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Positivist and Non-Positivist Paradigm in Social Science Research: Conflicting Paradigms or Perfect Partners?

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Abstract

The idea of a paradigm or worldview as an overarching framework which organizes our entire approach to being in the globe has become usual since Kuhn published The Structure of Scientific Revolutions in 1962. This paper therefore critically examined the positivist and a non positivist research paradigm in social science research. It was revealed that the two paradigms are opposing each other. The findings show that positivist and a non positivist research are conflicting paradigms and a researcher needs to cortically evaluate each and every paradigm before employing it in his research activities. Conclusion was eventually drawn based on the literature findings.

Keywords: constructivist, epistemology, non positivist, ontology, positivist and research paradigms

1. Introduction

The idea of a paradigm or worldview as an overarching framework which put in order our entire approach to being in the globe has become usual since Kuhn published *The Structure of Scientific Revolutions* in 1962. In distinction to the view that a paradigm is, by its very nature, beyond description and the understanding of the human intellect, it is believed that the intellect, by it's extremely nature, is more general than any world perception on which it takes its existing cognitive carriage. Hence it is likely and necessary to enlarge individual awareness to eloquent any essential way that individual frame his world, for dissimilarity of epistemology, methodology, as well as supporting perspective are more often than not based on model supposition. While paradigms could be drawing out in straightforward cognitive terms, their natural world is far better-off: as Ogilvy (2006) reveals out, they are more concerned with models, mythology, frame of mind and descriptions (Venkatesh, 2007).

Guba and Lincoln (1996) have disclosed an incredibly helpful contribution to articulating and distinguishing opposing paradigms of investigation. They recognize and explain critical theory, constructivism, positivism and post-positivism as the key paradigms that surround research. In this article, it has been argued that the positivist and constructivist paradigm, as they express it, is uncertain about the association between created realities and the unique givenness of the universe, and that a world perception based on partaking and participative realism is more obliging and fulfilling. The study starts from and expands the Guba and Lincoln's structure and framework to eloquent a contributory paradigm. This study argues that an essential quality of the participative world notion, which it shares with Guba and Lincoln's constructivism paradigm, is that it is self-reflexive.

The participative intellect which Tugendhat (2006) further coined as post-conceptual intelligence articulates realism within a paradigm, brings together the paradigm itself, and can in standard get to the wider framework of that worldview to reframe it. A fundamental predicament of positivist paradigm is that it cannot recognize the framing paradigm it has fashioned. It puzzles the given universe with the world perception it has created to shape the given worldview. It cannot perceive that the position, on which it stands to structure its globe, is its own conception. It therefore, tends toward bigheadedness, prejudice and the repression of scientism. The most severe rejection of positivism is to facilitate form of post-structuralism and postmodern which is being gotten from the deconstruction of Suppe (2007). He holds the view that, at hand, there is no rise above grounds for reality

outside the transcript. Its fundamental predicament is that it rejects any ground as convincing merely because there is an additional ground or background beyond it.

It mixes up virtual reality with nihilistic disbelief: it believes that since no ground is concluding, no opinion has any assert to reality (Weber, 2004). It consequently, moves in the direction of a restless disorder of raw and meaningless power. The notion for a participative world perception has underpinned researcher's work on supportive investigation and supplementary participative outline of action research more than the past two decades and above. This research has articulated this viewpoint as a political and epistemological belief just recently (Reason & Rowan, 2001; Schwandt, 2004). In contrast to this, other scholars and researchers have come up with constructive arguments which comprise a participative point of view (Schwandt, 2004; Neurath, 2003; Olaison, 2001), whereas Skolimowski (2003) has invented and developed the standpoint which he regards as the participatory intellect. A predominantly graceful clarification of participatory observation and language and its insinuation for natural thoughts can be found in Phillips (2007).

This structure of fundamental empiricism is not to be baffled with behaviourism, that has on no account been experimental enough, given that it preconceives and draw up the boundaries of experience in regards to its positivist paradigm. On the other hand, the research's empiricism is the fundamental kind long in view of the fact that it has been commended by phenomenologists: a perfect relationship with occurrences untainted by presumptions (Patton, 2002). It is unobstructed knowledge of the "lived-through world" that Putman (2006) maintains that is is altered and vague by the limiting standards of the "objective thought" of positivist discipline and "dogmatic ordinary sense" (Polgar & Thomas, 2005; Popper, 2008; Putman, 2006). This research deems it is important to regain the idea of empiricism from positivist mistreatment and reinstate it to more productive use in terms of this sort of unconventional experience (Flew, 2001). The experimental is based on understanding, and it stops to be empirical when knowledge is controlled by a restricting explanation.

2. The Extent and Nature of Research Paradigms

Guba and Lincoln (1996) revealed that investigation paradigms may be seen as lay down of fundamental viewpoints about the natural world of realism and how it might be identified; and with the intention that these ideas are put into respite by three basic and interconnected questions. There is, however, the ontological question, "What is the structure and type of truth and, consequently, what is at hand that can be recognized and known about it?"; the epistemological inquiry and question is: "What is the connection amid the knower or could-be knower and what could be known"; and the procedural and methodological question and issue is: "How could the investigator and inquirer set out regarding discovering whatsoever he or she deemed could be known in relation to?" Guba and Lincoln start by recognizing the answers and responses advocates of the four diverse paradigms could build on the three questions highlighted above.

These answers and responses are presented in Table 1, the first five discourses and columns are directly taken from Guba and Lincoln. The last "Participatory" column is the study's contribution. The study has also included a fourth line or row known as "Axiology", which is not there and missing from the Guba and Lincoln explanation, and which the study believe is an indispensable crucial feature and quality of an investigation and inquiry paradigm, beside and alongside methodology, epistemology and ontology. The axiological inquiry or question asks what is essentially valuable and precious in individual life, in a more precise way, what kind of information and knowledge, if any, is fundamentally and inherently valuable and important. This is explained in a later part and segment below.

Table 1. The nature and extent of research paradigms

Issue	Positivism	Post positivism	Critical Theory et al.	Constructivism	Participatory
Ontology	Naive realism - "real" reality but apprehendable	critical realism - "real" reality but only imperfectly and probabilistically apprehendable	historical realism - virtual reality shaped by social, political, cultural, economic, ethnic and gender values crystallized over time	relativism - local and specific constructed realities	participative reality - subjective-objective reality, co-created by mind and given cosmos
Epistemology	dualist/objectivist: findings true	modified dualist/objectivist; critical tradition/community; findings probably true	transactional/ subjectivist; value mediated findings	transactional/ subjectivist; created findings	critical subjectivity in participatory transaction with cosmos; extended epistemology of experiential, propositional and practical knowing; cocreated findings
Methodology	experimental/ manipulative; verification of hypotheses; chiefly quantitative methods	modified experimental/ manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	dialogic/dialectical	hermeneutic/dialectical	political participation in collaborative action inquiry; primacy of the practical; use of language grounded in shared experiential context
Axiology	propositional knowing about the world is an end in itself, is intrinsically valuable	propositional knowing about the world is an end in itself, is intrinsically valuable	propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end in itself, is intrinsically valuable	propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end in itself, is intrinsically valuable	practical knowing how to flourish with a balance of autonomy, co-operation and hierarchy in a culture is an end in itself, is intrinsically valuable

Source: Neuman, (2007).

3. Positivism

This study argues that positivism could be regarded as a research strategy and approach that is rooted on the ontological principle and doctrine that truth and reality is free and independent of the viewer and observer. A good number researchers and intellectuals who are concerned with the viewpoint and philosophy of investigation and research concur with this explanation and definition. The self-governing, independent and objective existence of truth can be seen as a definition and meaning of positivism in a number of write-ups (Goetz & LeCompte, 2004; Gough, 2005; Griffin, 2006; Hollis, 2004; Lee, 2000a; Mouton & Marais, 2003; Polgar & Thomas, 2005; Reason & Rowan, 2001; Ryan, 2006; Ryan & Julia, 2007; Scheffler, 2007; Schwandt, 2006; Spiegelberg, 1960; Strauss & Corbin, 2007; Urquhart, 2008; Venkatesh, 2007). Some writers employ diverse terms to indicate this ontological standpoint, for example "realism" or "objectivism" (Neuman, 2006; Polgar & Thomas, 2005; Rorty, 2007; Shafer, 2004; Weber, 2004). These scholars classically view positivism as encompassing epistemological (Neurath, 2003; Olaison, 2001; Popper, 2008), methodological (Patton, 2002; Weber, 2009), and occasionally other idealistic and philosophical features, such as principles, morals and ethics (Putman, 2006).

A positivist investigator has an idea or notion that the universe or world conforms to permanent and unchanging laws and rules of causation and happenings; that there exist an intricacy and complexity that could be overcome by reductionism; and with the intention of asserting an importance and emphasis on impartiality, measurement,

objectivity and repeatability. These scholars have equally a realist and an independent and objective analysis and view of the universe. The methodologies frequently used by positivist investigators and researchers comprise: confirmatory analysis, nomothetic experiments, quantitative analysis, laboratory experiments and deduction (Olesen, 2004; Ryan & Julia, 2007). An interpretivist inquirer or researcher advocates that there is no worldwide and universal truth. This type of investigator understands, comprehends and interprets from his/her own outline of orientation and reference. He or She holds the view that uncommitted and indifferent impartiality is impracticable and realism or practicality of framework and background is imperative. These writers have equally a relativist and a biased or subjective conception or view of the globe or world. The methodologies in most cases used by interpretivist scholars and researchers consist of: field experiments, exploratory analysis, idiographic experiments induction and qualitative analysis (Ogilvy, 2006; Tugendhat, 2006).

Much of the compilation of diverse idealistic facets within the notion "positivism" is comprehensible for numerous undertones and a number of these features could be further explained in the later part of this article. The distinction amid positivism and non-positivism is so profound in such a way that the awfully idea "positivism" has go a long way in depicting a derogatory connotation for non advocates of positivist (Burrell & Morgan, 1979; Lee, 2001). Therefore, it appears to be employed largely by adversary of the thought, while advocates of this idea have a preference for the adjective "positive" rather than "positivist" (Friedman, 1994). The objectivist or realist ontology upon which positivism is rooted, that is to say that the certainty and assurance that truth or realism prevail independent and sovereign of the viewer or observer, is a residue of the thriving ontology of the so called mechanistic natural or ordinary sciences of the explanation and illumination era. It is up till today predominant in parts of ordinary, natural and technological sciences. The study's present use the word is fashioned by the effort to bring in this scientific ontology into social sciences and humanities with the affirmed intend of replicating the achievement of the ordinary or natural sciences (Habermas, 1974).

It is worthy to note that, it does not form the basis of this article to explain the weaknesses of positivism. Academic and scholarly sincerity requires, however, that a number of the key critics alongside positivism are critical analyzed and reviewed. This could go along way in helping the person who reads understand the thrust and shove of the argument. Positivism, particularly the complex set of ideas and notions coined by the Vienna Circle termed "rational positivism", has mainly been dishonored in the viewpoint of sciences. It on the other hand persists to be a viable and strong "logic or judgement in use" (Landry & Banville, 1992) or "ontology in use" (Lee, 2004) in the world of social sciences. The perhaps most essential evaluation and\ critique of positivism in social sciences world is that the notion of an independent realism and the resulting unbiased observation and study of this realism does not guide to a sufficient comprehension of the happening in question (Adam, 2001). This frequently entails a difference between natural ordinary and social reality.

Positivism appears to be a weak or lacking foundation for research and investigation in any case in the concluding realm (Nissen, 1985; Orlikowski & Baroudi, 1991). Further points of critique and analysis address the epistemological troubles ensuing from positivist ontology. There are a number of problems of induction or initiation and general applicability (Pettigrew, 1985; Lee & Baskerville, 2003). Philosophy has not established a persuasive and believable clarification on how the intellect can sufficiently symbolize a mind-independent truth or reality (Khlentzos, 2004). Subsequently, there exists the claim that positivism is self-contradictory due to the fact that it is not by itself a natural happening independent of the viewer or observer and associated problems of the ultimate underpinning of positivism (Quine, 1980). Consequently from this, it could be established that positivism is organizationally globular and that in spite of its suspected impartiality, it could simply look into happenings or occurrence that are formed by the researcher (Stahl, 2003).

3.1 Development and Concept of Positivist Paradigm

According to Kaboub (2008), the idea of positivism came into being as a truth-seeking paradigm in the later part of the 19th century through Auguste Comte's denunciation of metaphysics and his contention that barely only technical and scientific facts can disclose the reality concerning truth. It was afterward officially recognized as the leading scientific and technical approach in the beginning of the 20th century by constituents of the Vienna Circle, with Karl Menger, Otto Neurath, Rudolf Carnap, Gustav Bergmann, Philipp Frank, Herbert Feigl, and Moritz Schlick. The Vienna Circle required building a combined scientific and technical world-idea that discards the employment of philosophy as an avenue of erudition regarding the factual and natural world of realism. Unluckily, it unsuccessfully falls short as a logical and rational philosophy of discipline due to a critical discrepancy amid its assumption of "reality" and its hypothesis of "knowledge".

Positivism incorporated David Hume's presumption of the natural world of reality (i.e., idealistic ontology). Hume alleged that truth or reality comprises of atomistic (micro-level) and self-determining or independent

events. He established that in the employment of the senses to create facts in relation to reality (i.e., scientific technique). He deliberated that thoughtful and rational way of thinking may perhaps eventually pave way to researcher to "see" non obtainable relations among happenings taking place concurrently. On the other hand, positivism in addition employed Rene Descartes's epistemology (i.e., hypothesis and theory of knowledge reasoning). Descartes was of the view that rationale is the most excellent approach to create and generate knowledge and information concerning truth and realism. His deductive technique and approach means that happenings are prearranged and interrelated, and for that reason realism and truth are structured and deducible. This inner discrepancy ultimately damaged the soundness, strength and validity of positivism.

The positivist paradigm emphasizes that genuine, real and factual happenings could be studied and observed scientifically and empirically and could as well be elucidated by way of lucid and rational investigation and analysis. The decisive factor for assessing and appraising the soundness and validity of a systematic scientific and logical theory is whether a researcher's facts view point (i.e., theory-based on guesses and hunches) are reliable consistent and dependable by means of the knowledge researchers are capable to achieve by means of their senses. Positivist research approach and methodology (methodological uniqueness) highlights micro-level testing and experimentation in a lab like setting that do away with the intricacy of the outside globe (e.g., societal, psychosomatic, and financial connections among joblessness, and offense or suicide). Strategies are then arranged based on winding up gotten through the "scientific and logical method" (e.g., career training and teaching for the jobless, antidepressants those in the depths of despair, and prison or jail time for the hoodlums or criminal). Psychologists just of recent understand that this yields outcomes that contain internal or inner validity (i.e., the associations observed and studied in the test and experiment are valid contained by these background, background and circumstances).

Despite the fact that the results and outcomes gotten by means of experimental and scientific methods approaches give important insights and knowledge into the natural world of realism and truth, those outcomes or results may perhaps be short of external or outside validity. That is to say, the associations studied and observed in the experimental room or laboratory may possibly not be similar in the additional complex external or outside world wherever a much larger number of elements or factors act together. A positivist who handles multifaceted social problems, for instance joblessness and offense could be concerned through their noticeable expression (i.e., the jobless person or criminal who could be perceived or sensed) rather than with the fundamental underlying machinery that are imperceptible to individuals. For this reason, positivist recommendations or prescriptions tend to treat and handle the symptoms sooner than the original source of the predicament. Positivism put forth a significant influence on technical and scientific practice in the humanities, social sciences and art for decades in the beginning of 20th century.

Furthermore, this was particularly factual in the natural or ordinary sciences wherever laboratory tests and experiments could nearly approximate the true or real world setting, as a result permit for precise and truthful forecast. In the humanities and social sciences, on the other hand, human wish and doubt make the room or laboratory experiment not much dependable and reliable. Eventually, its internal or inner discrepancy and inconsistency culminated in the desertion of positivism in support of scientific and technological approaches for example critical multiplism, that is based on the idea that no one method is constantly enough or adequate for developing and innovating a valid comprehension of an occurrence. The relevance of critical decision in studying numerous research questions employing several samples, measures, analyses and designs are essential to allow a meeting on a valid perception of an occurrence.

4. Non-Positivism

In a situation whereby positivism is merely not the ontological point, then the problem occurs which options to positivism at hand are. In view of the above explanation on positivism, the options are those ontological standpoints that do not rely on a reality or truth independent or free of the observer. The historical background of philosophy presents a number of diverse non-positivist ontological points of view. In view of the fact that the observer contributes a greater part in the establishment of reality and is more often than not believed to do this by means of his or her intellect, a number of writers are of the view that the opposite of positivist research paradigm is rationalism (Goles & Hirschheim, 2006). Nevertheless the field or area of rationalism is broad and has many diverse theories. One of which is the doctrine or notion that the observer or researcher constructs truth or reality and that, at the end, all of realism is just a fabrication of the individual's thoughts. This solipsist supposition is reflected in the concept or doctrine of radical or fundamental constructivism (Feyerabend, 2000; Flew, 2001; Gephart, 2008; Lee, 2001b).

A further non-positivist tributary of reflection that was enormously powerful in the philosophy and thinking of the later part of 19th as well as 20th century is romanticism, idealism, or more exclusively German idealism or optimism. It is connected with the given name of Fichte, Schelling, Hegel and others who established the preeminence of the psyche or spirit above any outside reality. In modern research however, these ontological viewpoints do not in any way play a significant role. They can be viewed, on the other hand, as the foundation of a number of the ontological options to positivism which are common today (Eisenhardt, 2002). The two most significant notions contrasting to positivism are interpretivism and constructionism. Constructionism (or social constructivism) holds the view that reality or truth is constructed or formed by the observer or researcher, however, in resistance to earlier (radical) constructivism, it opines that reality or truth is a combined construction. It gives more regards to the role of contact and communication in the course of constructing or forming reality (Bailey, 2006). Its academic and scholarly biography could be referred back to the earlier part of idealism (Denzin & Lincoln, 2007). Researchers and investigators who succumb to the ideas of constructionist ontology classically call themselves interpretivists relatively than constructionists.

The distinction between interpretivism and constructionism emerges to be that the constructionists are more fundamental and radical and they broaden their ontological observations to all facets of reality or truth while interpretivists restrict it to social truth reality (Creswell, 2002). In view of the fact that researchers and investigators are more often than not concerned with aspects of technology that are having to do amid social happenings, they could typically abstain from protecting the more controversial claims of the constructionism and thereby focus on those facets of reality or truth that are straightforwardly recognizable as generally constituted. In present research or study, interpretivism is perhaps the most significant substitute to positivism. This article establishes that this is likely because the spirit of the interpretivist viewpoint is an ontological point of view which looks at reality or truth as a social formation or construct of the mind's inner feeling.

Furthermore, the constructionist ontology within the context and framework of interpretivism could be seen in several texts on interpretivism (Coffey & Atkinson, 2006; Glaser & Strauss, 2001; Glesne, 2007; Goles & Hirschheim, 2006). The notion of interpretivism has to compete with a number of the similar problems because positivism in that regard is frequently refers to as epistemological (Arksey & Knight, 2006; Creswell, 2004; Descartes, 2008; Goles & Hirschheim, 2006) and methodological (Bloor, 2007; Lee, 2001) aspects of research concurrently. The word "interpretivism" is frequently not piercingly defined. Moreover, "interpretivism" is a word that is quite new, however, simultaneously everywhere in the midst of non-positivist researchers and scholars.

A concise contrast of the make use of "interpretivism" and "positivism" may throw some light with regard to this. If one evaluates the book of proceedings of the IFIP WG 8.2 conferences in 1984 (Bless & Higson-Smith, 2008) and 2002 (Creswell, 2002) subsequently, one might discover a noticeable distinction among employment and acceptance of such terms. In 1984 the key thrust and theme of the conference and symposium was to shatter the seeming throttlehold of positivism on investigation and research. As a result, expressions beginning with "positivi…" were employed more than 158 times in just 9 of the 18 papers presented. On the other hand, "Interpretiv" was used no more than 15 times in the conference, more often than not with references to the work of Burrell and Morgan (1979). "Interpretivism" or "interpretivists", as the case may be, were not employed or used in any way. In the beginning of 2002, when non-positivist social and collective research was resolutely recognized, "interpretive" was employed and used more than 30 times in just 10 out of 30 article presented, while "positivi…" was only used two times, one of which, by way of example, was just a reference. This points out that the great effort in opposition to positivism gives the impression to have been unbeaten and successful and, therefore, interpretivism is considered as a terminology or term in research investigation.

5. Disagreement and Inconsistency among Positivism and Non-Positivism

This article has to this point been set up to streamline the disagreement and incongruity amid positivism and non-positivism. It has regarded positivism as thus, the ontological assertion that reality or truth is independent and free of the viewer or observer and also that non-positivism is the logically and rationally opposing and conflicting view that reality or truth depends on the viewer or observer. The benefit of this explanation is that it permits the application and use of a basic and logical saying or axiom, that is to say, the proposition of the barred third. This proposition was originated by the famous philosopher called Aristotle in his writing on metaphysics. It suggests that an expression or sentence ought to be true or false. In the details of propositional common sense or logic, it could be represented tersely: $\neg$ (p. $\neg$p)

The biography and history of reasoning or logic has paved way to a number of efforts to demonstrate that this adage or axiom is not adequate and that rational or logical states do not contain to be bivalent. Instances of such

non-bivalent reasonings or logics are modal way of thinking or logic and fuzzy logic (Creswell, 2004) or deontic logic (Gephart, 2008). The suggestion or proposition is all the same generally conventional and becomes one of the fundamental doctrines of individual's scientific and technical system. An example could effortlessly indicate the strength of the saying or axiom. If A is the plan or proposition "X is a dog", then ¬A is the plan or proposition that conveys the fact that "X is not a dog". This notifies a researcher that it is impracticable that A and ¬A are correct and true, and therefore, that X could not be a dog as well as not a dog (or a non-dog: ¬dog) simultaneously.

As it could be seen, if the assumption or proposition A means: "truth or reality is independent or free of the observer or viewer" then ¬A could be interpreted as "truth or reality is not free or independent of (therefore rely or dependent on) the observer or viewer". As revealed through *tertium non datur*, both of them cannot be factual concurrently. This proclamation is the thrust of this article. The incompatible opposition among positivism and non-positivism is basically based on a rational axiom or maxim and the ontological source of the words or terms. This, in any way, does not answer the entire ontological problems in investigation or research but rather it permits for a great deal and further concise arguments of numerous issues. It can be established, for example, that, had it been interpretivism is a type or form of non-positivism (as was critically discussed earlier in this article), then an investigator or researcher cannot adopt a positivist and an interpretivist research strategy or approach simultaneously. However, that does not, in any way, mean that every researchers or scholars must belong to the school of thought of either positivists or interpretivists. Equally, if a cat could be termed as a non-dog then X cannot, in either way, be a dog as well as a cat. X does not, therefore, have to be a cat or simply a dog, nevertheless, given that X could be, say for example, a fish.

An analogue or immature conclusion is to say that a researcher could prefer a non-positivist ontology which is not interpretivist. This standpoint must not be equated with a number of the theories about the association among positivism and its substitutes seen as paradigms, for example, supremacism (Klein, Hirschheim, & Nissen, 1991), paradigm incommensurability (Brooke, 2002; Mingers, 2001) or purism (Petter & Gallivan, 2004). It merely depicts that the ontological postulations of positivism and non-positivism are not, in any way, commensurable. What this statement means for investigative or research methodology and epistemology would be explained further in the subsequent sections.

6. Constructivist Ideology

It has been understood from Guba and Lincoln's (1996) assertion that the real or factual is a mind construct of persons and these constructs "do not live or exist external of the individuals who generate and grasp them". Consequently, there might be a lot of such constructed or structured realities; and they might be contradictory and mismatched. Constructions are not relatively "true", but to a certain extent; they are relatively complicated and conversant. As Berger and Samuel (1966) have concluded: There is an instant complexity with the thought that reality or truth is a construction inside an individual psyche. It heaves the predicament of solipsism, which is a sarcastic problem for a humanities and science of the other. In support of the fact that reality is merely nothing but rather an internal mind construct, no merit can be given for assuming that the other public being investigated really exist, let alone for assuming that the researcher's point of view of them sufficiently stands for their own view point of their circumstances and situations.

On the other hand, Guba and Lincoln are vague in their explanation on constructivism. They, in addition, articulate that the mind constructions are connected to "physical or tangible entities", which could, as a result, emerge to contain some truth or reality free or independent of the constructions (Bailey, 2006). Consequently their unambiguous or explicit idealist position seems to respite on an understood implied realism, and, thereby, leaves the paradigm in a condition of shake (Ayer, 1999). Constructivist assertions or views are liable to be lacking in any such acknowledgement of empirical understanding that is, grasping by acquaintance, by gathering, by experienced participation in the attendance of what is present. Gephart (2008) thinks that researchers could not by any means be acquainted with a "real" world, and could not, in any way, even visualize it, due to the fact that individuals cannot imagine or envisage something existing with no notions of freedom and time, which are individual's own constructs (Gephart, 2008). This is the Kantian point of view that space and times are *a priori* structures that the psyche imposes on truth or reality. It has nothing to do with truth or reality itself.

Empirical understanding is subjective-objective and consequently relative to the inquirer or knower. It is as well relative to the known universe, but rather with greater nearness, lesser arbitration, than planned or propositional perception. Empirical knowing is, hence, an opinion, although not an absolute opinion, for the representative frameworks of theoretical, hypothesized or propositional knowing. Constructivists notably Guba and Lincoln admit, as the quote above highlights, that intangible constructs are connected to "tangible entities" and therefore

emerge to believe "tangible" or empirical knowing. However, they do not articulate and coordinate the nature of empirical knowing and do not consider it as given any type of merit for the valid employment of theoretical and conceptual constructs.

7. Epistemology

Based on the Oxford English Dictionary, (2004), epistemology is the "an established fact, theory, discipline or science of the technique process or foundation of knowledge, facts or information". As far as an investigation or research desires to come up with knowledge and fact then subsequently, it has to depend on an understood (implicit) or open (explicit) epistemology. Nevertheless, this article will pursue and follow the doctrine of Chua (1986) in differentiating amid methodology and epistemology where the latter refers to the main beliefs and principles of facts or knowledge, the former refers to different means of getting it. Epistemology is directly connected to ontology. A person would only be able to get knowledge about things or entities that live. In response, an individual ought to have a mean of acquiring knowledge so as to to make generalizations whether there something existing. Although the correct association among known epistemologies and ontologies is not at all times straightforward, it is significant to bear in mind that each epistemology needs a matching ontology (Livari et al., 1998).

It is worthy to mention that there exists no ontology that is free from epistemology (Feyerabend, 1980). In a situation whereby epistemology is the truth-seeking area of specialization or discipline that takes into cognizance with knowledge then it requires definition of what knowledge is. The famous definition from time to time employed by thinkers, philosophers and logician is that knowledge or fact is "true, acceptable beliefs" (Steup, 2001). This is useful for the reason that it permits a researcher to differentiate the question as soon as a statement or declaration is true or factual from the inquiry or question when a researchers or investigators are convinced in accepting a statement of fact to be accurate or true. Whereas the last question is adequately discussed in scientific research, the previous, debatably more significant one is frequently unnoticed.

Amongst the various ways of getting knowledge and protecting the assertion for reality, the most famous one is perhaps empiricism. Empiricism could be regarded as the "principle that knowledge instead of rationale is the foundation of individual knowledge of the globe" (Goles & Hirschheim, 2006). Empiricism couls also be regarded as the conventional epistemology of the natural and innate sciences (Hollis, 2004) wherever their supporters more often than not investigate for fundamental associations. Empiricists attempt to find out the rules guiding reality or thruth and employ a hypothetic deductive approach in solving problems (Henning, Van Rensburg, & Smit 2004). Empiricists develop hypotheses or hunches which they afterward then attempt to confirm or falsify it (Kvale, 2006).

As a matter of fact, the eventual goal of empiricist investigate is, therefore, to make logical forecasting (Hammond, Howarth, & Keat, 2007). Empiricism is directly connected with numerous suppositions concerning the nature of logical and scientific investigation. First and foremost, it advocates that examination or observation is objective or truth (Klein & Myers, 1999) and is value-free as well (Walsham, 1995). It is, in addition, viewed as a generally reliable, valid and suitable approach and strategy to knowledge or fact which discloses that it is frequently linked with advancements for a agreement and unity of science or logic which might comprises the natural logics, sciences in addition to humanities, social sciences and arts. Impartiality, neutrality, objectivity and independence could be guaranteed via or through an observer or viewer who is separated from the item or object of study or observation along with who does not obstruct (Introna, 1997; Yin, 2003). An essential component and element to this way of thinking or approach to scholarly and academic research or inquiry is a convinced type of disconnected and detached wisdom which is concerned with associations without being closely mixed up in them (Wilson, 2003).

As a response to the apparent limitation and shortcomings of empiricism, which comprises the difficulty of the likelihood of objectivity or truth in social science and humanities, the problem of suitability of experimental observation or study of individuals, the so-called uniformity of empiricism, the intricacies of the concept of causality and relationship, a confrontation to the fundamental logic or wisdom, and further problems, additional epistemological strategies or approaches have been emerged and developed. The most commonly cited option to empiricism in thinking and logic is rationalism, which is the concept or idea of reasoning or logic, as an alternative to feeling or consciousness, is the underpinning basis of knowledge and fact (Gough, 2005).

7.1 Positivist and Non-Positivist Epistemology

As asserted by Griffin (2006), hermeneutics, phenomenology and empiricism are the mainly significant epistemologies in modern and existing research. Within the background of this article, it is appealing to inquire what their connection to positivism and its option or alternative is. There are possibilities that connect ontologies

along with epistemologies. Conversely, Goetz and LeCompte (2004) are of the view that positivism normally moves hand in hand with empiricism, while non-positivist strategies or approaches, for example, interpretivism are likely to employ phenomenology or hermeneutics as avenues to get knowledge and information. The problem however is whether these postulations are essential or dependent relationships or associations. This article argues that these associations are not essential but rather a modification in the distinctive relationship needs re-thinking the connotation of notions (Goles & Hirschheim, 2006).

Looking at another perspective, McCarthy (2002) revealed that there is, for instance, no justification why a positivist ought not to employ hermeneutics. The historical background of hermeneutics is in fact originated from a positivist perceptive where one existing and real God place His opinions to paper (by means of human devices or instruments) and these assertions had one correct connotation. Hermeneutics can be employed as an instrument to discover what this exact connotation of a divine wording is. This denotation of "hermeneutics" is dissimilar from the current post- Heideggerian hermeneutics explained above. On the other hand, an interpretivist could employ an empiricist strategy and approach to research or investigation and attempt to study truth or reality and discover objective reality or truth (Hammond, Howarth, & Keat, 2007).

In this regard, nevertheless, "objective reality or truth" will depict something unlikely from the positivist make use of the word. It could not be a right explanation of a free and independent reality or truth but rather must be something unusual, for instance a validity assertion that is not doubtful (Henning, Van Rensburg, & Smit 2004). Although these questions or problems are argued repeatedly in research, mainly in connection to approach or methodology, an evenly significant but usually not argued problem or question is that of the association of ontology with reality presumption. This is imperative since the hypothesized reality or fact theory will decide what can add up as valid investigation or research outcomes.

Bloor (2007) in his analysis revealed that the line of difference between positivism and non-positivism is reflected more obviously with regards to truth or reality theories. A connection theory of reality or truth is simply valid if let say there exist a disconnected reality or truth which a researcher can explain properly. In the same way, a compromise or consensus assumption of reality is extremely sufficient to constructionist ontological perspective but rather carries no intrinsic worth in an unbiased and objective world of reality. Nonetheless, Gephart (2008) restated that the consistency and rationality theory will take major a role in the numerical and mathematical modeling, which is once more best matched to positivism. Realistic truth or fact theories, lastly, could be suitable for diverse ontologies but their connotation, the inquiry what works; can reproduce the ontology in dissimilar ways. As for the positivist, a suggestion or proposition is unbeaten as it explained the human world sufficiently. However, as for the constructionists, it is because it completes the decisive factor of being effectively formulated or constructed (Eisenhardt, 2002).

8. Research Inferences and Implications in Positivists and Non-Positivists Perspective

As a matter of fact, there is no any algorithmic means of conducting research in accordance with to researcher's ontological point of view. This article does not hold up the theory of the inappropriateness of diverse methods (qualitative versus quantitative). The major lesson to be learned is thus, the combination or mixture of diverse ontologies, epistemologies and methodologies has to be verified and justified in each and every single situation. Thus, it might be entirely suitable and logically or rationally severe to employ quantitative methods of conducting research from an interpretivist point of view or to employ semi-structured form of interviews from a positivist standpoint. In the same vein, the same investigation or research method could denote different things to different people. It only depends on researcher's ontology. A positivist conducting interviews would anticipate discovering social reality or truth as it is, while the constructionist would be part and parcel of the combined construction of the pertinent reality or truth of a research.

Two investigators employing the exact similar strategy or approach and arriving at the same results or outcomes might, as a result, come to differing conclusions, due to their ontological background and underpinnings. A relevant but rather trickier inquiry has to do with the compatibility and suitability of epistemologies. Hermeneutic, empiricist and phenomenological approaches to research appear to have been more complicated to mix up or combine than qualitative and quantitative methods. This is possibly due to their greater nearness and closeness to the fundamental ontology. Another difficult outcomes stem from the fact that, in a normal setting, most interpretive investigative research is rooted on the compilation of empirical facts. That is to say that empirical or experimental research is not essentially empiricist. It as well indicates that non-empiricist scholars and researchers conducting empirical research ought to explain in simple terms why they consider that this would assist them.

In view of non-positivist ontology in addition to a non-empiricist epistemology, it might not straight away apparent that empirical or experimental research is better than other types, for example, theoretical, philosophical, reviewed or conceptual research (Coffey & Atkinson, 2006). Furthermore, the major research repercussion and implications of the positivism and non-positivism partition is the fact that there are personal and combined responsibilities with reference to the combinations or mixing up of ontologies, epistemologies and methodologies (Creswell, 2002). A straightforward pick-and-choose strategy and approach guided by thoughtfulness of convenience could not be suitable. That shows that the individual investigator or researcher ought to be understandable with regards to these questions and shall address them in his or her research plan or design. On the combined side, the specialization discipline as embodied in journals conferences, reviewers, chairs or editors' desires to confirm that these inquiries and questions are appropriately and adequately reflected and mirrored.

8.1 Political and Social Implicative Consequences in Positivists and Non-Positivists Research Investigation

It has been established that research or investigation does not happen in an emptiness or vacuum (Lee, 2001) but, however, it is entrenched in social and collective systems where political beliefs play a major role. Indeed, this ought to be rather apparent mainly for non-positivist investigators or researchers who know and understand the social construction of truth and realism. Nevertheless, non-positivist investigative research politics are greatly less noticeable or flourishing compare to their positivist counterpart. Advocates of the positivist paradigm are explicitly attempting to place the plan of research based on their ideas and thoughts.

The positivists encourage convinced research theories and methodologies, and thereby siding with proper and numerical methods and approaches, which are naturally more helpful to their ontology compare to others (Weber, 2004). Although these efforts to support the positivist plan and agenda have formed a sparkling deliberation, debate and discussion, no determined non-positivist accomplishment is evident. The rationales for this are various, but amid the most imperative ones, a researcher could locate the historical occurrence of positivism (Action, 1967; Eisenhardt, 2002) and could as well discover the lack of consistency amongst non-positivist. This article might help in eradicating the problem by presenting the idea or opinion that the overarching feature of non-positivist investigative research is its ontological principle and belief of the reliance of reality or truth on the observer or researcher.

8.2 Moral and Ethical Implications in Positivists and Non-Positivists Research Paradigms

A concluding significant implication of considering the incompatibility of positivism and non-positivism stem from the morals and ethics of research investigation, and more particularly in the midst of how people are professed in research activities. Positivism necessitates ethical or moral manners and conducts by the investigator or researcher (Miles & Huberman, 2004). It can as well even further be illustrated as an ethically or morally motivated attempt and effort that undertakes to build up society (Merleau-Ponty, 1999) and "boundless progress" (Morick, 2005; Mouton & Marais, 2003). It might therefore be incorrect to view positivism as basically "un-ethical" but in consequence it develops perturbing ethical repercussions. These consequences are the outcome of the perceived likelihood of differentiating undoubtedly among research subject and object and between unbiased or objective explanation and biased or subjective evaluation and assessment.

This permit positivist to debate and argue that they could be regarded standing apart observers or researchers which counteract the requirement to turn out to be concerned and consequently originates for their status quo in research (Merriam, 2001). Positivist ontology proposes that all researched objects live in some kind of objective or unbiased world and this comprises human beings. Indeed, it could be seen that, this, along with all methodological individualism, could generate a disposition to look at humans as objects or items. Taking individuals as objects indicates that researcher could classify them as means to a certain extent than ends, consequently denouncing McCullagh's (2001) renowned version of the Categorical or Definite Imperative Doctrine according to which persons should by no means be classified as means. Or to express it in more modern expressions: "Such research investigation could end up by suggesting most individuals to be taking care off like just billiard balls" (Henning, Van Rensburg, & Smit, 2004).

8.3 Common and General Implications of the Research Paradigms

Guba and Lincoln (1996) advances from recognizing the fundamental beliefs of their four essential paradigms to investigate the connotation of each one; this study has equally prune, reduce and extended their study in Table 2 below. This study has intentionally omitted out of the below table the three basic issues of research or inquiry ethics, values and aim, because these have, in this research perspective, been more fittingly covered in this study's explanation of the axiological inquiry or question above. Furthermore, this study consists of a participatory observation of the entire outstanding issues. Therefore, this allows for a more absolute comparison

and judgement with Guba and Lincoln's theoretical point of view, however, this study will not shade more light on the points in advance. A detailed explanation of co-operative or supportive investigation could be seen in Harre (2006); and an extensive review of participatory types of study or inquiry in Hammond, Howarth, and Keat (2007), Rudner (2006) and Ryan and Julia (2007).

Table 2. Implication of research paradigms

Issue	**Positivism**	**Non-Positivism**	**Critical theory et al.**	**Constructivism**	**Participatory**
Nature of knowledge	verified hypotheses established as fact or laws	non falsified hypotheses that are probably facts or laws	structural/historical insights	individual reconstructions coalescing around consensus	extended epistemology: primacy of practical knowing; critical subjectivity; living knowledge
Knowledge accumulation	accretion - "building blocks" adding to "edifice of knowledge"; generalizations and cause-effect linkages	accretion - "building blocks" adding to "edifice of knowledge"; generalizations and cause-effect linkages	historical revisionism; generalization by similarity	more informed and sophisticated reconstructions; vicarious experience	in communities of inquiry embedded in communities of practice
Goodness or quality criteria	conventional benchmarks of "rigor": internal and external validity, reliability, and objectivity	conventional benchmarks of "rigor": internal and external validity, reliability, and objectivity	historical situatedness; erosion of ignorance; action stimulus	trustworthiness and authenticity and misapprehensions	congruence of experiential, presentational, propositional and practical knowings; leads to action to transform the world in the service of human flourishing
Voice	"disinterested scientist" as informer of decision makers, policy makers, and change agents	"disinterested scientist" as informer of decision makers, policy makers, and change agents	"transformative intellectual" as advocate and activist	"passionate participant" as facilitator of multi-voice reconstruction	primary voice manifest through aware self-reflective action' secondary voices in illuminating theory, narrative, movement, song, dance and other presentational forms
Training	technical and quantitative; substantive theories	technical, quantitative and qualitative; substantive theories	resocialization; qualitative and quantitative; history; values of altruism and empowerment	resocialization; qualitative and quantitative; history; values of altruism and empowerment	co-researchers are initiated into the inquiry process by facilitator/researcher and learn through active engagement in the process. Facilitator/researcher requires emotional competence, democratic personality and skills
Accommodation	commensurable	commensurable	incommensurable	incommensurable	Incommensurable
Hegemony	in control of publication, funding, promotion, and tenure	in control of publication, funding, promotion, and tenure	seeking recognition and input	seeking recognition and input	emergent and at present essentially countercultural in Western societies

Source: Mouton and Marais (2003).

9. Personal/Individual Construct or Formulated Theory (PCT)

It is worthy to note that George Kelly authored one of the earlier books on this very important topic in the later part of 1955. In the book, his main point of argument was that each individual is a "personal or private scientist". Thus, his above contention indicates that it might not be the privilege or opportunity of specialist and trained scholar or scientists to extend the frontier of knowledge or fact (established facts, conventions and doctrines), which a researcher might eventually acknowledge, accept and apply, but to a certain extent that all people in normal rational and mental healthiness are able to create knowledge or fact at different points. Individuals are not passive or inert receivers of fact or knowledge, but rather active or dynamic constructors (i.e., self-instructors) and analyzers or interpreters of people experiences or skills. Therefore, information and established facts become modified and pertinent to. They are completely incorporated into people's practice. With reference to this epistemological doctrine, Kelly came up with his famous personal construct theory based on a fundamental assumption expanded by eleven outcomes.

Nevertheless, Kelly's epistemological standpoint could be termed as "constructive or positive alternativism", to be precise, the supposition that peoples' present interpretations, understanding or constructs of the cosmos needs to be revisited or substituted. realized that this clearly indicates that individuals appreciate themselves as well as their milieu. They also predict expectations and their occurrences, by formulating tentative theories or personal suppositions and thereby analyzing these models alongside individual conditions with regard to whether the forecast and direct influence of occurrences (by mere looking at the models) have been practicalized or not. As a matter of fact, all suppositions are assumptions formulated by individuals; they might be valid and correct at any given instance, although, they might, all of a sudden, be unacceptable and illogical in various unforeseeable circumstances and substituted by an enhanced theory or hypothesis.

Kelly, moreover, is of the view that individuals interpret reality or truth in an endless, countless and unlimited number of several ways. Even though Kelly does not refute the significance of childhood and early day's experiences and skills or existing environmental constriction, he eventually recommends that it would be more imperative to investigate individuals' philosophy, opinion and judgement in relation to their existing state of affairs (i.e., their present hypotheses or assumptions structure). He, further, advocates that individuals should not be fascinated by their childhood experiences, skills or be powerless in the midst of existing environmental limitations, except that transformation could happen if they perceive their personal or individual theories and postulations as subject to criticism and not as "purposive or objective reality".

This study basically concur with Personal Construct Theory in that active investigators or researchers are personal or individual scientists, both with an individual structure of belief (independent outcome) that could be studied by him/herself and by means of others (sociality outcome). Indeed, a collection of accomplished investigators and researchers might be analogous with regards to their formulation and understanding of experience or occurrence (Harmonized or commonality outcome), however, their progressive and theoretical transformation relies on the "permeability" result, i.e. their candidness to adjust and their readiness to explore for invalidating, in addition to validating facts, in their investigation. Conversely, individual's constructivist perception moreover recognizes peoples' mind-sets, viewpoint and principles; more willingly than simply a cogent formulating structure in the individual mind. For that reason, this study refers to "theory or concepts" as well as "theorization or conceptions", instead of "constructs or mind-set".

10. Conclusions

This article has buttressed that positivism along with non-positivism as ontological viewpoint are incompatible and opposing. It can be concluded that there exist methodological and epistemological repercussions of the ontological split, although, these are rather not quite straightforward compare to the ontological resistance. The article has summarized a number of the implications and consequences of such kind of split as they might occur for research investigation, moral values, politics, and moral principles. Knowing the theoretical and conceptual circumstance of the argument, it is impracticable to "establish and confirm" it incorrect through employing conflicting empirical or experimental data. As a matter of fact it is not possible to subject ontology to scientific or empirical research investigation since any scientific or empirical exploration ought to be rooted on an ontology that could not prove or attest to the fact that it is incorrect as it decides which occurrences could be observed and studied. The key point of argument would lie in the employment of the concepts, ideas, beliefs and notions themselves in a given research investigation.

The dilemma of forbearance among positivist along with non-positivist scholars might therefore have to be looked upon within the background of broadmindedness among positivists as well as non-positivists in broad-spectrum. It can be argued within the spiritual expressions of the label of this article that forbearance

could be interpreted into an essential approach or method. A concise glance at the historical background of religious or spiritual conflicts and the resulting ecumenical activities put forward that harmonious and mutual existence of opposing, conflicting and differing beliefs and ideologies could be probable but rather have a tendency to be awfully delicate. Lastly, it is, moreover, promising if the diverse and opposing parts crave or aspire it profoundly and are willing to accept the other position as perhaps imprudent but justifiable. However, this is subject to discussion and dialogue whether these requirements are fulfilled in present-day study and investigation.

11. Practical Implications

The findings and methodological approach in this research could benefit and contribute to the implication for practice. Similar research of this kind may be replicated in other field of studies within Africa and in other locations in other part of the world. Therefore, this research which examines whether positivist and non-positivist research paradigm in social science research are conflicting paradigms or perfect partners provides the indicators to overhaul or adjust the problem as a whole in order to guard against detected shortcomings.

In other words the lesson learnt would be of considerable value for a more efficient use of either positivist or non-positivist paradigm in social science research. The findings of the research serve as a reference material for future researchers. It will also assist scholars to formulate good research framework and to classify their research within the existing research philosophical foundations. It is suggested that to apply this framework to other field of research other than social science, it would require further investigation, as additional research objectives and questions will emerge on the suitability of the framework to the areas. The methodological approach in this research could be adopted by practitioners or researchers for similar studies in other areas.

12. Future Research Recommendations

This research is absolutely a pioneering research into the application of positivist and non-positivist research paradigm in social science research and to draw conclusion as to the fact that whether they are conflicting paradigms or perfect partners. Further research efforts need to be carried out in other cities of the world, to ascertain the general application of present findings. In addition, there are other modes of research philosophical approaches which were not captured in this article, and they play a significant role in social science research.

A research into these approaches could be very significant. It is therefore important to further ascertain the influences of the phenomena in the fields of natural science, engineering and the likes. From this research, opportunity for further research also exists in using other approaches to analyze ontological belief, epistemological concepts and axiological prepositions. This will reduce the laborious steps involved in understanding the meaning of reality and world view.

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