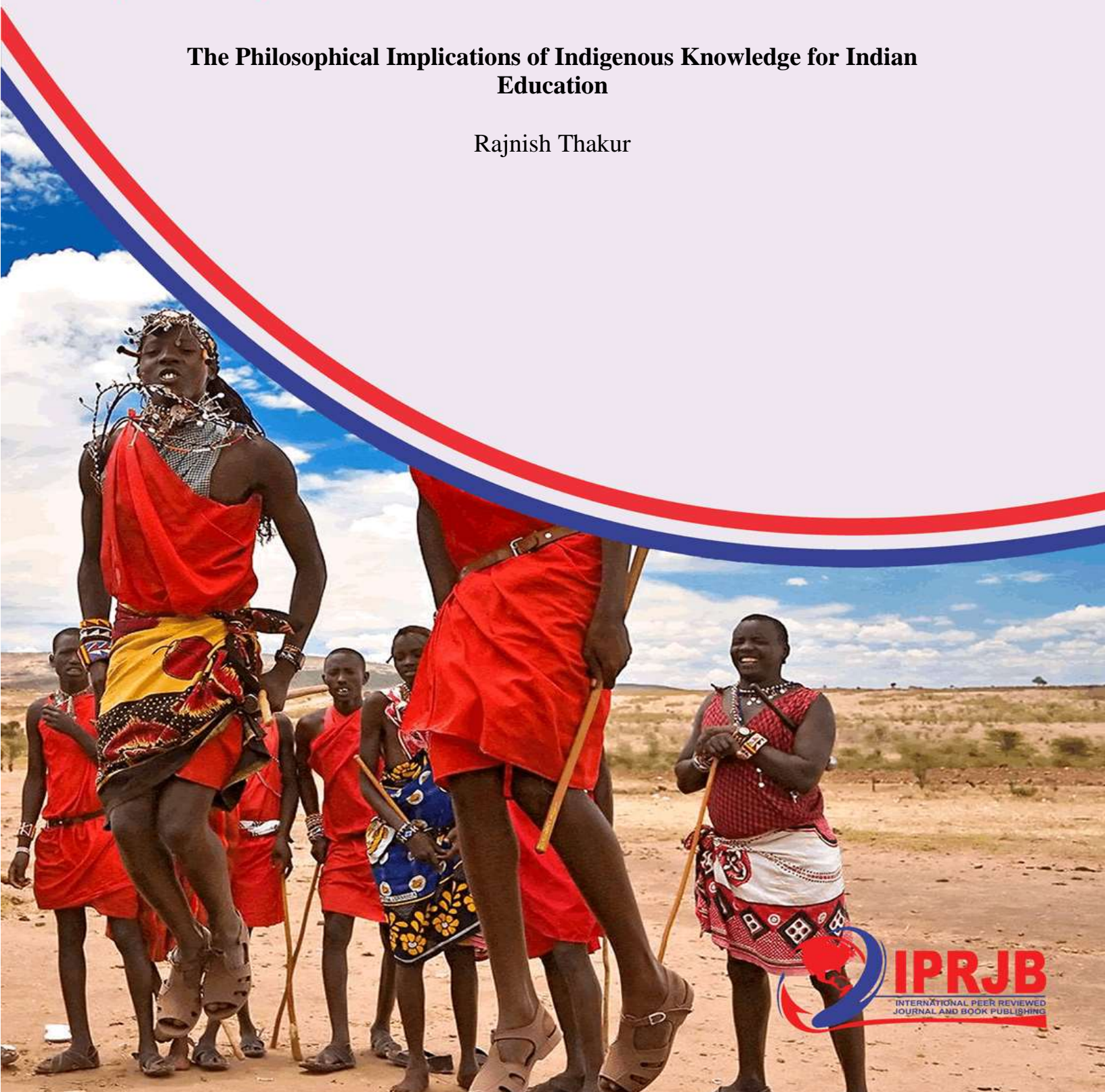



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**The Philosophical Implications of Indigenous Knowledge for Indian
Education**

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The Philosophical Implications of Indigenous Knowledge for Indian Education

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Abstract

Purpose: The purpose of this study was to examine the indigenous knowledge of the Indian community and deduce implications for education in India.

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low-cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The results revealed that there exist conceptual and contextual gaps relating to the study on the indigenous knowledge of the Indian community and deduce implications for education in India. Preliminary empirical review reveals that knowledge is constructed as a worldview that is continually re-evaluated, improved and systematized; the indigenous knowledge of the Indian was pragmatically developed enabling the community to adapt and survive in its environment; positive elements of the indigenous knowledge of the Indian include sustainable use of the environment, emphasis on functional and relevant knowledge and skills; values such as commitment to service, responsibility and self-discipline. Such values can be useful to education in India today.

Unique Contribution to Theory, Practice and Policy: Cultural synergism theory maybe used to anchor future studies in the health sector. The findings of this study are useful in stimulating debate on educational reform in India. By focusing attention on indigenous knowledge and cultures and seeking synergistic inclusion into formal education, the findings of this can be used to make education inclusive, attractive and meaningful to indigenous people of India.

Keywords: *Indigenous Knowledge, Indian Education, Indian Community.*

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INTRODUCTION

Indigenous knowledge (IK) is the body of information that local people have developed to deal with their unique environment, according to Warren (2021). IK here refers to whatever is considered rural knowledge, local knowledge, or traditional knowledge in this setting. In Johnson's definition (2022), IK is knowledge accumulated by a people over generations of living in close contact with their environment (see also Semali and Kincheloe, 2019). According to the International Labor Organization (ILO), indigenous knowledge (IK) is that knowledge that is held and used by a people who identify as indigenous of a place based on a combination of cultural distinctiveness and prior territorial occupancy relative to a more recently arrived population with their own distinct and subsequent dominant culture (International Labor Organization, 2019).

All of the preceding definitions assume that local knowledge develops over time and is tailored to the needs and lifestyles of the people who use it. It also implies originality, since people build their knowledge through deliberate and purposeful engagement with their surrounding social and physical worlds. As a result, the knowledge incorporates the perspectives, experiences, values, and beliefs of the people as a whole that are considered important enough to ensure their continued existence and prosperity (Wa Thiongo, 2016). Traditional indigenous knowledge is grounded in the particulars of a given place and time, including the surrounding ecology and the changing of the seasons. Indigenous knowledge systems, in contrast to the universal truths sought by certain Western scientific traditions, have a narrative foundation in natural communities. These ecological settings are the cradles of human and nonhuman knowledge because of the intricate webs of interdependence that connect humans, animals, plants, and the cosmos (Ermine, 2015).

Wright claims that North America was discovered by Christopher Columbus in 1492 and that this is widely accepted as the date of the discovery of the New World (Wright, 2022). Wright claims that the Americas were not a new continent as declared by Western knowledge, but rather an old one where various types of indigenous societies had developed, such as hunting groups and farming communities (Wright, 2022). Furthermore, First Nations (referring to Canadian Aborigines) had been in America since 'time immemorial,' as archaeological evidence suggests that First Nations citizens had been living in North America for at least 10,000 years prior to its 'discovery' by Western explorers (Mott, 2015). This suggests that different First Nation communities developed a shared body of knowledge through cooperative practices like hunting, fishing, gathering, and merchandising that fostered a harmonious relationship with their respective ecosystems. Wright (2022) argues that by 1600, the populations were reduced to a tenth, making them more manageable and controllable, and that this was made possible by the introduction of diseases brought to America from Europe (2022). This proves beyond a reasonable doubt that the Europeans colonized a population that was already well-organized and using a complex survival system. They also ignored and despised indigenous systems while imposing their own Western knowledge on the indigenous people.

According to Spear (2015), many people are familiar with Indian culture because of books and other written materials. In the 1880s, as explorers' accounts like as Fischer's (2015) and Thomson's were published, the Indian began to appear in popular culture (2015). This research operates under

the premise that indigenous knowledge is fundamental to the tenacity and pride with which Indians hold onto their cultural traditions. This study, as an implication of the indigenous knowledge of the Indian communities, may offer lessons on how the best of traditional values can be blended with modern values to create an inclusive and effective approach to contemporary needs and challenges, which is one of the goals of education in India.

As Dei (2020) argues, knowing the nature of indigenous knowledge and how it differs from that of non-indigenous peoples is crucial for deciding how it can be applied. Knowing what Indigenous Knowledge is and how it is acquired is crucial if it is to be put to use in the present-day Indian society. The stated goal of formal education in India is to preserve and develop the diverse indigenous cultures, and this goal presumes that the nature and value of the IK underlying these cultures is well understood. However, Indigenous Knowledge is deemed important enough to investigate in this study.

It is estimated by the International Labor Organization (ILO) that there are millions of people of indigenous origins spread over a wide variety of countries. All of these communities have its own distinct characteristics because of where they call home (ILO 2015). For the people who created this system, Indigenous Knowledge is essential to their own survival. According to Granier (2018), indigenous knowledge is inherently dynamic since it is a cumulative system that reflects the experiences of past generations, as well as the thorough observations and trial-and-error experiments of the present. The constant influx of fresh information gives it a lively quality. As a result, indigenous knowledge is a system that generates new ideas organically through the incorporation and modification of foreign knowledge. The Indian community is included among these communities, and the characteristics of their indigenous knowledge are consistent with those described by Granier (2018).

Memory and practice are the repositories of indigenous Indian knowledge. It manifests itself in the form of myths, legends, rituals, local languages, flora, fauna, plant species, and animal breeds. For the Indian, their indigenous knowledge encompasses all the skills they've honed over time for managing their community, economy, religion, and environment. There is no one way to communicate indigenous wisdom, but rather it is reflected through the animals and cattle that people raise. However, much Indigenous knowledge, ways of knowing, and worldview remain intact and practiced in an indigenous setting among the Elders in the Indian Indigenous community. There is a growing need, according to the study, to recognize the contributions that Indian Indigenous knowledge can make to modern understanding in fields as diverse as environmental improvement, resource and wildlife management, meteorology, biology, medicine, and even fundamental human behavior and pedagogical methods.

The indigenous Indians' knowledge is oriented on life and is therefore vibrant and ever-changing. Indigenous knowledge (IK) has sometimes been defined as environmental expertise; however, some academics contend that IK is cultural expertise in its broadest sense, encompassing the social, political, economic, and spiritual facets of a community's way of life (Emery,2017). But when talking about IK in the context of Indian people, the emphasis is on the customs and laws as the principle that ties life together. No matter how you slice it, religion is a crucial aspect of Indigenous

Knowledge (IK). As a result, religious beliefs affect various areas of the Indian community's traditional knowledge.

There is a pressing need to bolster efforts that find synergies between the modern iteration of formal Western knowledge that was initially designed to serve the educational needs of the Indian community and indigenous knowledge that is rooted in the life of the Indian as an example of an indigenous community. In spite of the fact that Odora-Hoppers (2022) acknowledges the necessity of interdependence between the various components of this complex body of knowledge, she maintains that these systems are often separated in practice. This colonial bias against IK, which holds that it cannot effect the necessary change, has hampered many attempts to bridge the gap between two cultural systems. If we think as the western perspective of knowledge as the Master, then IK is the subject, and from that perspective, the western perspective of knowledge finds nothing of value in it. Formal education, both in theory and practice, reflects and perpetuates this disregard for Indigenous Knowledge.

Statement of the Problem

Among the goals of Indian education is to foster an appreciation for and understanding of India's many cultural traditions. A people's culture encompasses their entire way of life. The term "culture" encompasses both tangible and intangible aspects of a society, such as cuisine, clothing, and housing. There is constant change in cultural norms. It engages with other cultures, adopts elements from them, and is influenced by them. This means that both indigenous and imported features can be found in India's many and varied cultural traditions. The native perspective on culture is the subject of this analysis. Assuming that the nature and importance of indigenous aspects of India's different cultures are acknowledged and accepted in educational theory and practice is essential to achieving the aforementioned educational goal. It also presumes that the formal education system as it is presently constituted and implemented in India is successful in capturing and cultivating indigenous wisdom. The study's author argues that these presumptions are incorrect. Evidently, groups that are more committed to their culture and indigenous knowledge are less likely to embrace formal education (Rigby, 2015). Moreover, Serone (2016) contends that communities and, often, individuals who actively embrace formal education tend to be apathetic to, hostile to, or even unaware of their indigenous knowledge and culture. To the contrary of what is claimed in the aims and goals of education in India, this study claims that formal education actually serves to distance people from their own culture. By doing so, we keep alive the colonial bias against IK in favor of WK. Examining IK to determine its nature and worth and define its complementary function in formal education is one strategy for resolving this issue. The purpose of this investigation was to examine this issue by focusing on the Indian population.

Theoretical Review

Cultural Synergism

Cultural synergism is as mean between relativism and universalism. Universalism asserts that intrinsically, everyone is endowed with certain entitlements merely by reason of being human, and that such rights should be universal to the extent of their nature. Such entitlements can exist as shared norms of actual human values. In this context, Western knowledge is taken as the carrier of

these entitlements and it comes basically as the culture of the Western people. On the other hand, cultural relativism is the view that no culture is superior to any other culture in terms of their system of knowledge of values, education, law, politics or religion. It is the philosophical notion that all cultural beliefs are equally valid and that truth itself is relative, depending on the cultural environment.

This study attempted to show that universalism and scientific behaviorism are epistemologically related. Social scientists assume that there is a system of preferences which contrast each individual as having a freedom of choice (Harre, 2012). An individual ontology recognizes each individual as having a freedom of choice. In contrast to this individual ontology, cultural relativists believe that the meaning of human existence must be derived from relationships among individuals. Bell, (2021) argues that these preferences must reflect the identity of an individual in society. To assert a form of individual being that is above the society to which he or she belongs is to destroy the society through which the individual identifies him/herself. The study also observes that inculturation as the tool of evangelization is an effort to make meaning of both the Western religion as universal belief and cultural religion as a relative belief of the community (Hillman, 2017). Inculturation as a methodology in itself takes the advantage of the cultural synergy.

The philosophical ground for cultural synergism is in Friedrich Hegel's dialectic idealism. The Hegelian dialectic is a three-stage model of development that can be applied to demonstrate synergy in understanding of the reality of knowledge. The first stage is the thesis, followed by reaction to it, its counter argument, or opposite, the antithesis. From this tension between the two arises a third possibility, the synthesis, which is a new and many times better option than either the thesis or antithesis, being the integration of the two previous two stages. The synthesis is also many times greater than simply the sum of the thesis and antithesis. Thus, Hegel believed that everything in history develops through a process of change, the dialectic. The thesis has internal contradictions and inner conflicts that causes the antithesis to arise, causing on its part the synthesis to be formed. Reality is not static or fixed, but is in a constant historical process of change and development. The study attempts to show that knowledge presented as western world view is not static that the antithesis of indigenous aspect will result to a synthesis that the study wants to achieve as the synergy.

This practice and approach can also be observed in Holism. Holism is the tendency in nature, the cosmos and reality in general, to form wholes that are greater than the sum of their parts as argued by Heraclitus of Ephesus (c.535BC - c. 475BC). It is the idea that systems (physical, biological, chemical, social, economic, mental, linguistic,) and their properties should be viewed as wholes, not as collections of parts. This often includes the view that systems function as wholes and that their functioning cannot be fully understood solely in terms of their component parts (Auyang 2019). It is therefore important to note that those who hold to cultural relativism believe that education is completely relative to the individual within a cultural identity. The divergence of these views kills the would-be possible consensus between the two theories, while the convergence creates the synergy.

Indigenous Indian have sustained their unique worldviews and associated knowledge for ages, even in times of transformative forces that are beyond their control. The depth of Indigenous knowledge rooted in long practice offers lessons that can benefit educators and scientist. There exists an opportunity to utilize cultural synergism between Indigenous and Western knowledge as the point for fostering a new functional connectivity between the two systems. These two complex knowledge systems, while functionally interdependent, are currently largely disconnected but if appropriately explicated, can serve and strengthen the quality of educational experiences for indigenous Indian.

Empirical Review

Onyancha (2022) investigated the difference between indigenous knowledge, traditional knowledge and local knowledge. This study aims to explore the similarities and differences between the three concepts that are commonly used to describe the knowledge of traditional and indigenous communities, namely, indigenous knowledge, traditional knowledge and local knowledge, with a view to contributing to the discourse on conceptualizing indigenous knowledge. Data was extracted from the Scopus database using the main terms that are used for indigenous knowledge, namely, “indigenous knowledge” (IK), “traditional knowledge” (TK) and “local knowledge” (LK). Data were analyzed according to the themes drawn from the objectives of the study, using the VOSviewer software and the analytical tool embedded in the Scopus database. The findings indicate that whereas IK and LK are older concepts than TK, TK has become more visible in the literature than the former; there is minimal overlap in the use of the labels in the literature; the three labels’ literature is largely domiciled in the social sciences; and that there were variations in representation of the labels according to countries and geographic regions. The author avers that the scatter of literature on the knowledge of traditional and indigenous peoples under the three main labels has huge implications on the accessibility and use the literature by stakeholders including researchers, students, information and knowledge managers and information service providers. This study demonstrates the application of informetric beyond is traditional use to assess trends, nature and types of research patterns and mathematical modeling of information patterns to encompass the definition of the scope of concepts as covered in the literature.

Serdyukov (2017) investigated innovation in education. The purpose of this paper was to present an analytical review of the educational innovation field in the USA. It outlines classification of innovations, discusses the hurdles to innovation, and offers ways to increase the scale and rate of innovation-based transformations in the education system. The paper adopted literature survey and author research as a mode of data collection. The results revealed that the US education badly needs effective innovations of scale that can help produce the needed high-quality learning outcomes across the system. The primary focus of educational innovations should be on teaching and learning theory and practice, as well as on the learner, parents, community, society, and its culture. Technology applications need a solid theoretical foundation based on purposeful, systemic research, and a sound pedagogy. One of the critical areas of research and innovation can be cost and time efficiency of the learning. Several practical recommendations stem out of this paper: how to create a base for large-scale innovations and their implementation; how to increase effectiveness

of technology innovations in education, particularly online learning; how to raise time and cost efficiency of education.

Dufva & Ahlqvist (2015) investigated knowledge creation dynamics in foresight. A typical foresight process involves stakeholders exploring the futures and interpreting the results to present actions. In other words, participants create knowledge about the future. Interaction between the participants is a key ingredient of foresight, yet this dynamic interaction has rarely been studied from the perspective of knowledge creation. In this paper, the study aim to fill this gap by looking at how, and through what kinds of dynamics, knowledge is created in a foresight workshop; how it is manifested; and what are the special characteristics of futures knowledge. The study developed a typology of knowledge in foresight workshops, and construct an exploratory methodological approach for analyzing the knowledge creation dynamics in transcribed workshop discussions. Based on the results from the analysis of two workshop discussions, the study argued that futures knowledge is founded on the knowledge base formed by the participants and new knowledge is created both through cumulative discussion flow and revelatory statements which reframe the discussion or challenge implicit assumptions. It was argued that the typology of knowledge as well as the exploratory method aid in understanding futures expertise and support the planning of foresight processes.

Chittaro & Buttussi (2015) assessed the state of traditional knowledge at national level. Traditional practices of Indigenous Peoples support the sustainable management of a quarter of the global land area. Yet their traditional knowledge is declining. To date, there has been insufficient focus on the development of participatory and evidence-based processes for assessing the state of traditional knowledge at national levels. The study used traditional knowledge indicators and participatory video to evaluate the state of traditional knowledge within three Indigenous groups in Guyana. The study found that traditional knowledge is perceived to be 'stable' and responding and adapting to a diverse set of environmental factors and new circumstances. There are differences amongst Indigenous groups, but also commonalities, which help identify areas of intervention and point towards developing shared and collective narratives at the national level to feed into policy making. The findings have critical implications for the ways in which traditional knowledge should be researched, measured and safeguarded.

METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low-cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

RESULTS

The results were grouped into various research gap categories namely as conceptual, contextual, and geographical.

Conceptual Gaps

Studies by Onyancha (2022), Serdyukov (2017), Dufva & Ahlqvist (2015), Chittaro & Buttussi (2015) had conceptual framework gap. The indigenous knowledge of the Indian population and its consequences for education in India were not established in any of the aforementioned research. The implications for educational system in India were not made obvious in the study. Therefore, the purpose of this research is to fill in these gaps in our understanding.

Contextual and Geographical Gap

Studies by Onyancha (2022), Serdyukov (2017), Dufva & Ahlqvist (2015), Chittaro & Buttussi (2015) had geographical gap because they were not conducted in India. This implies that the results may be inapplicable in India since the indigenous knowledge of India and other countries differ. The current study seeks to address this gap.

CONCLUSION AND RECOMMENDATIONS

This study is an attempt towards creating awareness about the nature and value of indigenous knowledge and cultures. As such the findings have the potential to contribute towards the achievement of the preservation and development of India's varied cultures which are one of the aims of education in India.

The findings of this study are useful in stimulating debate on educational reform in India. By focusing attention on indigenous knowledge and cultures and seeking synergistic inclusion into formal education, the findings of this can be used to make education inclusive, attractive and meaningful to indigenous people of India.

Based on their findings, the authors conclude that schools should actively seek out and include cultural diversity. India's educational system, in particular, should include both indigenous and imported (Western and other) cultural components that contribute to improved human flourishing. Positive and tried indigenous elements, such as democratic values and leadership, a sustainable relationship with the environment, innovative human-wildlife conflict resolution mechanisms, and the instillation of a sense of responsibility, care, and service towards society, would all contribute to the success of such an approach.

REFERENCES

- Agrawal, A., (2015) Dismantling the divide between indigenous and scientific knowledge. *Development and Change*, 26, 413-439. Claremont, South Africa: New Africa Books.
- Chittaro, L., & Buttussi, F. (2015). Assessing knowledge retention of an immersive serious game vs. a traditional education method in aviation safety. *IEEE transactions on visualization and computer graphics*, 21(4), 529-538.
- Dei, G. J. S., Hall, B. L. and Rosenberg, G. D (eds.) (2020) *Indigenous Knowledge in Global Contexts: Multiple Readings of Our World*. Toronto: University of Toronto Press.
- Dufva, M., & Ahlqvist, T. (2015). Knowledge creation dynamics in foresight: A knowledge typology and exploratory method to analyse foresight workshops. *Technological Forecasting and Social Change*, 94, 251-268.
- Emery, Alan R. And Associates (2017). *Guidelines for Environmental Assessments and Traditional Knowledge*, Knowledge of The World Council Of Indigenous.
- Ermine, W. (2015). "Aboriginal Epistemology" in Baptite, Marie and Jean Barman (eds.) *First Nations Education In Canada: The Circle Unfolds*. Vancouver, UBC Press
- Fischer, G.A. (2015). Dr Fischer,s Journey in Masai. *Proceedings of the Royal Geographical Society* vi:76-83.
- Granier, L. (2018). *Working With Indigenous Knowledge – A Guide for Researchers*. International Development Research Center: Ottawa ON, Canada. IDRC: Ottawa, Canada.
- International Labor Organisation (ILO) (2019). *International Labor*
- Johnson, M. (2022). *Lore: Capturing Traditional Environment Knowledge*.
- Mott, V. (2015). *The Role of Culture in Continuing Professional Education: An Implication of Epistemology and Reflection Among Native American Women*. Research paper, University of Georgia and Kellog Foundation, Athens, Georgia.
- Odora-Hoppers, (2022) *Indigenous Knowledge and the Integration of Knowledge Systems: Toward A Philosophy of Articulation*.
- Ogawa,M. (2015). Science education in a multiscience perspective, Science opportunities, uncertainties. *Configurations* 2.2, 301-330. Organization Convention on indigenous and Tribal peoples in Independent Countries. June (referred to as Convention 169). Geneva: ILO.
- Onyancha, O. B. (2022). Indigenous knowledge, traditional knowledge and local knowledge: what is the difference? An informetrics perspective. *Global Knowledge, Memory and Communication*, (ahead-of-print).
- Rigby, P. (2015). *Research and development in East Africa Pastoral Societies'*

- Semali , L.M., and Kincheloe, J.L. (eds.) (2019). What is Indigenous Knowledge? Voices from the Academy. Falmer Press, New York and London.
- Semali, L. (2019) Community as Classroom: Dilemmas of Valuing African
- Serdyukov, P. (2017). Innovation in education: what works, what doesn't, and what to do about it?. *Journal of research in innovative teaching & learning*, 10(1), 4-33.
- Serone, O.S. (2016) "Pastoralists and Education: School participation and social Change among the Indian" Unpublished Ph.D Dissertation, McGill University, Montreal.
- Spear, T. (2015). "Introduction" in Being Indian ed. Spear, T., & Waller, R. Ohio University Press, Mkuki wa nyota, James Carrey and EAEP.
- Thomson, J. (2015). Through Masai land, London and Rivington.
- Wa Thiong'o, N. (2016). Decolonising The Mind: The Politics of Language in African Literature. London: James Curry; Nairobi Kenya: Heinemann; New Hampshire: Heinemann.
- Warren, M. (2021) Conservation of indigenous knowledge serves conservations of biodiversity. In *Alternative Journal*, 23, 26-7. Website: <http://idrc.ca/plaw/11e-IK.html>
- Wright, R., (2022) *Stolen Continents – "The New World Through Indian Eyes*. Toronto: Penguin Books, Canada Ltd.