sure that he is objective in his/her research and produce objective knowledge? For empiricism all knowledge is limited to what can be observed through the senses. This position constitutes the essence of the scientific method.⁵¹ Empiricists do not accept anything as real which cannot be measured or observed.⁵² The essence of positivism is the view that social science procedures should mirror, as near as possible, those of the natural sciences. “The researcher should be objective and detached from the objects of research. It is possible to capture reality through the use of research instruments such as experiments and questionnaires. The aims of positivist research are to offer explanations leading to control and predictability. Positivism has been a very predominant way of knowing the social world; ...This can be seen by the ways in which many still perceive positivist approaches to be simply a commonsensical way of conducting research”.⁵³

Post-positivism is subtly different from positivism but shares some similarities. “Post-positivism maintains the same set of basic beliefs as positivism. However, post-positivists argue that we can only know social reality imperfectly and probabilistically. While objectivity remains an ideal, there is an increased use of qualitative techniques in order to check the validity of findings. ‘Post-positivism holds that only partially objective accounts of the world can be produced, for all methods for examining such accounts are flawed’”.⁵⁴ According to interpretivism the social world is seen as culturally derived and historically situated. Interpretivism is often linked to the work of Weber, who suggested that the social sciences are concerned with *verstehen* {understanding} whereas natural sciences look for causal explanations.⁵⁵ Interpretivism claims that natural science methods do not suit social investigation due to the fact that the social world is not governed by regularities alone. It is governed by other factors such as moral and spiritual. Hence, a social researcher is bound to find out and comprehend the social world through the participants’ and their own perspectives; and explanations can only be offered at the level of meaning rather than cause.⁵⁶ So, interpretivism believes that the application of the scientific method to the study of the social world is not suitable. It “shares a view that the subject matter of the social sciences – people and their institutions – is fundamentally different from that of the natural sciences. The study of the social world therefore requires a different logic of research procedures, one that reflects the distinctiveness of humans as against the natural order”.⁵⁷ Qualitative research is largely associated with interpretivism.

Phenomenology is an epistemological position that deals with the question of how individuals make sense of the world around them and how in particular the philosophers should bracket out preconceptions in his or her grasp of that world. Constructivism or Constructionism is an ontological as well as epistemological position. It is a theory of knowledge according to which the world is constructed by human beings as they interact and engage in interpretation. A constructivist approach to research differs in many ways from both positivism and post-positivism. Ontologically, constructivists believe that a single true reality does not exist; rather, there exist multiple socially constructed realities. Epistemologically, they believe that there exists a link between subjective interactions of the researcher with the participant's "lived experienced". In terms of axiology, constructivists acknowledge that the values of the researcher cannot be removed from the research process because the researcher's own lived experience inherently affects his or her interpretation of the participant's lived experience.⁵⁸ According to constructionists, social phenomena and their meanings are continually being accomplished by social actors. "It implies that social phenomena and categories are not only produced through social interaction but that they are in a constant state of revision".⁵⁹ They are viewed as socially constructed. Postmodern epistemology believes that people play a large part in the 'construction' of knowledge, and truth is ambiguous, fluid, and relative.⁶⁰

INTEGRATED METHODS

There are other types or methods called multiple-methods, mixed-methods or integrated methods. They are complementary to each other rather than mutually exclusive. Due to different paradigms or needs, the quantitative and qualitative methods are used together. The idea behind the combination of both methods is to use the best of both inductive and deductive logic. It offers a broader picture by adding depth and insights to numbers. I have debated earlier that the Islamic research does not depend on any one singular method/approach but adopts whatever is needed according to the needs of the appropriate research and relevant data. The Islamic research emphasises empirical, rational, and logical reasoning and hence we have termed it the 'scientific and rational method'.

AN ANALYSIS

The cosmological, ontological and epistemological dimensions of research methodology and methods deserve our attention and examination. It is generally claimed that while we apply quantitative and qualitative methods, we also apply ethics and scientific method. The fact is that most of the

available concepts use in modern research is neither based on truth and reality of life, society and the world nor in line with Islamic revealed knowledge. Hence, most of them are questionable. They all are deeply rooted within the modern paradigm of life, society and the world. The foundation of so-called ethical and scientific theories and modern philosophical thought is based on speculative and conjectural deliberations. It is the modern philosophical thought which had developed its worldview, vision of life and society and also the aim of research and its methodology. To achieve the goals of the modern vision of life and society modern philosophers and thinkers have provided those systems of research and research methodologies which suit their perspectives. The modern theories of research, models, methods, structures and strategies are deeply rooted within the framework of the modern worldview. They are considered the source for development and means of modernisation. The existing models of research, research methods, research methodologies and books on these subjects are the manifestation of a modern worldview and perspective. We do not have at present books free from modern perspectives and paradigms.

The term paradigm was used by Thomas Kuhn, an American philosopher, in his book, *Scientific Revolution* in 1962. He meant by a paradigm, a scientific community that shares common ideas, beliefs, values, teachings and so on. All research paradigms are based on assumptions about the natural world which are unproven and unprovable. Paradigm also suggests how the natural world should be studied. The assumptions address the issues of the nature of reality [ontology] and explain the nature of the relationship between the researcher and research participant [epistemology]. A paradigm as a system of ideas affects our views of reality and truth especially the truth and reality of life, society and the world. It is argued that the use of a paradigm in research means a way of thinking about and conducting research. In this sense, a paradigm is similar to a research methodology. It is considered a constructive framework. It is not strictly a research methodology, but more of a philosophy that governs how the research should be done (for example, the paradigm of positivism, post-positivism, interpretivism, postmodernism, etc.).

A paradigm, in fact, identifies the types of questions that are considered as legitimate research questions, and answered are given based on a specific method, for example, the question of use or non-use of Islamic revealed knowledge in research: how one should answer, and in what context one should interpret this question is determined by a paradigm? In short, in a theoretical sense, the development of a paradigm satisfies most or all of the criteria for research methodology. Quantitative research based on a positivist paradigm is usually associated with the scientific method. Hence, it is also called a positivist scientific paradigm. Likewise, other paradigms such as

constructivism are associated with qualitative approach and are called a constructivist paradigm. These paradigms involve three dimensions, namely the philosophical or theoretical framework; the type of data and how data are collected; and the type of data analysis. A paradigm is a type of constructive framework meaning that the construction is a logical, rather than merely a physical, array of connected elements. There are two major paradigms in social sciences at present which are considered important. One of the dominant paradigms, sometimes called positivism, is usually associated with quantitative research and methods similar to those in the natural sciences. The other paradigm is the constructivist, or naturalist, and is usually associated with qualitative research and method.⁶¹ Those who follow the constructivist paradigm argue that along with numerical numbers one should give importance to values as they also affect people and behaviour. Therefore, they do not depend totally on positivist method.

Contrary to paradigm, a method is a description of the means of calculation of a specific result based on specific steps and procedures. It is not a description of a research methodology. It is thus important to avoid using the term research methodology as a synonym for method or body of methods. Interchangeable use of research methodology for method shifts it away from its true epistemological meaning and reduces it to being the procedure.

There are several aspects of research such as the development of research methodology, research methods, the application of the scientific method, research design, research plan, research strategy, research process, research questions, research objectives, research skills and techniques, etc. Other than these aspects of research, there is another important aspect which we need to know. Most of researchers and experts do not realise that important aspect of research. It has to be noted as a fact of research that every notion of research has two important dimensions. These dimensions may be divided into two categories. The first category deals with theoretical or conceptual aspects of research which involves a discussion of perspective, paradigm, framework or point of view. No researcher is free from a perspective, paradigm, framework or point of view. Whosoever does research follows consciously or unconsciously some perspective, paradigm, framework or point of view. I call this category the spirit or soul of research. This soul of research is something which is not discussed in detail in research methodology courses although it is very important. We cannot ignore it. If we are determined to do good and meaningful result-oriented research, then there is no way to ignore this important category.

The second category deals with technical or procedural aspects of conventional research. Here several research methods, research techniques and skills and their applications are discussed such as the method of qualitative research, techniques of identification of the problem of research, techniques of

developing research questions, techniques of finalisation of objectives of research, identification of research methods, techniques of formulation of hypotheses, formation of questionnaires, identification of the nature of interviews, development of surveys, nature of participation observation, techniques of data collection, techniques of data analysis, techniques of report writings, techniques of drawing conclusions, techniques of observation, experiment, participation, techniques of content analysis, techniques of textual analysis, techniques of quantitative and qualitative researches, etc. Authors on research, research methodology and research methods focus more on these dimensions, that is, abovementioned techniques and skills. The first category is completely ignored in our discourse on modern research methodology. It is, in fact, a discussion of theoretical or conceptual aspects of research methodologies and methods that distinguishes Islamic research methodology from modern research methodologies. It is more of perspectives/paradigms/frameworks or point of views.

The application of research methods in Islamic research is not easy. It has become a challenging task due to the abovementioned dimensions. In several ways, explanations about the importance of research and research methodology have been made by scholars but without realising, identifying and highlighting the differences in the abovementioned two categories of research. In conventional research, the emphasis is only on research methods, better knowledge of the overall process of research, justice to the complex nature of research and the knowledge of techniques and skills. This is not sufficient. Nobody knows what is exact meaning of the 'better knowledge of the overall process of research'? Along with the 'better knowledge' of 'process of research' we also need to know how to do justice to research; what kind of 'better knowledge' and what kind of 'justice' we need. What is our view of 'better knowledge' and 'justice'? Is it same as the scholars understand them in modern research or different? Can we do 'justice' to anything just by repeating something as said by others? We need to know what kind of 'knowledge' is really 'better knowledge' of research methods because in our time many scholars have raised the issue of 'true knowledge' and 'false knowledge'. Can 'false knowledge' fulfil the criteria of 'better knowledge'? What is 'true' knowledge? How can 'true knowledge' be acquired and differentiated from 'false knowledge'? Is the understanding of 'better knowledge' and also 'true knowledge' same or different? One can argue by 'better knowledge' we mean the knowledge of techniques or the background knowledge of related issues of the problem of research and its method under investigation. The question here is: from where do we get this background knowledge of research? How do we get it? How do we differentiate it from other types of knowledge? These questions require along with skills and techniques the ability to approach issues involve in research critically and

wisely. These things are not explained in clear terms in existing literature on modern research and its methodology. They are either ambiguous or remain unaddressed. Hence, the knowledge of ‘critical thinking’ becomes an indispensable prerequisite for genuine Islamic research. Every researcher must have a reasonable knowledge of critical thinking and its skills. Does the available literature on critical thinking fulfil our need of being critical? Do we have true, authentic, realistic and universal criteria of critical thinking or we simply repeating on the need of critical thinking without realising the need of criteria of critical thinking – true, authentic, realistic, comprehensive and universal.

ROLE OF PARADIGM AND WORLDVIEW IN RESEARCH METHODOLOGIES

The role of worldview, paradigm, framework and point of view is important which have not been discussed as issues of research methodology and research methods. This issue is not a concern of current researchers. They just follow whatever is discussed in books. To make this point clear, I argue that different scholars have written their books on ‘research methods’ and ‘research methodology’ from a particular point of view. They must have some worldview and paradigm which may be different from that held by others. In my opinion, the worldview which is used as the basis of research methodology at present is integral to the understanding of research methodology. The currently popular research methodologies and methods are genuinely based on some worldview and paradigm. No one can develop any discussion or framework of research, research method and research methodology without applying any worldview. Every one moves based on some sort of worldview. The modern worldview, according to which this world is the only reality, has become the dominant worldview across the world. Hence, nobody dares to challenge the validity and authenticity of that worldview. It is presented as the most authentic and scientific worldview.

On the issue of research methods or research methodology, most scholars seem to adopt a modern worldview which is basically materialistic. Hence, a careful analysis of existing views of ‘research methods’ and ‘research methodology’ along with their ‘worldview’ is badly needed as they are not neutral and universal but based on some particular worldview. An analysis will reveal that the currently held research methodologies and methods are based on modern materialistic worldview. Hence, the focus of research is on the development of the physical dimension of life and society. This is the result that the physical needs and their fulfilment of man and society are the main concerns of all research strategies and planning. The history of the origin and development of qualitative or positivist method is a witness to this fact. If we study the views of man, views of society, and the views of the world, views of goals of society, vision and mission of society and the aims of

research, we find they all are different from a true, authentic and universal worldview. Currently, they are based on the modern materialistic worldview which denies spirituality. What is that modern worldview? What is its basis? What does it really constitute? Does it go along with the truth and reality of life, society and the world as disclosed by the Islamic revealed knowledge? Is it modern due to its spirit which is different from the traditional worldview? What is the basis of the spirit of modern worldview? If it is modern in nature, then what are the characteristics of that modern worldview? The understanding of everything seems to be based on modern worldview and its values which they sought from a modern philosophical thought. It is the modern philosophical thought on which the modern worldview is based. The dominant paradigm of research and research methodology has been developed based on a modern worldview. It is dominant today and leading the world.

Hence, we need to understand what do we mean by a modern worldview, modern values, modern framework and point of views? What is their source? We also need to understand the implications of the modern worldview to research, thought, life, society and the world. Why do we need to examine these views as they have been accepted as ‘scientific’ and ‘realistic’ and ‘universal’? Then we need to understand what we mean by the dominant view of research and its implications for thought, life, society and the world. All these questions deserve our attention.

The contemporary philosopher Seyyed Hossein Nasr argues that the existing systems of research and their methodologies are “based upon a fallacy related to the false conception of man which has grown within modern civilisation since the Renaissance, a concept which posits perfection for man in his present state, a supposed perfection which is simply not there”.⁶² Unfortunately, “No one takes it seriously enough upon himself to ask whether modern man should not begin remaking the future by reforming himself and by seeing himself as he really is, namely God’s vicegerent on earth, endowed with exceptional powers but also with great responsibility towards all creatures, a responsibility which he cannot shun at any price except through his own destruction”.⁶³

There are several modern research methodologies such as rationalist, positivist, relativistic, etc. that are considered ‘scientific’. We need to understand the difference between them and the Islamic research methodology in more detail. For this, we also need to re-examine all the terms used in research methodology because in the modern period every concept is defined from the modern perspective. Should one accept them as being truthful and realistic? Is there a genuine reason to accept without question their claim to truthfulness and reality? Are we really reasonable and scientific if we raise these types of questions? I feel there is an urgent need to re-examine the

modern concepts and terminologies related to research and research methodology.

The above questions and need for re-examination are not realised in the existing literature on research methodology and research methods because they had been accepted as 'granted', although, they are in essence modern and hence not universal and neutral. But, if anyone who is committed to truth and reality of life, society and the world, as well as follows true, authentic and universal knowledge – the Islamic revealed knowledge, then, he is bound to re-examine them. This re-examination will help us to have a clearer and better understanding of research and its methodology – Islamic research and Islamic research methodology which is in line with the truth and reality of life, society and the world. The methodology and research which are based on the truth and reality of life, society and the world are, therefore, different from the modern research in many ways such as in terms of methodology, method, aim of research and kinds of research, among others.

If we agree to use the term Islamic research, it is applicable to all areas of life. Islamic research, for example, focuses on certain topics. Social research has social phenomena and specific topic related to social phenomena. This implies that in social research we take into consideration the concerns of people such as what people want, why people want a specific thing, how people see that thing and how people act, think, feel and interact with one another. All these are the important factors in Islamic research. They are, no doubt, important but, before we think about what people want, we also need to think whether whatever people want is in line with truth and reality of life or it goes against them. What does Allah SWT as our Creator really want from us as researchers and people? Is there any guidance from Him? Are we independent from Allah's guidance? Can we take a genuine intellectual decision after liberating ourselves from Allah SWT and His guidance? Is there historical and empirical evidence for the need of liberation of man from Allah SWT? Is there any reference to Allah SWT and the next world in the discourse on research and research methodology?

All these questions are taken into consideration in Islamic research methodology as it is, at first, based on knowledge – true, authentic and universal – the Islamic revealed knowledge. The Islamic research methodology cannot ignore these questions. For it, these questions are not religious. They are an integral part of life and society. No social science research, rather any research can ignore them. All the above mentioned questions occupy an important place in the Islamic research methodology. They enjoy the highest place in the discussion of Islamic research methodology because, in truth and reality, these questions are fundamental to Islamic research methodology and methods of research. Researchers will have to take into consideration what Allah SWT wants and what people want.

Through Islamic research we plan to make people understand that whatever Allah SWT wants from us is better for us than what we think is better for us. Our thinking with regard to what is better for us cannot be equal to the judgement of Allah SWT. We cannot, therefore, achieve any truthful, meaningful, realistic, comprehensive, holistic understanding of anything if it is not understood in the context of the creation and Guidance of Allah SWT. The so-called sustainable development, as planned by the United Nations and various governments, becomes impossible without seeking guidance from Allah SWT. The only way to sustainable development is through the application of the guidance of Allah SWT in all aspects of life both individually and collectively, locally and internationally especially in intellectual activities and also by the right kind of leadership and professionals. The phenomena of recurrent natural calamities, new diseases and environmental crises, rise in crimes and corruption and cost of living are empirical evidence that refute our claims that we can solve problems of life and society without the help of Allah SWT. Depending on Allah's help is not the denial of human capabilities but rather to guarantee their best possible use.

Hence, every discipline must be committed to the application of an Islamic research methodology. For example, if we do research in 'religious studies' we follow methods of textual analysis, content analysis or contextual analysis on the basis of quantitative or qualitative approaches. However, if we are committed to the Islamic research then we need to be empirical, historical, comparative and ethical, i.e. rational. Ethics and science demand that our view of life, society and religion must be true, correct, authentic and universal. To imagine and think that the truth and reality of life can be relative is to defeat rational and scientific understanding. For this reason, we cannot depend on the modern methods of research and analysis. Rather, we need to apply the scientific rational method which implies that based on true, authentic and universal knowledge, we know, at first, what is the truth and reality of religion and who developed the idea of religion. Are there several religions or only one, if there is any? Are there several 'religions' revealed by Allah SWT as religious pluralism assumes. Allah SWT made it clear in the Quran– that He revealed only Islam not as religion but as the worldview and the way of life and code of conduct. If Islam is taken as religion in the modern sense of religion, is this not against the truth and reality of Islam? If we take Islam as the true worldview, then are there only one true worldview or many and which one is, in truth and reality, true? Can there be two 'true' worldviews? Is it rationally and scientifically possible? How do we know about truth and reality? Is our view of truth and reality at present based on speculation or knowledge – true, authentic and universal? Relativism rejects any idea of being truthful, realistic and at the same time universal. Are the Quran's claims to true, authentic and universal knowledge false? If yes, is this claim rational

and scientific? There may be a long list of questions. All our answers and views have to be based on knowledge – true, authentic and universal knowledge. Based on knowledge - true, authentic and universal - we come to know the truth and reality about religions and worldviews, their positions and reality.

It is made clear in the Quran that Islam is not a religion in its limited sense. It is more than that. Our contemporary scholars have forcefully contended that Islam must be understood in its proper and truthful perspective. They asserted genuinely that it is the worldview and the way of life, a code of conduct and mode of living. Allah SWT revealed Islam as the only true worldview and way of life which provides details in the form of guidance about scheme of life and society whereas religions as man-made mode of worships and doctrines deal with rites and rituals and indulge people in superstitions. They do not deal with entire society as a worldview, though some of them claim to be a worldview, but do not provide details based on knowledge for the scheme of life and society. Take the example of the state of Israel which claims to be a Jewish state but from a practical point of view it is based on a secular perspective. Therefore, we will have to make a comparative study between Islam and other religions and see what kind of life and society they want to develop. What is their view of man? What is vision of a good society? What are the differences and similarities between the Islamic approach and religious approach to life and society?

Other than religious studies in social sciences, psychologists prefer to conduct experiments on human behaviour as they apply the scientific method. In psychology, humans are taken as self-created animal beings similar to actual animals because both humans and animals have life and similar biological systems. Sociologists most often prefer to apply survey research; anthropologists characteristically conduct field research; historians tend to make use of available historical data but for all of them humans are physical and animal beings who have no reference to other dimensions of life such as ethical [rational], spiritual [purpose oriented], moral [responsible beings] and consequential [accountable] as approved by Allah SWT. So far as true, authentic and universal knowledge is concerned, human beings are not only physical beings but also ethical, spiritual and moral beings. Life and society at present are studied in all disciplines which move based on material factors. Research is not conducted based on the spirituality of life and society and researchers are not concerned with the ethical, spiritual, moral and consequential dimensions of life and society.

It is this sense of consequentiality and accountability before Allah SWT that makes people conscious of responsibilities. They understand that they have to face the consequences of their thinking and actions - right or wrong. We cannot see this world without its final consequences. If we claim a

world free from consequences, it must be the result of our imagination but not the result of an ethical inquiry and knowledge - true, authentic and universal. We are bound to follow the law of consequences as we follow the law of cause and effect. If there is a law of cause and effect, then there must be a law of consequences. There must be some effect by all those actions of human beings who go against law and order and commit acts of financial corruption and remain unchallenged. There must be someone who can check them for all their lawful and unlawful activities who cannot be misguided or deceived and who knows everything about this world and the world of human beings. Is there any reference to consequentiality in our research methodologies and research activities? Is there any technique which can measure the effect of corruption on the individual and family life of corrupt people? Are researchers conscious of that effect and capable of seeing that effect in human life? Do they have any technique or skill to see and measure that effect? If they want to see that effect, then what skills and techniques do they require? Is there a discussion about those skills and techniques in existing methodologies and books on research methods?

In modern research, researchers depend on data collected by rational and empirical methods. What do we mean by 'rational' and 'empirical' methods? Are they not subject to new and fresh investigations? We have taken everything coming from the modern worldview for granted. They are generally used in modern research without question even though they must have been developed based on modern perspectives. Is it necessary to stick to those methods and their meanings in all disciplines? Do not we have the right to reassess their meanings and characteristics? Do we need to refer to true, authentic and universal knowledge to know what method and methodology is really good for us without forgetting that each and every method used in the modern world is the result of modern worldview? We need to raise questions: Did Allah SWT use any method in the Quran to convey His message to people? This offers us guidelines based on which we can claim that all branches of knowledge need to follow some method. Whatever method we follow it must be based on knowledge. I call it the Scientific Rational Method [SRM].

Despite this clear guidance and guidelines, whatever method of research is adopted in the modern world it is accepted without realising that it works within the framework of modern worldview. It does not follow the framework of truth and reality of life, society and the world and is not guided by true, authentic and universal knowledge. Hence, I argue that the Quranic emphasis is on the Scientific Rational Method [SRM] but it does not stick to a single method. It allows us to think and develop suitable methods. It prefers a combination of empirical and rational approaches. Thus, I further argue that in SRM, comprehensive observation is demanded as its first principle. As a result,

I conclude the Quranic method is not one dimensional. It is not empirical or rational but is united with historical, comparative, analytical approaches and supported by parables and examples from various dimensions of life. It is neither rational in a limited sense nor empirical in a narrow context. Along with the method of scientific rationality we are allowed to use other suitable options to conduct research. But before the application of methods, we need to know truly, correctly, realistically and authentically what is the true purpose of life and society? What kind of society do we want to develop? What would be the characteristics of people who live in that society? Blind followers of religions, isms and ideologies of rationalism, empiricism, relativism, and scientism deprived from ethical and scientific consciousness and live with loss of true vision of life and society. Are they not victims of their desires and fancies? People who are ethically, spiritually and intellectually unsound cannot help to develop a good society or beings. They have to understand that there is no room for emotionalism, extremism and dogmatism in life: life is for them ethical and spiritual in essence.

I argue that the use of SRM would guarantee the use of the right kind of epistemology and truthful methodology and on the other the reliability, validity, and generalizability.⁶⁴ The application of methods other than SRM need to be understood scientifically and critically in the light of true, authentic and universal knowledge and in line with truth and reality of life, society and the world because “epistemological bases” and “methodological concerns” of other methods are not that same as those of the Islamic epistemology and Islamic methodology. Hence, the modern notions of epistemology and methodology cannot be applied. Acceptance of any view or idea and application of any technique without thorough examination and critical thinking is useless. We need to examine objectively [honestly] and analyse scientifically [systematically] as well as critically all views, ideas, models, theories, frameworks, perspectives, concepts and terminologies as all of them are the product of modern epistemology. At present, a blind approach is dominant in the academic world. Most of the views and frameworks, perspectives and terminologies, definitions, techniques and skills are accepted without challenge. There exists thousands of books and textbooks on modern research methodologies and methods which are accepted by everybody because it is repeatedly said that these books deal with systems and methods of research which have been tested and verified. Yes, they must have been tested and verified but from the modern point of view and not from the point of view of truth and reality of life, society and the world.

CONCLUSION

Based on the above survey of the epistemological foundations of quantitative and qualitative methods, one can rightly argue that the modern methodologies and methods are genuinely subject to Islamization and relevantisation. It is

now clear beyond doubt that each and every notion and idea related to any aspects of life and society is based on some perspective of paradigm. The quantitative and qualitative research methodologies and methods are no exceptions. They are deeply rooted within several cosmological, ontological and epistemological frameworks. They do not work independently. The modern notions of cosmology, ontology, and epistemology are neither based on true, authentic and universal knowledge nor in line with the truth and reality of life, society and the world. This is the reason that the quantitative and qualitative methodologies and methods in spite of their claims do not take a comprehensive and holistic approach to the study of physical or metaphysical issues and dimensions of life. They generally work in an isolated way. They are not concerned with the true, authentic and universal vision, mission and objectives of life and society. They practically deny the spiritual basis of life, society and the world and un-authentically focus on the material needs of life and society. This is the reason that current sophisticated research methodologies and methods bitterly fail to solve problems and lead societies on the path of cultural and civilisational development.

All those who are involved in the study, teaching and application of modern methodologies and methods, and realise genuinely the need of Islamization of knowledge and relevantisation of Islamic sciences are under obligation to adopt a critical approach instead of and rather than mere acceptance and adoption. They have to realise that without exploration, analysis and criticism of the concept of modern research, research methodologies and methods, they cannot contribute anything positive. They would be repeating and imitating un-authentically. Islamization of research methodologies and research methods seems to be scientifically sound and spiritually obligatory.

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