



EPISTEMOLOGICAL SCHOOLS OF THOUGHT AND RISK MANAGEMENT RESEARCH

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Abstract.

The main objective of the study was to provide knowledge on the epistemological schools of thoughts that most appropriately suits risk management research. The researcher then laid out the steps involved in managing risk, like identifying potential dangers, analyzing how likely the researcher are, figuring out how to control them, and then checking how well your plan worked. Next, the researcher looked at specific schools of thought like naturalism (focusing on the physical world), rationalism (using logic and reason), empiricism (based on evidence), idealism (emphasizing ideas), and existentialism (individual experience). By comparing these schools, the researcher showed how each has its strengths and weaknesses. The key takeaway? Don't just stick to one way of thinking about risk! Mix and match different approaches depending on the situation. This will help practitioners and researchers to make risk management research more reliable, accurate, and widely accepted. So, in a nutshell, this research is like a guide for choosing the right tools to navigate the tricky terrain of risk. By understanding different ways of knowing and using them strategically, practitioners and researchers can make better decisions and avoid getting caught off guard.

Keywords: Epistemology, Research philosophy, Research paradigm, Risk Management

1. Introduction.

There is a perpetual pursuit by humans to comprehend existence and understand reality. This quest is deepened by the fact that many aspects of existence defy simple explanation. In this regards, philosophers are continuously seeking ways to understand existence in the most general way possible hence the construction of theories that may be regarded as synoptic, descriptively accurate, explanatorily powerful, and in all ramifications, rationally defensible (Shapere, 2012). Fundamentally, what philosophers aim at achieving is to provide theories of knowledge and the study of the philosophical problems underlying theories of knowledge is known as epistemology (Welch et al, 2011). Basically, epistemology is a branch of philosophy that studies the nature, origin, and limits of human knowledge (Khin et al., 2011). Thus, epistemology can be regarded as the foundation as well as the building blocks for ascertaining knowledge in a systematically factual manner.



In this regards, the attempts to explain how factual knowledge can be acquired and developed have led to the emergence of different epistemological schools of thoughts. These schools of thoughts therefore inform the variety of ways that factual knowledge can be proven. Generally, a scientific research is a philosophical attempt to add value to existing body of knowledge (Aurangzeb, 2021; Hassan et al., 2018). A scientific research is a philosophical exercise because it is methodological and it involves discovering new things from what we already know. However, the varieties of the epistemological schools of thoughts invoke the need to investigate if the multiplicity of areas of research interest should inform the appropriateness of a single or otherwise of epistemological school of thought to prove knowledge by researchers. Specifically, the objective of this study is to provide knowledge on how epistemological schools of thoughts can inform research methodologies in the area of management sciences and most specifically conducting research in the area of risk management. Put another way, the goal of this study is to determine which conceptions of knowledge are most useful for management science research on risk management.

The focus of this study on the area of risk management is important as risk is ubiquitous and providing knowledge on the existence and management of same through research may require well thought-out methodology which may be at variant with the conventional. The findings of this research is significant as a good number of management sciences research papers that are published are not really clear on the epistemology employed in the study. Whereas, understanding the epistemological underpinning to a research paper is critical to the validity of the findings of any research. To achieve the objective of this study the concept of risk management is presented followed by discussion of five epistemological schools of thoughts and a comparison of all five schools of thoughts discussed is carried out to understand their individual uniqueness followed by conclusion and recommendations.

2. The Concept of Risk Management

Risk is ubiquitous and reality is possible because of the existence of risk. Unarguably risk is the undisputed common factor in all ventures undertaken by humans and the understanding and management of same is pivotal to the outcome which could be success or failure. This provides a perfect explanation to the reality that life and living is risk and risk is life and living. This is so as daily human living only finds meaning in expected outcomes commonly called human expectations. Simply, risk entails uncertainty about deviation from expected outcome (Asif et al., 2023). This deviation is influenced by exposures which sometimes could be hazardous.

Fundamentally, when exposures are set in motion to achieve a given outcome, it can be termed as risk. Ideally, these exposures are considered as hazardous due to the uncertainty surrounding the functionality of the exposures. This indicates that hazards make the manifestation of risk possible. However, it is worthy of note that the continuous chain of actions on a hazardous exposure can produce three outcome which includes; positive (favourable) outcome, negative (unfavourable) outcome or neutral outcome. It is worthy of note that the expectation of the risk-taker determines the riskiness of a venture and the difference between the expected outcome and the actual outcome is the measure of risk. The measure of risk provides understanding of the risk and thus guides decision on the risk management procedure to be adopted to ensure the production of only the desired and acceptable outcomes.

The measurement of risk can only be conducted with the use of scientifically accepted procedure called risk management process or procedure. Fundamentally, the risk management process in the order of

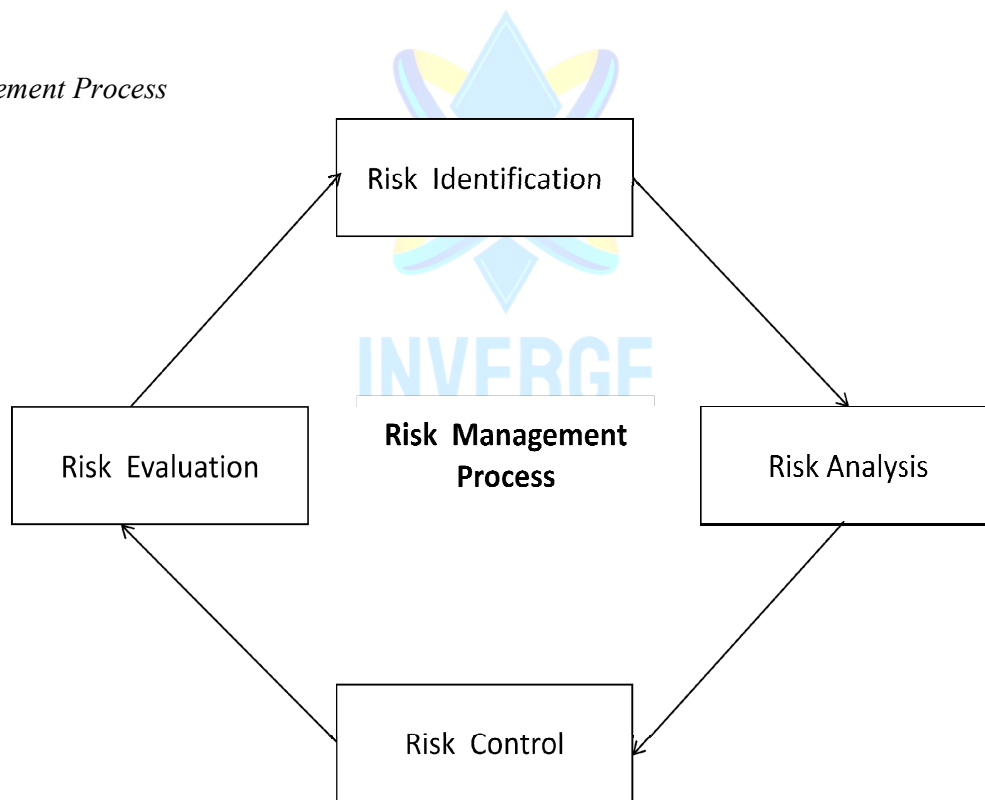


implementation involves risk identification, risk analysis, risk control and risk evaluation control (see figure 1).

Risk identification is an intentional engagement which results in the understanding of what can possibly lead to the crystallization of a risk of interest. Risk identification is typically done using qualitative techniques like a structured risk identification questionnaire to conduct an interview of the units of exposures which will typically be humans. The stage of risk identification will provide information on the type of risk the frequency of the risk and the severity of the risk. The information obtained in the risk identification stage is used in analyzing the risk to understanding the possible impact of the risk. Risk analysis at the basic level involves quantification of the product of the frequency and the severity of the risk which provides information on the effect of risk upon occurrence. When the impact or effect of the risk upon occurrence is known possible means of controlling the risk are then suggested and applied and this constitutes the risk control stage (Ishfaq et al., 2022). After monitoring the risk control measures applied for a given period an evaluation of the effectiveness of the control measure applied is then carried out and this is the risk evaluation stage. This cycle continues to ensure the proper functionality of the adopted risk management process.

Figure 1

Risk Management Process



The operation of the different stages in risk management process is undoubtedly a research process as data gathering, data analysis, interpretation of results and recommendations are involved in a cyclical manner. Also, risk management researches can specifically focus on one of the stages of risk management process to provide knowledge as may be deemed necessary. However, the unique demands of the different



stages of the risk management process with regards to the nature, origin and limit of knowledge poses a concern on the adoption of a singular epistemological approach in research in the area (Martinez-Vargas et al., 2022; Morard, 2023).

Thus, a detail discussion of the key epistemological schools of thoughts that can be adopted in management science and social sciences research is imminent to provide knowledge on applicability decisions in risk management studies.

2. Discussion of Selected Epistemological Schools of Thought

2.1. Naturalists

Naturalist school of thought came into existence through the works of philosophers like Hales, Heraclitus and Democritus during the period 600-400BC (Maddy, 2011). The school of thought was made popular in the 1930's and 1940's by F.J.E. Woodbridge, Morris R. Cohen, John Dewey Ernest Nagel and Sidney through their scholarly works (Barrow, 2010). Naturalist school of thought holds that all beings and events in the universe are natural (Clark, 2016). Consequently, proponents of this school of thought are linked to naturalism, a theory that relates scientific method to philosophy in affirming that existence and reality are natural events (Maddy, 2011). In simple terms, naturalists are of the opinion that all knowledge of reality can be garnered through the scientific investigation of nature (Clark, 2016). In principle, naturalism presumes that nature is completely knowable. According to naturalist the pursuit of scientific knowledge finds meaning in the existence of regularity, unity and wholeness that implies objective laws in nature (Clark, 2016). According to Kojonen (2017), naturalists may argue against the existence of supernatural realities in absoluteness, but they make allowance for the supernatural, in as much as that knowledge of the supernatural can be acquired indirectly, that is, the influence of the natural object by the supernatural entities can be detected.

One major confirmation of naturalistic methodology is man's unending search for absolute proof of his existence which is regarded as the search for truth (Clark, 2016). Naturalists point out that the evolution of scientific theory does not cast doubt on natural realities or result in the rejection of the natural method in the search for truth (Maddy, 2011). So for naturalist, theories will always change but methodology does not change. Notably, naturalism has no ontological inclination (Kojonen, 2017). Thus naturalists are not biased towards a particular set of categories of reality. As such dualism, monism, atheism theism idealism and materialism maybe employed in affirming reality. In this regards it is obvious that naturalist express wide variety of views leading to specificities in the school of thought. For naturalists nature and the whole of it is reality. And so there is nothing beyond, nothing "other than," no "other world" of being in the naturalist school of thought (Maddy, 2011; Clark, 2016).

2.2. Rationalists

Descartes, Spinoza, Leibniz and Kant are fathers of rationalist school of thought that came into existence between 1640 and 1800 (Slomp, 2016). Rationalist holds that reality has an inherently logical structure link to a class of truth whose existence can be grasped directly by human intellect (Smith, 2012). Proponents of this school of thought are connected to rationalism which is a theory that regards reason as the principal source and ultimate test of knowledge (Slomp, 2016). Epistemologically, rationalists assert that human knowledge is gained rationally which is different from sense experience that is often associated with confused and merely provisional approach (Westphal, 2012). Consequently, rationalists firmly hold the opinion that reality can be proven with an a priori knowledge meaning that reality relates to or denotes



knowledge which proceeds from reasoning supported by theoretical deduction rather than observation or experience (Tahko, 2017). In the rationalist view, a priori knowledge, which includes the whole of logic and mathematics as well as fragmentary insights in many other fields, is the most important and certain knowledge that the mind can achieve (Gatens, 2017). Thus a priori knowledge is both necessary and universal as it does not accept exceptions pointing to the assertion that rationalism finds expression in the claim that the human mind imposes inherent patterns or forms upon incipient experience (Asif & Shaheen, 2022; Tahko, 2017).

This explains why rationalism is sometimes referred to as intellectualism or apriorism (Muller, 2014). Fundamentally, rationalism holds the position that reason, rather than feeling, custom, or authority, is the ultimate source in ascertaining the truth (Westphal, 2012). So for rationalist, the consistency of an act as apprehended by the intellect is the only way to reach decisions on the reality of a subject matter (Smith, 2012).

2.3. Empiricists

Empiricists are of the epistemological view that all rationally acceptable knowledge is acquired only through experience (Hossain, 2014). Empiricism which is the theory that drives this school of thought strictly states that experience is the origin of all concepts and the only justification for all reasonably acceptable beliefs or propositions. This school of thought came into existence through the works of Locke, Berkeley and Hume (Meyers, 2014). “Empiricism” originates from the Greek word “empeiria” which translates to the word “experience” in English (Bull & Luring, 2014).

Empiricists regard all concepts as either mental copies of items that are directly experienced or complex combinations of concepts that are themselves copies of items that are directly experienced which indicates that the condition of application of a concept must always be specified in experiential manner (Johnson, 2011). Accordingly, empiricists are of the opinion that all rationally acceptable beliefs, concepts or propositions are a posterior meaning that reality relates to or denotes knowledge which proceeds from observations or experiences to the deduction of probable causes (Hossain, 2014). Specifically, the experiences referred to by empiricists are those captured by the sense organs of sight, hearing, touch, taste and smell (Meyers, 2014). Thus, for empiricist the frequency of an experience through these sense organs is the only means of knowledge (Johnson, 2011).

2.4. Idealists

Idealists stress the role of ideal or the spiritual as the source of knowledge (Ewing, 2013). Idealism, with Hegel as the lead proponent, is the theory that emanates from the idealist school of epistemological thought which states that if reason is followed far enough, ideas will emerge converging on a single ideal and a single vision of truth which only exist in the spiritual world (Dunham et al, 2014). Consequently, the proponents of this school of thought hold that reality exists fundamentally as consciousness (Schulting & Verburgt, 2010; Stock, 2020). Furthermore, abstractions and laws are more essential in reality than sensory things as whatever exist is known in the dimensions that are chiefly mental as ideas for the idealists (Ewing, 2013).

Epistemologically, idealism identifies the mind as the only medium that is involved in the knowledge process with the ability to grasp only the psychic which in turn is conditioned by perceptibility (Dunham et al, 2014). Thus, reality is modelled by propositions and defined in terms of the coherence of those propositions to form a harmonious whole. This way, idealism aims at overcoming contradictions by



penetrating into the overall coherent system of reality which supports continuous creation of new knowledge which seamlessly merges with earlier discoveries (Ewing, 2013). To achieve this, idealists traditionally use the dialectical method of reasoning to remove the contradictions that may have characterized human knowledge (Dunham et al, 2014). The removal of such contradictions leads to a new synthesis of propositions which becomes a higher reality (Schulting & Verburgt, 2010).

2.5. Existentialists

Existentialists are of the view that reality is born out of decisions and so knowledge can be gotten through the deciphering of decisions (Olson, 2012). Existentialism, the theoretical construct, guiding existentialist founded and promoted by Kierkegaard, Nietzsche and Sartre holds that human beings are responsible for everything they do and everything they are (Reynolds, 2014). This suggests that human beings are the architects of their reality. Accordingly, existentialists hold that even though reality primarily faces the problem of mode of being, the continuous investigation of the meaning of being presents diverse possibilities from which a human being can then decide to select a commitment for himself which then becomes the reality (Michelman, 2010). Since the possibilities are constituted by the individual's relationships with the realities already in existence, reality is always a discrete choice conditioned by historical determinants (Reynolds, 2014). Thus, reality is presented as particular and individualistic.

The ontology of existentialism which focuses on some doctrines of the general meaning of being typically involves diverse approaches. Such ontological approach may be in the form of analyzing the temporal structure of reality, through the understanding of the etymologies of common words, the rational clarification of existence using symbols or the soul, psychoanalysis which brings to reality the fundamental of existence and the analysis of the fundamental modality to which all the aspects of existence conform (Michelman, 2010).

3. Comparison of the Epistemological Schools of Thoughts

Five epistemological schools of thoughts have been discussed in this work. However, comparing the schools of thought discussed will offer a deeper understanding of the schools of thought. Therefore, the key difference between idealism and naturalism is that while idealism focuses on a mentally constructed state of entities, naturalism focuses on the existing reality of entities that are governed by natural forces (Gardner, 2011). Also, idealism is opposed to realism which holds that in human knowledge, objects are grasped and seen as they really are in existence independently of the mind (Dunham et al, 2014). Existentialism, which holds that reality is particular, is opposed to idealism that stresses consciousness as the source of reality (Olson, 2012). Existentialism is also opposed to any doctrine that sees the physical universe as some given and complete reality that must be resolved into its elements in order to be known or contemplated (Celestino, 2023; Michelman, 2010). Thus, existentialism is opposed to naturalism that stresses the crass reality of external fact.

Since rationalists claim that there are significant ways in which our concepts and knowledge are gained independently of sensory experience, empiricists claim that sensory experience is the ultimate source of all our concepts and knowledge indicating that these two schools of thoughts oppose each other (Tahko, 2017).

It can be deciphered thus that there seem to be no school of thought with similar definition of reality which is the foundation for factual proof of knowledge in a research process. The uniqueness of each school of thought therefore explains the multiplicity of epistemological schools of thought and equally demands a



knowledgeable choice of a school of thought that best suits a research design in any field of study, risk management process inclusive.

4. Conclusion

The main objective study was to provide knowledge on the epistemological schools of thoughts that most appropriately suits risk management process research. The concept of risk management was discussed in the study. The study also presented a discussion as well as comparison of selected epistemological schools of thought to deepen understanding. The selected schools of thought discussed were the naturalist, rationalist, empiricist, idealist and existentialist. All the epistemological schools of thought discussed were unique in defining reality making the applicability in management sciences with particular focus on risk management research an interesting case.

5. Recommendation

The individual uniqueness of the schools of thought suggests an advantage in epistemology in the Aristotelian dialectic, the preferred dialectic in management science research viz-a-viz risk management research. Since epistemology studies the nature, origin and scope of knowledge, it is therefore recommended that risk management researchers adopt multiple approaches viz a viz the assertions of different epistemological schools of thought as deemed appropriate in their research methodologies. Put simply, employing more than one school of thought in risk management research appears to be appropriate. This way, the reproducibility, the robustness, the validity as well as wide acceptability of the research findings will be guaranteed.

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Conflict of interest

The author had no conflict of interest to disclose.

Ethical statement

This research did not require ethical approval as it did not involve human or animal experiment.

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