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Paradigm Shift in Social Science Research: A General Perspective

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Abstract

This paper explores the paradigm shift in social science research from positivism to the contemporary approach of indigenous research paradigms. The paper is based on relevant literature on paradigm shift reviewed. It begins with a discussion of Kuhn's notion of paradigm and paradigm shift from its historical perspectives towards the contemporary advancements of alternate paradigms such as interpritivism, criticalism, post modernism and indigenous research paradigm. Every paradigm follows certain stages from normal science, crisis and revolution or a shift into a new paradigm. The contemporary literature on social science research reveals how decolonization occurs through indigenous research paradigms. The paper then delves into the concept of decolonization and the emergence of indigenous research paradigms. The paper also examines the implications and challenges of indigenous research paradigms, including issues of decolonization among the indigenous communities of the global south. The paper concludes by emphasising the significance of decolonizing research methodologies and identifying the perspectives of marginalized communities. The existing positivist paradigm has been challenged by the critical, interpretive, and postmodern paradigms for a better understanding of social phenomena. Although there has been a positive development in the paradigm shift in social science research, challenges such as the problem of representation and the critique of power and knowledge still exist to be addressed.

Keywords: Paradigm shift, social science research, positivism, indigenous research, decolonization

Introduction

Academic research needs careful attention on certain issues that have potential benefits concerning the context in question. Kraemer and Perry (1989) discuss the requirements of academic research about the public administration and revealed that the need for academic research is guided by institutional sustenance, which should be backed up by the institutional objectives, competent faculties, necessary resources allocated for research and established determination (pp. 10-11).

Within the academic arena, social science research encompasses a wide range of disciplines, including sociology, psychology, anthropology, and political science, among others. Each of these fields has its unique perspectives and methodologies, but they all share a common goal: to understand and explain the complexities of human behaviour and social systems. This can be referred to as a paradigm.

The notion of paradigm has been brought up to the scientific community by Thomas S. Kuhn in 1962 through his famous publication, 'The Structure of Scientific Revolutions'. The concept of 'Paradigm' can be elaborated with an example of the perception towards population growth by developed and developing countries. The countries where the fertility rate is higher and the population is growing rapidly, population growth in such a case will be a burden. However, for developed countries, where the fertility rate is too low below the replacement level, the perception towards population growth is appropriate. Therefore, here, the way of viewing or perceiving the same situation is different. This way of viewing the world has been termed a 'paradigm' by Kuhn (1970).

The term 'Paradigm' has been considered by social scientists in different ways in diverse scientific communities. A paradigm is an organized system of knowledge and practices that affect the way we view and interact with the world (Lyotard, 1984) and leads the research practice (Willis, 2007). Kuhn (1970) suggests a 'disciplinary matrix' (p. 182) and contends that the disciplinary matrix is a constellation of paradigms that have a collective function. Berger and Luckmann (1966), in their book, 'The Social Construction of Reality, defined paradigm as a set of assumptions, ideas, values and practices that establish a way of understanding reality for the community that shares them. They maintained that paradigms provide an outline of how people and communities comprehend social reality. In a broad sense, Archer (1995) described paradigm as a predominant framework of theoretical assumptions and methodological rules and argued that paradigms shape how academics see and analyse social phenomena and that they are essential for the development of social theory. Likewise, Bauman (1990) defined paradigm as a combination of ideas and practices that determine the way we perceive and interpret social reality.

Kuhn (1970) postulates that each paradigm has five stages of the scientific revolution: the pre-paradigm stage, the stage of normal science, the crisis stage, the stage of revolution or paradigm shift and the post-revolution. The pre-paradigm stage is the time with no unanimity on any specific theory due to the lack of a common body of facts. The stage of

normal science is characterised by the acceptance of the existing paradigm or theoretical framework and the scientists work on finding solutions and making discoveries within the framework. The crisis stage emerges when a crisis or anomaly within the framework and scientific questions arise for a new theory or framework to be developed. The stage of revolution or paradigm shift appears when a new theory or framework has gained adequate support to take over the existing dominant paradigm and the new theory is verified by the scientists with sufficient research work. The post-revolution stage is when the dominance of a new framework is established and the stage of normal science starts for the new paradigm (Kuhn, 1970). However, following the emergence of every paradigm in social science research, there has been a growing recognition that traditional ways of thinking about these issues are no longer sufficient and that a paradigm shift is desirable by the scientific community.

A paradigm shift refers to a fundamental change in the basic assumptions, concepts, values, and practices of a particular field (Kuhn, 1970). Kuhn argues that scientific revolutions occur when a paradigm is challenged by a significant number of anomalies or facts that cannot be explicated by the dominant paradigm. This leads to a crisis, as scientists begin to question the validity of the dominant paradigm and search for a new one. The crisis is resolved through a process of revolutionary science, in which a new paradigm is established and becomes the new dominant framework for scientific research (Kuhn, 1970).

In social science research, these shifts have been driven by several factors, including advances in technology (Bhattacherjee, 2012; Cherp et al., 2018; Mormina, 2019), changes in political and economic systems (Greene, 1984; Useem, 1976), and shifts in cultural attitudes and values (Kendal & Raymond, 2019; Kim et al., 2022; Lekas et al., 2020). For instance, the rise of the internet and social media has had a profound impact on the way we communicate and interact with one another, and this has led to new ways of understanding social networks and online communities. A paradigm shift is essential in education to have transformative learning by blending the local and global standpoints (Luitel & Taylor, 2019). Similarly, the global financial crisis of 2008 and the subsequent economic decline have led to a transformed attention on inequality and social justice, and a rethinking of traditional economic models (Ventriss, 2013).

Thomas Kuhn, one of the main scholars associated with the paradigm shift, contends that scientific progress is not a linear process, but rather one concerned with periods of "normal science" punctuated by infrequent "scientific revolutions" in which a new paradigm develops (Kuhn, 1970). Similarly, other prominent scholars have contributed to the shift of paradigm in social science research by proposing new ways of thinking about society and human behaviour.

Methodology

This article is based on the secondary literature on paradigm shift with the point of departure from Kuhn's (1970) notion of paradigm and paradigm shift. The qualitative, secondary

information from the literature have been reviewed on the issues of a paradigm shift in social science research. It attempts to explore the paradigm shift and examine its implications for the future of social science research. The historical context in which the shifts have occurred is discussed and examined some of the key figures and ideas that have been instrumental in driving these changes. Moreover, the article also considers some of the challenges that social scientists face in navigating these new paradigms and the potential opportunities they present for future research.

Paradigm Shift in Social Science Research: From Positivism to Decolonialism

Positivism

The history of positivism in the social sciences can be traced back to the late 18th and early 19th century, with the work of philosophers such as Auguste Comte (1798-1857) and John Stuart Mill (1806-1873). Positivism as a research methodology emphasizes the use of scientific methods, especially quantitative methods, to understand and explain social phenomena. The concept of positivism was developed by Comte (1853). He argued that the social sciences should be modelled after the natural sciences and that scientific methods should be used to understand and explain social phenomena, and believed that the use of the scientific method would lead to a better understanding of human behaviour within the social phenomena and contribute to the progress of society. Likewise, Mill (1856) described positivism as the science of collecting and analysing empirical data. He argued that the physical method is the only way to understand and explain social phenomena. Mill believed that the use of scientific methods would lead to a better understanding of social phenomena and contribute to the progress of society.

Positivism has had a major impact on the development of the social sciences, especially demography, sociology and anthropology. In the late 19th century and early 20th century, many sociologists and anthropologists incorporated positivist methods and concepts into their research, however further discussion on their contribution is beyond the scope of the paper. Positivist approaches later on focused on studying social phenomena using quantitative techniques such as surveys and statistical analysis. The ontology of positivism rests upon the fact that reality is objective and independent of the researcher's interest. The epistemological notion states that knowledge is inherent in the natural science paradigm, which signifies the systematic observation and experimentation of the phenomena. The positivist approach to axiology is a value-free inquiry to obtain objective and reliable findings. The methodology of positivism follows quantitative, statistical and experimental methods to test hypotheses.

In recent years, however, positivism has been criticized for failing to consider the context and the perspectives and experiences of marginalized groups, its lack of attention to power relations and its assumption that objective knowledge is possible (Fox, 2008; Schrag, 1992). Many social scientists have moved away from positivism and adopted alternative paradigms such as constructivism and critical theory in their research.

Interpretivism

Interpretivism is a research paradigm that appeared as an alternative to positivism. It emphasizes the importance of understanding social phenomena from the perspective of the individual or group under study, rather than objectively measuring or explaining them (Fox, 2008). Interpretivism has influenced research in the social sciences, particularly in the areas of anthropology, sociology, and psychology. This paradigm is often associated with qualitative research methods, such as ethnography, case studies, and hermeneutic analysis (Thanh & Thanh, 2015). Interpretive quantitative approaches are imperative in the triangulation of research findings obtained from the quantitative data analysis and more importantly significant in the policy-making process (Babones, 2016). However, interpretivism has been criticized for being too subjective and failing to provide clear methods for data collection and analysis (Mack, 2010) and too meagre in generalization (Williams, 2000).

The ontology of the interpretive paradigm is based on the idea that reality is socially constructed and that reality is attached to personal belief, time, space and society. The epistemology of the interpretive paradigm is that knowledge is subjective and socially constructed. This implies that knowledge is not something that can be objectively discovered, but rather it is something that is constructed through social interactions. The axiology for this paradigm is based on the idea that social inquiry is value-laden. The methodology employed in this paradigm includes qualitative methods such as ethnography, case study, and phenomenology.

Criticalism

Criticalism as a paradigm emerged in the social sciences in response to the limitations of positivism and post-positivism. It has been used to study a wide range of social phenomena, including globalization, inequality, and social movements. It underscores the need to critique and challenge dominant narratives and power structures to understand and change social phenomena (Asghar, 2013). It emphasises 'power, inequality and social change' (Sheppard, 2022, p. 23) and can be beneficial in challenging Western-centric research activities by promoting local knowledge (Denzin & Lincoln, 2018). However, it has been criticized for focusing too much on criticism and ignoring the importance of understanding and explaining social phenomena. As it intends to exercise hierarchies and power and has meagre neutrality in analysing social issues rather has biases in certain political agendas there is a need to 'free individuals from sources of domination and repression' (Anderson, 1989, p. 249).

Criticalism is an approach to social science that emphasizes the role of power and ideology in shaping social reality. The ontology of the critical theory paradigm is dialectical, the epistemology is critical, and the axiology is emancipatory. The methodology of criticalism is critical, using methods such as critical discourse analysis and critical policy analysis.

Postmodernism

Postmodernism as a research paradigm emerged in the social sciences and humanities in the late 20th century in response to positivism, post-positivism, and the limits of modernity. It emphasizes the importance of understanding the social and cultural contexts in which knowledge is generated and how knowledge and power are intertwined. Jean-François Lyotard, one of the philosophers of postmodernism argued that the grand narratives of modernity, such as progress and rationality, have lost their credibility and must instead focus on the local and specific (Lyotard, 1984). Postmodernism was also influenced by the work of other scholars such as Michel Foucault, Jacques Derrida, and Fredric Jameson. Postmodernism has influenced the study of the social sciences, especially in the areas of sociology, anthropology, literary theory and to some extent in demography. It has been used to study a wide range of social phenomena such as identity, culture, and representation (Sarup, 1996).

Postmodernism has been criticized for being too relativistic and ignoring the importance of objective knowledge (Aldawod & Day, 2017). Additionally, some scholars argue that postmodernism can be too unconvinced and distrustful, ignoring the potential for social change and improvement (Atkinson, 2002), and ignoring the traditional apprehension of philosophy (Nath, 2014).

French philosopher and historian Michel Foucault (1926-1984), known for his writings on power and knowledge, argued that knowledge is not neutral, but is produced and used by those in power to maintain control. He also emphasized the importance of understanding the social and historical context in which knowledge is produced. French philosopher Jacques Derrida, known for his work on deconstruction, explored how language and discourse shape our understanding of the world (Rorty, 1977).

Decolonialism

In recent years, there has been a growing movement towards the decolonization of social science research. This seeks to challenge Western-centric perspectives and methods and focus on the perspectives and experiences of marginalized communities. This included developing new research methods. The process of decolonization, which began in the mid-20th century and continues to this day, has led to the dissolution of colonial systems of power and knowledge (Williams & Chrisman, 2015). Along with this process comes growing criticism of Western-centric perspectives and methods that have long dominated social science research.

One of the most influential critiques of Western-centric social science research, Frantz Fanon (1967) in 'Black Skin, White Masks', argued that Western-centric perspective of social science research was inherently discriminatory and despotic, and was new to understanding the experience of colonized peoples (Fanon, 1967). In the late 20th century, the emergence of postcolonial studies as a field of study brought further criticism of Western-centric social science research. Bhabha (2003) argues that the knowledge produced

by such research is colonial in nature and that a new paradigm is needed to understand the experiences of colonized people.

Bhabha (2012) contends that the Western portrayal of colonized peoples as "others" is a way of preserving colonial power. It highlights how it resists and subverts the description of Baba's concept of "third space" or "middle space" and shows how marginalized communities create their own identities and meanings in the face of colonial rule.

Smith (2021) assumes that there is an objective reality that can be discovered through scientific research that underpins conventional Western research methods. She says that this assumption is wrong because it doesn't take into account how power relationships shape and construct knowledge. This has meant that Indigenous communities and people have been represented and studied in ways that are in line with the interests of the colonizers rather than accurately reflecting Indigenous perspectives and realities in the context of colonialism. Therefore, she offered a decolonizing research approach as an alternative to conventional Western research approaches. The new approach values the necessity of developing research methods that are inclusive and respectful of Indigenous perspectives as well as the importance of recognizing and challenging how colonialism has shaped research.

The emphasis placed on the significance of community-based research is one important aspect of Indigenous research paradigms. When designing, carrying out, and disseminating research, this strategy involves closely collaborating with Indigenous communities (Gellman, 2021). In addition, it entails fostering relationships that benefit both communities and researchers, as well as ensuring that research directly benefits communities. The notion of ecofeminism (Shiva, 1989, 1991; Shiva & Mies, 2014) has not only brought together the Western and Southern feminists but also developed a critical discourse of environmental concern for women's leadership against the backdrop of patriarchal hegemony (Molyneux & Steinberg, 1995).

Traditional research methods and knowledge are also used in decolonizing methodologies. This could include studying environmental issues with traditional ecological knowledge, documenting historical events with storytelling and other oral traditions, and studying health and wellness with traditional healing practices as well (Smith, 2021). It is essential to develop strategies for decolonizing academia as well as to make transformations in indigenous people's lives (Smith & Smith, 2019). Interestingly, Rai (2019) has also demonstrated with his academic practice how the exploration of our indigenous knowledge can bring about changes in the perspectives of contemporary world views. He regarded this as *third-spacing pedagogy* and claimed that it would create changes through 'transformative learning' (p. 248). More specifically, Bhabha's (2003) concept of *third space* has provided room for understanding how the diversities and differences associated with cultures can be hybridized to create new perspectives as a shift in the contemporary paradigm.

"Indigenous Research Methodologies," written by Bagele Chilisa, a researcher from Botswana - is a comprehensive guide to comprehending and carrying out research with

Indigenous communities in a manner that is respectful of Indigenous perspectives and values and includes them. She uses her own experiences as well as those of other Indigenous researchers to shed light on the particular complications as well as opportunities that arise when carrying out research in Indigenous contexts (Chilisa, 2012). The significance of comprehending the historical and political context of Indigenous research is one of the book's main themes. She argues that the way Indigenous peoples and communities have been represented and studied in research has been shaped by colonialism and its ongoing effects. As a result, she stresses the importance of researchers comprehending and evaluating how privilege and power have influenced the research process.

Utilizing traditional research methods and knowledge is another important aspect of Chilisa's strategy. She argues that such knowledge is a valuable source of data that can be employed to explore a wide range of subjects, including the environment, education, and health. This could include studying environmental issues with traditional ecological knowledge, documenting historical events with storytelling and other oral traditions, and studying health and wellness with traditional healing practices (Finn et al., 2017).

The prominence of decolonization is another significant aspect of the Indigenous research paradigm. This involves identifying and challenging how Indigenous peoples and communities have been subjected to Western-centric perspectives and methods, as well as working to develop research strategies that are more inclusive of and respectful of Indigenous perspectives (Held, 2019). The works of Indigenous scholars like Linda Tuhiwai Smith, Bagele Chilisa, Taiaiake Alfred and many others developed critiques of Western-centric perspectives and methods in social science research and underlined the implication of respecting Indigenous knowledge and perspectives, have had an impact on the paradigms of Indigenous research.

In general, the Indigenous research paradigm provides a significant alternative to Western-centric social science research perspectives and approaches. They emphasize the significance of decolonization, traditional knowledge and methods, and community-based research (Getty, 2010). These paradigms give useful insights and perspectives that can help us understand the world in a way that is more fair and inclusive.

Implications and challenges of the Indigenous research paradigm

The Indigenous research paradigm recognizes the importance of respecting the sovereignty and self-determination of Indigenous peoples and seeks to empower Indigenous researchers and communities (Shrinkhal, 2021). It challenges the dominant Western knowledge systems and power structures that have traditionally oppressed Indigenous peoples (Held, 2019). However, there are some challenges to executing an Indigenous research paradigm. One challenge is that it can be difficult to find Indigenous researchers who have the necessary training and resources to conduct research in a way that is sensitive to Indigenous perspectives. The non-Indigenous researchers might be resistant towards the institutions, and funding agencies to this approach, which can challenge the traditional ways of doing

research (Skille, 2021). There may often be a lack of understanding, respect and recognition for the intellectual property rights of Indigenous peoples, which can be a barrier to the development of Indigenous research. Likewise, Indigenous research often involves working with communities that have been historically marginalized and oppressed, which can be emotionally and psychologically taxing for the researcher. Additionally, there may be ethical considerations and challenges in obtaining informed consent and maintaining confidentiality in Indigenous research. To conclude, the Indigenous research paradigm has many important implications and is a crucial shift in the way research is conducted. However, it also poses many challenges that need to be addressed.

Strengths and limitations of the paper

The paper discusses the paradigm shift in social science research and attempts for a more nuanced and clear understanding of the subject. As the paper employs the systematic review of the secondary literature and attempted to bring some drops from the ocean in the field of social science research, the author owes all shortcomings and limitations apparent in the paper. However, the paper is believed to be a gate opener for novice researchers in academia and expects feedback from proficient researchers for further perfection.

Conclusion

The paradigm shift can be considered as how society gets developed beginning with the basic to advanced level of development concerning the social, cultural, economic as well as other constructs of the existing human population. Positivism, with its emphasis on objectivity and scientific methods, was the dominant paradigm in social science research for much of the 20th century. However, as society has evolved and new perspectives have emerged, the limitations of positivism have become gradually apparent. Scholars have stressed the significance of decolonizing research methodologies and recognizing the perceptions of marginalized communities. The critical, interpretive, and post-modern paradigms have also challenged the existing positivist paradigm for a better apprehension of social phenomena. While the paradigm shift in social science research has been a positive development, there are still challenges to be addressed such as the problem of representation and the critique of power and knowledge. The field continues to evolve as new perspectives and paradigms emerge, and researchers must stay informed and open to new ideas.

The Indigenous research paradigm has been envisioned by social scientists would be effective in shaping the social science research paradigm in the developing world. This can be claimed with the evidence that numerous ideas and research issues from within the indigenous communities are still in need of being uncovered and explored. In this very situation, the notion of indigenous research can be expected to create a space in academia in terms of a new paradigm in social science research. As much has to be explored from the indigenous knowledge and ideas in the global south, the indigenous research methodology can have a preference as a new approach. Therefore, it is essential to discover the hidden and unexplored traditional and indigenous knowledge of the wider scientific community.

References

Aldawod, A., & Day, J. (2017). A critical reflection upon the postmodernist philosophical positions and issues relevant to entrepreneurship research. In *BAM 2017*, . 5-7 September 2017.

Anderson, G. L. (1989). Critical ethnography in education: Origins, current status, and new directions. *Review of Educational Research*, 59(3), 249-270. https://doi.org/10.3102/00346543059003249

Archer, M. S. (1995). *Realist Social Theory: The Morphogenetic Approach*. Cambridge University Press. https://doi.org/10.1017/CBO9780511557675

Asghar, J. (2013). Critical paradigm: A preamble for novice researchers. *Life Science Journal*, 10(4), 3121-3127. http://www.lifesciencesite.com

Atkinson, E. (2002). The responsible anarchist: Postmodernism and social change. *British Journal of Sociology of Education*, 23(1), 73-87. http://www.jstor.org/stable/1393098

Babones, S. (2016). Interpretive quantitative methods for the social sciences. *Sociology*, 50(3), 453-469. https://doi.org/10.1177/0038038515583637

Bauman, Z. (1990). Modernity and ambivalence. *Theory, Culture and Society*, 7(2-3), 143-169. https://doi.org/10.1177/026327690007002010

Berger, P. L., & Luckmann, T. (1966). The social construction of reality: A treatise in the sociology of knowledge Penguin Books.

Bhabha, H. K. (2003). Cultural diversity and cultural differences. In B. Ashcroft, G. Griffiths, & H. Tiffin (Eds.), *The Post-Colonial Studies Reader* (pp. 206-209). London and New York: Routledge.

Bhabha, H. K. (2012). The Location of Culture. Routledge.

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods and Practices* (2nd, Ed.). https://digitalcommons.usf.edu/oa_textbooks/3

Cherp, A., Vinichenko, V., Jewell, J., Brutschin, E., & Sovacool, B. (2018). Integrating techno-economic, socio-technical and political perspectives on national energy transitions: A meta-theoretical framework. *Energy Research & Social Science*, *37*, 175-190. https://doi.org/10.1016/j.erss.2017.09.015

Chilisa, B. (2012). *Indigenous Research Methodologies*. SAGE Publications.

Comte, A. (1853). The Positive Philosophy of Auguste Comte, Freely Translated and Condensed by Harriet Martineau With an Introduction by Frederic Harrison.

Denzin, N. K., & Lincoln, Y. S. (2018). *The Sage handbook of qualitative research* (Fifth ed.). Sage.

Fanon, F. (1967). *Black Skin, White Masks* (C. L. Markmann, Trans.). New York: Grove Press.

Finn, S., Herne, M., & Castille, D. (2017). The value of traditional ecological knowledge for the environmental health sciences and biomedical research. *Environmental Health Perspectives*, 125(8), 085006. https://doi.org/10.1289/ehp858

Fox, N. J. (2008). Post-positivism. *The SAGE encyclopedia of qualitative research methods*, 2, 659-664.

Gellman, M. (2021). Collaborative methodology with Indigenous communities: A framework for addressing power inequalities. *PS: Political Science & Politics*, 54(3), 535-538. https://doi.org/10.1017/S1049096521000299

Getty, G. A. (2010). The journey between Western and indigenous research paradigms. *Journal of Transcultural Nursing*, 21(1), 5-14. https://doi.org/10.1177/1043659609349062

Greene, J. E. (1984). Challenges and responses in social science research in the English-speaking Caribbean. *Social and Economic Studies*, 33(1), 9-46. http://www.jstor.org/stable/27862062

Held, M. B. E. (2019). Decolonizing research paradigms in the context of settler colonialism: An unsettling, mutual, and collaborative effort. *International Journal of Qualitative Methods*, 18, 1-16. https://doi.org/10.1177/1609406918821574

Kendal, D., & Raymond, C. (2019). Understanding pathways to shifting people's values over time in the context of social-ecological systems. *Sustainability Science*, 14. https://doi.org/10.1007/s11625-018-0648-0

Kim, Y. J., Toh, S. M., & Baik, S. (2022). Culture creation and change: Making sense of the past to inform future research agendas. *Journal of Management*, 48(6), 1503-1547. https://doi.org/10.1177/01492063221081031

Kraemer, K. L., & Perry, J. L. (1989). Institutional requirements for academic research in public administration. *Public Administration Review*, 49(1), 9-16. https://doi.org/10.2307/977224

Kuhn, T. S. (1970). The structure of scientific revolutions. In *International Encyclopedia of Unified Science* (2nd., enlarged ed., Vol. II, No. 2). Chicago: University of Chicago Press.

Lekas, H. M., Pahl, K., & Fuller Lewis, C. (2020). Rethinking cultural competence: shifting to cultural humility. *Health Services Insights*, 13, 1-4. https://doi.org/10.1177/1178632920970580

Luitel, B. C., & Taylor, P. C. (2019). Introduction: Research as transformative learning for sustainable futures. In B. C. Luitel & P. C. Taylor (Eds.), *Research as Transformative Learning for Sustainable Futures: Glocal Voices and Visions* (pp. 1-16). Brill. https://doi.org/10.1163/9789004393349 001

Lyotard, J.-F. (1984). *The Postmodern Condition: A Report on Knowledge.1979. Trans. Geoff Bennington and Brian Massumi*. University of Minnesota Press.

Mack, L. (2010). The philosophical underpinnings of educational research. In: Polyglossia.

Mill, J. S. (1856). A System of Logic, Ratiocinative and Inductive: 1 (Vol. 1). Parker.

Molyneux, M., & Steinberg, D. L. (1995). Mies and Shiva's "Ecofeminism": A new testament? [Ecofeminism, Maria Mies, Vandana Shiva]. *Feminist Review*(49), 86-107. https://doi.org/10.2307/1395330

Mormina, M. (2019). Science, technology and innovation as social goods for development: Rethinking research capacity building from Sen's capabilities approach. *Science and Engineering Ethics*, 25(3), 671-692. https://doi.org/10.1007/s11948-018-0037-1

Nath, S. (2014). The concept of reality from postmodern perspectives. *Journal of Business Management and Social Sciences Research*, *3*(5), 26-30.

Rai, I. M. (2019). Unshackling from cultural hegemony via third spacing pedagogy: Learning to think indigenously. In P. C. Taylor & B. C. Luitel (Eds.), *Research as Transformative Learning for Sustainable Futures: Glocal Voices and Visions* (pp. 239-250). Brill. https://doi.org/10.1163/9789004393349_015

Rorty, R. (1977). Derrida on language, being, and abnormal philosophy. *The Journal of Philosophy*, 74(11), 673-681. https://doi.org/10.2307/2025769

Sarup, M. (1996). *Identity, Culture and the Postmodern World*. Edinburgh University Press. https://doi.org/doi:10.1515/9781474472272

Schrag, F. (1992). In defence of positivist research paradigms. *Educational Researcher*, 21(5), 5-8.

Sheppard, V. (2022). Research paradigms in social science. In *Research Methods for the Social Sciences: An Introduction*. SAGE Publications Ltd. https://pressbooks.bccampus.ca/jibcresearchmethods/

Shiva, V. (1989). Staying Alive: Women, Ecology, Survival and Development in India. Zed Books.

Shiva, V. (1991). The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics. Zed Books.

Shiva, V., & Mies, M. (2014). Ecofeminism (2nd ed.). Zed Books.

Shrinkhal, R. (2021). "Indigenous sovereignty" and right to self-determination in international law: A critical appraisal. *AlterNative: An International Journal of Indigenous Peoples*, 17(1), 71-82. https://doi.org/10.1177/1177180121994681

Skille, E. Å. (2021). Doing research into Indigenous issues being non-Indigenous. *Qualitative Research*, 0(0), 1-15. https://doi.org/10.1177/14687941211005947

Smith, G. H., & Smith, L. T. (2019). Doing indigenous work: Decolonizing and transforming the academy. In E. A. McKinley & L. T. Smith (Eds.), *Handbook of Indigenous Education* (pp. 1075-1101). Springer Singapore. https://doi.org/10.1007/978-981-10-3899-0_69

Smith, L. T. (2021). *Decolonizing Methodologies: Research and Indigenous Peoples*. Bloomsbury Publishing Plc.

Thanh, N. C., & Thanh, T. (2015). The interconnection between interpretivist paradigm and qualitative methods in education. *American Journal of Educational Science*, 1(2), 24-27. http://www.aiscience.org/journal/ajes

Useem, M. (1976). Government influence on the social science paradigm. *The Sociological Quarterly*, 17(2), 146-161. http://www.jstor.org/stable/4105601

Ventriss, C. (2013). The economic crisis of 2008 and its substantive implications for public affairs. *The American Review of Public Administration 43*(6), 627-655. https://doi.org/10.1177/0275074013499817

Williams, M. (2000). Interpretivism and generalisation. *Sociology*, *34*(2), 209-224. http://www.jstor.org/stable/42858032

Williams, P., & Chrisman, L. (2015). Colonial discourse and post-colonial theory: An introduction. In *Colonial Discourse and Post-Colonial Theory* (pp. 1-20). Routledge

Willis, J. (2007). Foundations of Qualitative Research: Interpretive and Critical Approaches https://doi.org/10.4135/9781452230108