

Positioning Research Paradigm in the Development of the Social Housing Management Model in a Semi-Arid Climate

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Abstract

This paper examines the philosophical perspectives in research and the justification for the adoption of an appropriate paradigm in conducting social housing management research. An extensive review of established literature related to philosophical perspectives in social science research was conducted which forms part of the methodology. The review revealed several philosophical paradigms for conducting research such as positivism, realism, interpretivism, and pragmatism; and each of these paradigms aimed towards solving the many problems in research through appropriate methodologies. The review also indicated that effective strategy for housing management should be considered through research that is inclined to a relevant philosophical paradigm that dictates the appropriate research tools and design. The paper suggests that pragmatism with its methodological traditions was conceptualized by researchers to ensure not only adequate study of a given social phenomenon in the realm of social science as it views objective reality is embedded in the environment which is encountered through human experience; but also is a set of tools of value for addressing practical problems in the real world regardless of the peculiarity of research environment. Therefore, pragmatism has the potential to offer a suitable methodology to the social science research investigating social housing management in a peculiar environment such as the semi-arid climate by using different methodological combinations to address the research questions through either intermixing of interviewing, observation, and document analysis; relying on interviews rather than observations, or the intermixing of qualitative and quantitative data to address their research question.

Keywords: Philosophical perspective, paradigm, pragmatic, social housing management, semi-arid climate

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01.0 INTRODUCTION

Effective housing management in the built environment has taken centre stage as a result of its significance to occupants' life, as government institutions the world over and researchers in the academia dwelled in the investigation of ways to provide affordable housing estates and improve the performance of the existing stock. The motive behind the development of social housing estates as reported by the UN-HABITAT's publication (see Hannula, 2012) is to provide occupants a conducive, comfortable, healthy, and secured indoor environment that aids in carrying out different kinds of activities ranging from work, study, leisure, and family life to social interactions. This implies that housing represents a vital microenvironment where people spend a greater portion of their time daily (Mohammed et al., 2020). Hence, its effective management, therefore, became fundamental given the role it provides.

Despite the importance of social housing management to occupants mentioned above, established literature has indicated several challenges to effective management of housing in developing countries specifically the semi-arid region where apart from ineffective maintenance management, occupants of buildings also undergo environmental stress as a result of exposure to Harmattan dust that characterized the region which exposes occupants to several airborne diseases and stress-related illnesses that affects their health and wellbeing. Similarly, apart from the health challenges, this extreme weather event affects occupants' precious monuments/valuables such as water reservoirs, clothing/textiles, upholstery, kitchen utensils, carpets, satellite dishes, paints, electrical/electronic gadgets, computers, chemicals substances in the indoor environment and facilitates leakages on the roof and metal overhead water tanks due to trapped dust on surfaces. Hence, occupants spend much on medications, repairs, and replacement of damaged materials, and daily removal of dust particles (Yahi et al., 2014).

Conversely, these challenges call for an investigation to provide an effective housing management strategy. Such an in-depth investigation as opined by Kankam (2019) can best be conducted through appropriate research world views or a philosophical perspective before the selection of a particular approach. Thus, relevant philosophical paradigm remains ideal for conducting social housing management research since appropriate philosophical approach offers the researcher the flexibility and scope to be able to look at data

from the chosen paradigm (Taylor, 2018). It is in this vein that researchers such as McKenzie et al. (1997) and Kagioglou et al. (1998) suggest that research philosophy serves not only as a map or guide for research communities but also addresses those assumptions supporting the research strategy. In addition, Jonker and Pennink (2010) and Creswell and Plano-Clark (2011) are also of the view that research philosophy not only identifies the appropriate design for the research but also acknowledges the theoretical assumptions that help in identifying the heftiness of a researcher's techniques to take full advantage of their strengths and compensate for their weaknesses. Thus, there is therefore the need for an appropriate methodological determination of research strategy through an appropriate philosophical perspective that reveals the approaches, designs, methods, and analytical techniques that are available to the chosen approach to make an informed decision to address the research problem.

The objectives of this paper therefore, is to review and reveal the philosophical perspectives available in documented literature for conducting social housing management research in a peculiar environment such as the semi-arid climate that is bedeviled with high temperature and Harmattan dust, and to explore the justification for the adoption of an appropriate paradigm in conducting research in such a unique environment. This is in line with the purpose of an ongoing study which is an in-depth investigation and subsequent development of a model for social housing management in a semi-arid climate that will cater for the occupants' challenges.

02.0 LITERATURE REVIEW

2.1 Semi-Arid Climate

The semi-arid climate according to Scholes (2020) is the regions of the world where average rainfall is between one-fifth and half of the potential plant water demand. It is covered by ferruginous tropical soils which are predominantly laterite and characterized by sandy-fixed undulating topography that is usually very low in organic matter, nitrogen, and phosphorus that is degradable under conditions of intensive rainfall (Medugu et al., 2011; Sufiyan et al., 2020). The climatic condition in such a zone is a relatively cool dry season which is usually followed by a relatively hot dry season, and subsequently by a short rainy season (Scholes, 2020). In addition, the open and flat topography of the semi-arid zone allows an uninterrupted incursion of dust particles annually during the winter season. This condition is generally identified as Harmattan dust (Mohammed et al., 2020).

2.2 Social Housing Management (SHM)

Acioly and Horwood (2010) through UN-HABITAT publication, have underscored the fundamental role of housing management than mere development of houses alone does not bring about the desired change, as such, it does not greatly improve the living conditions of low-income and middle-income families, but only when good housing management concepts and effective practices are established, that necessary changes will be achieved. This assertion revealed how significant the management of housing generally and social housing in particular is. There is therefore the need for exploring the nature and meaning of this concept. Thus, to put it into proper perspective, the consideration of the definition of housing management becomes necessary. Although, Clapham et al. (2000), Lützkendorf and Lorenz (2005), and Muczyński (2016) maintain that housing management as one of the management domains existed as a discipline for a long without receiving an adequate and all-encompassing definition as a result of the dynamism of its scope. Yet, there are many definitions and or meanings of housing management offered by researchers in the housing sector such as those given by Lawal (1997), Clapham et al. (2000), Priemus et al. (1999), Lützkendorf and Lorenz (2005), and Muczyński (2016) that housing management is catering for the occupants regardless of their class or income level by ensuring that the building functions adequately with the economy of resources and expertise using appropriate policies and strategies to continue securing the return or the social satisfaction.

Meanwhile, Lützkendorf and Lorenz (2005) suggest that SHM is a subsidiary of the housing management domain which entails the adoption of appropriate management strategies which are in most cases depicted in the form of frameworks or models by researchers in the built environment for the management of social housing estates. To Lawal (1997), SHM is an application of management skills in caring for a dwelling unit, its surroundings, and amenities as well as developing a sound relationship between the occupants and the management. Likewise, Muczyński (2016) view SHM as a public administration policy that is considerably influenced by the housing system of a given country. It is also seen as a range of undertakings such as contractual and social functions carried out by a social landlord (public or private) to meet tenants' contractual obligations (Chartered Institute of Housing, 2020). Therefore, good SHM strategies have a significant impact on the environment; quality of occupants' life; economic activity; and the health, welfare, education, and safety of a community, region, or nation (Seymour-Jones, 2017). Hence, the provision of social housing involves the development, renting/selling, and maintenance of houses at affordable rates, as well as their allocation and management (Muczyński, 2016). This implies that better or effective management of buildings generally be it social housing or private housing provided it serves the purpose of housing is achieved through adopting appropriate management strategies which are often represented in the form of frameworks or models by researchers in the built environment.

However, the adoption of the term 'appropriate' in the selection of strategies for social housing management is connected to the prevailing peculiarities in the housing environment. The implication of this is that not all management strategies fit into social housing located within a different environment. For instance, a housing management strategy for a housing environment such as a semi-arid climate that is characterized by high temperature, open and flat topography that allows an uninterrupted incursion of dust particles annually for several months might not be effective for an environment with an absent of dust-laden wind and low temperature. Hence, an effective housing management strategy needs to be considered for such an environment through research that is inclined to a relevant philosophical paradigm that dictates the appropriate research tools and design.

2.3 Philosophical Perspectives in Research

Inclining to relevant research philosophy is considered by researchers as the first step in ensuring well-conducted research. Research philosophy in either natural or the social sciences serves not only as a map or guide for research communities but also addresses those assumptions supporting the research strategy (Kagioglou et al., 1998; McKenzie et al., 1997). Research philosophy identifies the appropriate design for the research and at the same time acknowledges the theoretical assumptions that assist in identifying the robustness of a researcher's techniques to take full advantage of their strengths and compensate for their weaknesses (Creswell & Plano-Clark, 2011; Easterby-Smith et al., 2003; Fellows & Liu, 2008; Jonker & Pennink, 2010; Johnson, et al., 2007; Kothari, 2004). For instance, a researcher who understands the philosophical paradigm within the context of quantitative techniques that emphasize measuring and counting is called a positivist; while, the one that prefers the use of qualitative tools of observation, questioning, and description is a naturalist in the philosophical perspective. These differences further portray the suitability or choice of what is significant to study; what can be known or what type of research tools and designs are appropriate; and what standards should be used to judge the quality of the research (Creswell & Plano-Clark, 2011; Fellows & Liu, 2008). Hence, the need to construct a philosophical position and orientation toward a given investigation in social sciences research is an essential question to face for the researcher (Dainty, 2008). Therefore, it is significant for the researcher to decide and adopt a world-view or paradigm inclusive of related assumptions suitable to the given research.

2.4 Nature and Meaning of Research Paradigm

A paradigm from the views of renowned scholars (e.g. Creswell & Plano-Clark, 2011; Fellows & Liu, 2008; Jonker & Pennink, 2010) is associated with perspectives and theoretical lenses through which the researcher perceives diverse pictures of the same world. In other words, paradigm is the philosophical assumption which is a basic set of beliefs that define and guide the researcher's actions and worldview (Lincoln et al., 2011). The term "worldview" is a synonym for paradigm and defined as a process of thinking about and making sense of the complexities of the real world (Creswell & Plano-Clark, 2011; Lincoln, 1990; Patton, 2002; Rossman & Rallis, 2003). Similarly, Morgan (1980), Arndt (1985), and Lan and Anders (2000) maintain that paradigm is individuals' different perception of the same world; and that, it is a view of reality that reveals suitable domain, basic assumptions, suitable research questions, rules of inference that aids in stipulating a discipline's appropriate domain as well as an appropriate research question. Mouton and Marais (1996) further asserted that paradigms assist in identifying empirical and theoretical problems that are appropriate and relevant for further problem-solving activities; and that it's also identified as well as differentiating the philosophical perspective of researchers. To this end, Taylor (2018) asserted that different philosophical approaches have been adopted by housing researchers in order to conduct their explorations, examinations and investigations. As such, a handful of scholars (e.g. Creswell, 2009; Dainty, 2008; Kankam, 2019; Kaushik & Walsh, 2019; Lincoln et al., 2011; Taylor & Medina, 2013) identified several paradigms or worldviews that structure and organize researches which include positivism, realism, interpretivism and pragmatism which are all philosophical perspectives with common elements such as axiology (beliefs about the role of values and morals in research); ontology (assumptions about the nature of reality); epistemology (assumptions about how we know the world, how we gain knowledge, the relationship between the knower and the known); methodology (shared understanding of best means for gaining knowledge about the world); and rhetoric (shared understanding of the language of research).

2.4.1 Positivism

Positivism is a Western philosophy propounded by the French philosopher Auguste Comte (1798-1857). It is a research paradigm with worldly, secular, anti-theological, and anti-metaphysical with strict compliance to the testimony of observation and experience as its ideological stance (Maxcy, 2003). This paradigm is based on a foundationalist ontology which is a view that the world exists independently of our knowledge of it; and that at its core ideology is the promise of unambiguous and accurate knowledge of the world which can be arrived at through sensory experience (Houghton, 2011). Positivism adheres to the view that factual knowledge that is trustworthy is the one gained through observation via the senses; data collection and interpretation in an objective way; and that the findings in such studies are usually observable and quantifiable which leads to statistical analyses (Collins, 2010).

2.4.2 Realism

Contrary to positivism, realism relies heavily on the idea of independence of reality from the human mind. This paradigm assumes that a scientific approach is the development of knowledge. Saunders et al. (2012) posit that realism is classified into direct and critical. Direct realism which is also known as naive realism interprets the world through personal human senses. Critical realism, on the other hand, assumed that humans do experience the sensations and images of the real world. In a similar assertion, Novikov and Novikov (2013) averred that a researcher following critical realism research philosophy has to appreciate the influence and interrelationship between the individual, the group, and the organization. Similarly, there is agreement among researchers that critical realism is more widely held as appropriate as the direct realism approach due to its ability for in-depth study of a phenomenon. It is in this vein that Taylor (2018) argues that realism can be used by researchers in the field of housing studies as it provides an approach that can be adapted to a research project and used as a tool to analyze the phenomena being studied.

2.4.3 Interpretivism

Interpretivism advocates the interpretation of elements of the study by the researcher and integrates human interest into a study (Myers, 2008). Similar to Myers (2008), accessibility to reality in interpretive research is either given or socially constructed through social constructions (such as language, consciousness, shared meanings, and instruments). Moreover, Collins (2010) indicated that the development of interpretivism philosophy is a result of the critique of positivism in social sciences as it focuses on qualitative analysis over quantitative analysis. Interpretivism is a meaning-centered paradigm that adopts multiple methods to reflect different aspects of the issue and it is also widely acknowledged that it is similar to the naturalistic approach in terms of data collection such as interviews and observations. Nonetheless, secondary data research is also relevant to this philosophy and 'meanings' often surfaced towards the end of the research process (Saunders et al., 2012).

2.4.4 Pragmatism

In pragmatism, there is a complete rejection of the idea that social science investigation can be accessed using a single scientific method. This has led to its recognition over the years by many researchers (Maxcy, 2003). This is also consistent with earlier assertions by Saunders et al. (2009) and Creswell and Plano-Clark (2011) that pragmatism considers choosing between one philosophical position (axiology, epistemology, ontology, and phenomenology) is unrealistic in practice; and it is argued that research question is the most significant factor to reckon with in terms of the position to adopt in research particularly where the research question does not suggest the paradigm that should be adopted in the study. As a philosophical and epistemological framework, pragmatism involves interrogating and evaluating ideas and beliefs in terms of their practical functioning (Kelly & Cordeiro, 2020). In addition, pragmatism recognized many different ways of interpreting the world and undertaking research, that no single point of perspective offers an entire picture as there exist multiple realities (Collis & Hussey, 2014; Saunders et al., 2012). Hence, pragmatism offers the opportunity for adopting and integrating the two main traditional methods: quantitative and qualitative approaches which are usually referred to as mixed-methods or deductive/inductive approaches (Creswell, 2009). Meanwhile, the summary of these philosophical perspectives reviewed is presented in Table 1.

Table 1 Summary of philosophical perspectives
(Source: Kaushik & Walsh, 2019)

	Positivism	Realism
Ontology	The researcher is external, objective, and independent of that study.	The researcher is objective and exists independently of the human mind but interpreted out of the social situation.
Epistemology	Things are observed to prove credibility to facts, focusing on causality and law generalizations thereby reducing phenomena to the simplest elements.	The belief that observing an event proves the credibility of facts; scarce data, facts create imprecision and misinterpretations; focus only within context or contexts for explanations.
Axiology	The research is value-free, hence independent of the data and objects in the analysis of the data.	The research is value-laden; hence, the researcher is biased by world views, culture, values, experiences which will affect the results/research.
Approach	Quantitative but can still use qualitative.	The approach adopted depends on the research matter.
Method	Mono-method but can use mixed in certain cases.	The method to use is based on the research problem or situation.
	Interpretivism	Pragmatism
Ontology	Things are socially constructed leading to subjective reasoning that changes with multiple realities.	The researcher is external, multiple, and the view is that chosen to best answer the research questions.
Epistemology	Toward subjective meanings of social phenomena, looking at details and realities behind it with motivating actions.	Either subjective or objective meanings can provide facts to a research question; focus on practical application to issues by merging views to help interpret data.
Axiology	The research is value bound; such that the researcher is part of what is being studied, not isolated from the study, and will be subjective.	Values play a vital role to interpret results using subjective and objective reasoning.
Approach	Qualitative.	Uses both qualitative and quantitative.
Method	Mixed or multiple methods.	Mixed or multiple methods.

03.0 METHODOLOGY

The systematic review approach is adopted in this concept paper. Articles selected based on theme relevant to the research question (philosophical perspectives in social science studies and housing management researches) from recognized documented sources which include online peer review electronic journals archives such as Elsevier, Emerald, MyiLibrary, Sage, SciVerse, Science Direct, SwetWise;

including online libraries and search engines such as Google and Google Scholar/Book; Online publications such as e-books, textbooks as well as contributions from experts at virtual research conferences/webinars. The articles subsequently analyzed using content analysis tool to compare and contrast various dimensions from the selected secondary materials. The rationale behind the adoption of such approach is that it is advantageous when answers to questions are required quickly; less expensive to use, and may provide a useful comparative tool, and new data may be compared to existing data for purpose of examining differences or trends (Kothari, 2004).

04.0 ANALYSIS AND DISCUSSION

From the reviewed paradigms (positivism, realism, interpretivism, and pragmatism), pragmatism is considered one of the most appropriate paradigms to investigate housing management-related research in general and social housing estates in particular. The rationale behind the adoption of pragmatism stemmed from its major underpinning of epistemology as identified by Kaushik and Walsh (2019) that knowledge is always grounded on experience. This implies that the researcher's view of the world is influenced by social experiences and knowledge is unique as it is created by unique experiences. Creswell and Plano-Clark (2011) also asserted that pragmatism as a research paradigm refuses to be part of the debate on contentious metaphysical concepts such as truth and reality, but recognized single or multiple realities that are open to empirical inquiry. Likewise, pragmatists are of the view that reality is never determined completely because it is a concept that is normative that considers what works (Baker and Schaltegger, 2015). This implies that knowledge claims cannot be abstracted from beliefs that are dependent, on habits, and experiences; hence, the reality is true provided it offers a satisfactory relation with other parts of individual experiences; and that 'truth' is whatever proves itself good or what has stood the scrutiny of individual users over time (Howe, 1988; James, 1999; Pansiri, 2005; Ray, 2004).

Similarly, Creswell and Plano-Clark (2011), as well as Maxcy (2003), posit that pragmatism as a research paradigm is geared toward solving practical problems in the real world and becomes popular as a method of inquiry for more practical-minded researchers. The paradigm does not confined to certain research environment but rather embraces plurality of methods and encourages researchers to adopt the philosophical and methodological approach that work best for the given research problem that is being investigated (Swedberg, 2020). Pragmatism offers liberty in the choice of methods as researchers inclined to this paradigm never restrict themselves to a particular research method (Teddle & Tashakkori, 2009). Consequently, pragmatists use different methodological combinations to address the research questions by adopting either intermixing of interviewing, observation and document analysis; relying on interviews rather than observations or vice versa; and more often intermixing of qualitative and quantitative data to address their research questions (Patton, 2002). This has stimulated a consensus in favour of taking a pragmatic stance for conducting mixed-methods research. Different authors have clearly supported the use of the pragmatist position in the use of mixed-methods design and that pragmatism at the moment gained popularity and is most often mentioned in mixed-methods literature (Teddle & Tashakkori, 2003, 2009). Mixed-methods researchers have encouraged the adoption of pragmatism as a paradigm advocating that it is directly linked to the needs of mixed-methods research.

Furthermore, some studies in social science have shown that generally, pragmatism as a paradigm and in particular mixed methods research design offers a philosophical foundation (Morgan, 2014). Equally, Bryman (2006) concur that the consideration and importance attached to research questions in pragmatism are also identified to be one of the major arguments in favour of the pragmatist position concerning combining quantitative and qualitative research (Mixed methods). The mixed-methods approach involves collecting, analyzing, and mixing both quantitative and qualitative data in a single study or a multiphase series of studies (Creswell, 2012; Swedberg, 2020). Combining the two approaches provides valuable insight and more opportunity for the development of hypotheses as well as improved comprehension of existing theoretical insights and direct practical benefits (Jonker & Pennink, 2010). Although, there is the needs to decide on the emphasis to be given to each form of data (priority); which form is to be collected first (concurrent or sequential); how the data is integrated or connected; and whether the researcher will use theory to guide the study (Creswell, 2012). This will ensure high-quality preservation, efficiency, and rigor that widen the scope and ultimate impact of the research as well as transparent explanations connecting the analytic approaches that enable further assessment by other researchers to build on it. In addition, the paradigm supports a wide choice of analytical instruments such as NVivo, SPSS, and other computer packages. These assertions as indicated in previous studies (i.e. Kaushik & Walsh, 2019; Pansiri, 2005; Teddle & Tashakkori, 2003) are in line with the main stance or central premise advocated in the pragmatic philosophical reasoning in contemporary social science research.

Moreover, scholars in the housing sector have drawn on the epistemology of pragmatism to present a case for its value in the creation of housing management in the housing sector. For instance, researchers such as Jimoh (2012), Ihuah and Eaton (2013), Mari et al. (2014), Aziabah (2018), Joseph et al. (2021) and Fulcher et al. (2022) among others adopted pragmatic paradigm in their investigations on housing management issues. As such, the adoption of this paradigm in the ongoing study remains critical given the study context. This is because the research questions consist of an initial assessment of occupants' perceptions in line with the research problem for justification of the findings in the literature, and the subsequent development of a model which can appropriately be answered with the aid of multiple approaches or combining qualitative and quantitative approach explanatory sequential mixed methods design. This further reveals the decision on the connectivity or integration of the data as well as the appropriate theory(s) to guide the study.

Meanwhile, Thompson (1996) in criticizing pragmatism argues that pragmatic paradigm limits the ability to identify and analyze structural social problems as a result of its contextual and problem-centered nature. Likewise, Amaratunga et al. (2002) are of the view that there is no exclusively better method to research either in the natural world or in the built environment in particular; but rather encourage the ways for conducting research in a variety of situations. In a similar assertion, Taylor (2018) recommended that it is critical that prior to conducting any research there is the need for a researcher to undertake a process for assessing the philosophical lens as their research design and methodology should be congruent with the philosophical approach taken.

05.0 CONCLUSION

From the reviewed literature, there exist several ways of conducting research, and each of these ways is geared toward solving the many problems in research. The most important thing, therefore, a researcher needs to identify is the underpinning of a particular philosophical assumptions. These basic philosophical assumptions are critical to social science research generally and the housing sector in particular. This is because the assumptions will go a long way in guiding the researcher; and the topic of the research, the analyses, and the interpretation of the data are influenced by these assumptions. It is identified in the literature that pragmatism with its methodological traditions was conceptualized by researchers to ensure the adequate study of a given social phenomenon in the realm of social science as the paradigm views objective reality is embedded in the environment which is encountered through human experience. This reveals that pragmatism is a set of tools of value for addressing practical problems in the real world regardless of the peculiarity of research environment. Similarly, the pragmatist position is identified to be one of the most appropriate paradigms for consideration to investigate housing management-related research in general and social housing in particular as it has the potential to offer a suitable methodology. Therefore, this review and the inclination towards this paradigm are not intended to be exhaustive, but, rather added to the available literature about pragmatism as a research paradigm in the social housing management domain. Hence, future researchers can continue to create research on this topic and generally the adoption of pragmatism as a research paradigm for social housing management-oriented research.

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