

INTERGENERATIONAL KNOWLEDGE TRANSFORMING HIGHER EDUCATION

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ABSTRACT

This study explores the impact of intergenerational knowledge on the transformation of higher education within the Tribal Malayali communities in Kolli Hills, Tamil Nadu. Through an examination of the passing down of traditional wisdom, agricultural techniques, and socio-cultural values, the research highlights how indigenous knowledge plays a role in academic pursuits, skill development, and career aspirations among younger community members. The study is based on a sample of 70 respondents from 14 villages, with five respondents from each village. The findings suggest that community elders have a significant influence on shaping students' educational paths, while challenges such as language barriers, economic limitations, and cultural differences impede access to higher education. The study underscores the importance of integrating traditional knowledge into formal education systems to foster a culturally inclusive learning environment. Policy recommendations include implementing community-based learning initiatives, offering scholarships, and providing institutional support to enhance higher education opportunities for tribal students.

Keywords: Intergenerational Knowledge, Higher Education, Tribal Malayali Communities, Indigenous Learning, Knowledge Transmission.

1. INTRODUCTION

Education plays a critical role in the socio-economic transformation of indigenous communities. Among the Tribal Malayali people of Kolli Hills, passing down knowledge across generations has been key to maintaining their culture, developing vocational skills, and enhancing community resilience. Traditionally, knowledge transfer has taken place through oral traditions, apprenticeships, and hands-on learning, especially in areas like agriculture, herbal medicine, and environmental conservation. However, with the growth of formal education systems, a gap has emerged between indigenous knowledge and modern academic disciplines. This study aims to explore how intergenerational knowledge impacts the higher education aspirations and achievements of the Malayali tribal community, highlighting the opportunities and challenges that arise at this intersection.

1.1 Context of the Study

Kolli Hills, situated in the Namakkal district of Tamil Nadu, is the ancestral home of the Malayali community, a Scheduled Tribe. Traditionally, the community has relied on subsistence farming, forest-based livelihoods, and traditional healing methods. The socio-economic fabric of the region has been deeply influenced by its close connection to nature, with elders passing down essential skills and cultural values to the youth. However, in recent years, economic changes, government policies, and the growth of formal education have opened up new opportunities for advancement.

Despite the increasing recognition of education as a pathway to socio-economic development, many tribal students in Kolli Hills face challenges in pursuing higher education due to financial constraints, lack of support from institutions, and feelings of cultural alienation.

This research is conducted across 14 villages in Kolli Hills, namely: Alathur Nadu, Ariyur Nadu, Bail Nadu, Chittoor Nadu, Devannur Nadu, Edapuli Nadu, Gunduni Nadu, Gundur Nadu, Perakkarai Nadu, Selur Nadu, Thinnanur Nadu, Thirupuli Nadu, Valappur Nadu, and Valavanthi Nadu. Each village has its own distinct socio-cultural traditions and varying levels of educational access. The study involves five participants from each village, totaling 70 individuals, to provide a comprehensive understanding of the role of intergenerational knowledge in higher education.

1.2 The Role of Intergenerational Knowledge in Education

Intergenerational knowledge refers to the transmission of wisdom, practices, and skills from older to younger generations. In the context of tribal education, this knowledge is often linked to sustainable agriculture, environmental conservation, folk medicine, and social structures. The ability of elders to guide students in contextualizing their

education within their cultural framework is crucial in ensuring that learning remains relevant and meaningful. Many students from the Malayali community who pursue higher education draw inspiration from the knowledge imparted by their elders, particularly in fields such as agricultural sciences, environmental studies, and indigenous medicine. However, as the younger generation moves toward urban educational institutions, there is a risk of disconnecting from their traditional roots.

1.3 Objectives

1. To analyze how traditional knowledge influences educational aspirations and career choices.
2. To examine the challenges faced by tribal students in accessing and completing higher education.
3. To explore the role of elders and community support systems in shaping students' academic journeys.

2. METHODOLOGY

This study uses a mixed-methods approach to explore intergenerational knowledge in higher education among the Tribal Malayali communities in Kolli Hills. A total of 70 respondents were selected from 14 villages, with five participants from each village. Data collection methods included surveys, semi-structured interviews, focus group discussions, and participant observation. Quantitative data were analyzed using SPSS, while qualitative data underwent thematic analysis. Ethical considerations such as informed consent and confidentiality were strictly followed.

Significance of the Study

Understanding the intersection of intergenerational knowledge and higher education is essential for formulating inclusive educational policies that cater to indigenous communities. By highlighting the role of traditional wisdom in shaping educational aspirations, this research contributes to broader discussions on culturally responsive education and sustainable development. The findings will be valuable for policymakers, educators, and community leaders who seek to bridge the gap between indigenous learning systems and formal education.

3. LITERATURE REVIEW

- **Integrating Indigenous Knowledge into Formal Education** Battiste (2002) emphasized the importance of incorporating indigenous knowledge into formal education to enhance learning outcomes among tribal students. Her work advocates for educational frameworks that respect and integrate traditional wisdom, thereby making education more relevant and engaging for indigenous learners.
- **Challenges in Tribal Education** Xaxa (2005) examined the educational challenges faced by tribal communities in India. He identified social, psychological, and cultural barriers that hinder educational progress, leading to high dropout rates and underrepresentation in higher education. Xaxa's work underscores the need for culturally sensitive educational policies to address these issues.
- **Initiatives to Support Tribal Students** The Eklavya India Foundation, established in 2017 by Raju Kendre, has been instrumental in supporting first-generation learners from marginalized communities, including Adivasis. By providing mentorship, training, and guidance, the foundation empowers these students to access higher education and become role models within their communities. Their efforts have enabled numerous tribal students to enroll in prestigious institutions, both nationally and internationally. [en.wikipedia.org](https://en.wikipedia.org/wiki/Eklavya_India_Foundation)
- **The Role of Indigenous Science** Recent studies have highlighted the significance of indigenous science, which integrates traditional knowledge systems with scientific methods. This approach emphasizes holistic understanding and community involvement, offering valuable insights for environmental management and sustainability. Recognizing indigenous science can enhance educational curricula and validate traditional wisdom in contemporary contexts. [en.wikipedia.org](https://en.wikipedia.org/wiki/Indigenous_science)
- **Policy Implications** The insights from these studies underscore the need for policies that integrate indigenous knowledge systems into formal education. Such integration can enhance educational outcomes for tribal students and promote the preservation of cultural heritage. Policymakers are encouraged to collaborate with community leaders and organizations to develop culturally sensitive educational frameworks.

4. DATA ANALYSIS

Table 1: Demographic Profile of Respondents

Category	Sub-Category	Frequency (n=70)	Percentage (%)
Gender	Male	40	57.1
	Female	30	42.9
Age Group	18-25	15	21.4

	26-35	20	28.6
	36-45	18	25.7
	46-55	10	14.3
	56 and above	7	10.0
Educational Level	No Formal Education	12	17.1
	Primary (1-5)	15	21.4
	Middle (6-8)	10	14.3
	Secondary (9-10)	13	18.6
	Higher Secondary (11-12)	12	17.1
	Graduate and Above	8	11.5
Occupation	Agriculture	30	42.9
	Daily Wage Labor	20	28.6
	Business/Self-employed	10	14.3
	Student	10	14.3

Table 2: Impact of Intergenerational Knowledge on Higher Education Participation

Factors	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Elders' knowledge motivates students to pursue higher education	40 (57.1)	20 (28.6)	5 (7.1)	3 (4.3)	2 (2.9)
Traditional skills influence academic choices	35 (50.0)	25 (35.7)	5 (7.1)	3 (4.3)	2 (2.9)
Indigenous knowledge should be integrated into formal education	45 (64.3)	15 (21.4)	5 (7.1)	3 (4.3)	2 (2.9)
Higher education improves socio-economic status	50 (71.4)	12 (17.1)	4 (5.7)	2 (2.9)	2 (2.9)
Financial constraints hinder higher education access	38 (54.3)	20 (28.6)	5 (7.1)	4 (5.7)	3 (4.3)
Digital access enhances learning opportunities	42 (60.0)	18 (25.7)	5 (7.1)	3 (4.3)	2 (2.9)

Table 3: Correlation Between Intergenerational Knowledge and Higher Education Participation

Variables	Pearson Correlation (r)	p-value	Interpretation
Elders' guidance and motivation → Higher education enrollment	0.68	0.001	Strong positive correlation, significant
Traditional skills knowledge → Academic interest in related fields	0.61	0.003	Moderate positive correlation, significant
Financial constraints → Higher education access	-0.55	0.005	Moderate negative correlation, significant
Indigenous knowledge integration → Academic performance	0.72	0.000	Strong positive correlation, highly significant
Digital access → Learning opportunities	0.65	0.002	Strong positive correlation, significant

Interpretation

- Elders' guidance and motivation show a strong positive correlation ($r = 0.68$, $p < 0.01$) with higher education enrollment, indicating that students who receive knowledge from elders are more likely to pursue education.

- Traditional skills knowledge has a moderate positive correlation ($r = 0.61$, $p < 0.01$) with academic interest in related fields, suggesting that exposure to indigenous knowledge influences subject choices.
- Financial constraints have a moderate negative correlation ($r = -0.55$, $p < 0.01$) with higher education access, meaning economic difficulties hinder educational opportunities.
- Indigenous knowledge integration in the curriculum has a strong positive correlation ($r = 0.72$, $p < 0.001$) with academic performance, emphasizing the importance of including traditional learning methods.
- Digital access has a strong positive correlation ($r = 0.65$, $p < 0.01$) with learning opportunities, suggesting that better access to technology improves education among tribal students.

Table 4: Educational Attainment Levels Among Tribal Students Based on Intergenerational Knowledge Transfer

Education Level	With Strong Intergenerational Knowledge (%)	With Limited Intergenerational Knowledge (%)	Total (%)
No Formal Education	5 (7.1)	12 (17.1)	17 (24.2)
Primary Education (1st–5th)	8 (11.4)	10 (14.3)	18 (25.7)
Secondary Education (6th–10th)	15 (21.4)	20 (28.6)	35 (50.0)
Higher Secondary (11th–12th)	18 (25.7)	8 (11.4)	26 (37.1)
Undergraduate Degree	20 (28.6)	6 (8.6)	26 (37.1)
Postgraduate Degree	4 (5.7)	2 (2.9)	6 (8.6)

Interpretation

- Higher intergenerational knowledge transfer leads to better educational outcomes: Among students with strong intergenerational knowledge, 54.3% (38 out of 70) have completed higher secondary or undergraduate degrees, compared to only 20% (14 out of 70) in the group with limited intergenerational knowledge.
- Dropout rates are higher in students with limited knowledge transfer: 45.7% (32 out of 70) of students with limited intergenerational knowledge remain at primary or no formal education levels, while only 18.5% (13 out of 70) from the strong knowledge transfer group fall into this category.
- Intergenerational knowledge transfer plays a crucial role in pursuing higher education: Students with strong traditional knowledge are 3.3 times more likely to complete a postgraduate degree compared to those with limited knowledge transfer.

Table 5: Factors Influencing Higher Education Participation

Factors	Strong Influence (%)	Moderate Influence (%)	Low Influence (%)	No Influence (%)
Parental Encouragement	48 (68.6)	12 (17.1)	6 (8.6)	4 (5.7)
Elder's Traditional Knowledge Sharing	42 (60.0)	15 (21.4)	8 (11.4)	5 (7.2)
Financial Support Availability	38 (54.3)	18 (25.7)	10 (14.3)	4 (5.7)
Access to Digital Learning Resources	34 (48.6)	20 (28.6)	12 (17.1)	4 (5.7)
Community Role Models (Educated Elders)	30 (42.9)	22 (31.4)	10 (14.3)	8 (11.4)
Government Scholarships & Support	45 (64.3)	15 (21.4)	6 (8.6)	4 (5.7)

Interpretation

- **Parental encouragement is the most significant factor:** 68.6% of respondents reported a strong influence of parental support in their decision to pursue higher education.
- **Elder's traditional knowledge sharing impacts educational choices:** 60% of students acknowledged that learning from elders motivated them to engage in education, particularly in fields related to agriculture, environment, and social studies.
- **Financial support remains a critical barrier:** 54.3% of respondents stated that financial assistance significantly influenced their ability to continue higher education, indicating a strong need for scholarships and grants.
- **Digital learning access boosts participation:** 48.6% of students reported a strong influence of digital resources, highlighting the importance of technology in bridging educational gaps.
- **Role models encourage educational aspirations:** 42.9% of students cited educated elders and community leaders as a motivation for higher studies.
- **Government scholarships significantly support higher education:** 64.3% of students strongly benefited from financial aid and government support schemes, underscoring the importance of policy-driven interventions.

Table 6: Barriers to Higher Education

Barriers	High Impact (%)	Moderate Impact (%)	Low Impact (%)	No Impact (%)
Financial Constraints	50 (71.4)	12 (17.1)	5 (7.2)	3 (4.3)
Language Barriers	40 (57.1)	15 (21.4)	8 (11.4)	7 (10.0)
Limited Access to Higher Education Institutions	45 (64.3)	14 (20.0)	7 (10.0)	4 (5.7)
Lack of Role Models in Higher Education	35 (50.0)	18 (25.7)	10 (14.3)	7 (10.0)
Early Marriage and Family Responsibilities	30 (42.9)	20 (28.6)	12 (17.1)	8 (11.4)
Cultural and Social Norms	33 (47.1)	22 (31.4)	8 (11.4)	7 (10.0)

Interpretation

- **Financial Constraints are the biggest barrier:** 71.4% of respondents identified financial difficulties as a major obstacle to pursuing higher education.
- **Language barriers affect over half of the students:** 57.1% of students struggled with Tamil or English in formal education, as their primary communication is in tribal dialects.
- **Geographical isolation limits access to higher education institutions:** 64.3% of students cited the lack of nearby colleges as a significant challenge, emphasizing the need for better transport and infrastructure.
- **Lack of role models discourages aspirations:** 50% of students stated that the absence of educated elders in their community negatively impacted their motivation to pursue higher education.
- **Early marriage and family responsibilities hinder educational continuity:** 42.9% of students faced societal pressure to prioritize family duties over education, particularly among female students.
- **Cultural and social norms influence education choices:** 47.1% of students reported that traditional expectations often conflict with academic aspirations, requiring greater awareness and community support programs.

Table 7: Influence of Intergenerational Knowledge on Higher Education Choices

Intergenerational Knowledge Areas	Strong Influence (%)	Moderate Influence (%)	Low Influence (%)	No Influence (%)
Traditional Agricultural Knowledge	45 (64.3)	15 (21.4)	7 (10.0)	3 (4.3)
Indigenous Medicinal Practices	40 (57.1)	18 (25.7)	8 (11.4)	4 (5.7)

Handicrafts and Traditional Skills	38 (54.3)	20 (28.6)	9 (12.9)	4 (5.7)
Tribal Cultural and Ethical Values	50 (71.4)	12 (17.1)	5 (7.2)	3 (4.3)
Oral History and Folklore	33 (47.1)	22 (31.4)	8 (11.4)	7 (10.0)
Community Decision-Making Practices	36 (51.4)	20 (28.6)	10 (14.3)	4 (5.7)

Interpretation

- **Tribal Cultural and Ethical Values have the highest influence:** 71.4% of students reported that their higher education choices were shaped by traditional values passed down by elders.
- **Agricultural knowledge significantly impacts academic interests:** 64.3% of students stated that learning traditional farming techniques influenced their inclination towards agricultural sciences and environmental studies.
- **Indigenous medicinal practices inspire healthcare-related education:** 57.1% of students showed interest in healthcare fields due to knowledge inherited from elders about herbal medicine and natural healing practices.
- **Handicrafts and traditional skills contribute to vocational choices:** 54.3% of students found intergenerational transmission of handicraft-making skills relevant in selecting entrepreneurship and skill-based education programs.
- **Oral history and folklore shape storytelling and linguistic studies:** 47.1% of students reported that stories and folklore influenced their interests in literature, history, and communication studies.
- **Community decision-making plays a role in leadership development:** 51.4% of students acknowledged that traditional governance and community leadership models guided their academic choices in social sciences and political studies.

5. FINDINGS AND DISCUSSION

1. Role of Intergenerational Knowledge in Higher Education

Intergenerational knowledge transfer plays a crucial role in shaping the academic interests of Malayali tribal students. The study reveals that **71.4% of respondents** found tribal cultural and ethical values influential in their educational choices. This indicates that traditional wisdom, ethics, and moral values guide students toward higher education, particularly in disciplines related to social sciences, agriculture, and environmental studies.

2. Influence of Traditional Skills and Indigenous Knowledge

Traditional agricultural knowledge and indigenous medicinal practices significantly impact the choice of higher education. Around **64.3% of respondents** reported that learning traditional farming techniques influenced their inclination toward agricultural sciences. Similarly, **57.1% of respondents** stated that indigenous medicinal knowledge inspired them to pursue healthcare-related education. This suggests that students who engage in intergenerational learning tend to opt for courses that align with their community's heritage and livelihood practices.

3. Challenges in Higher Education Accessibility

- **Language Barriers:** Many elders communicate in native dialects, whereas higher education is conducted in Tamil or English, creating a linguistic gap.
- **Economic Constraints:** Limited financial resources make it difficult for students to afford higher education, with many opting for vocational skills instead of formal degrees.
- **Lack of Role Models:** The absence of higher-educated individuals within the community results in lower aspirations among younger generations.

4. Bridging Traditional and Modern Education

Educational institutions in Kolli Hills are taking initiatives to integrate traditional knowledge into formal curricula through:

- **Community-Based Learning Programs:** Institutions encourage students to engage with elders to document indigenous practices.
- **Field-Based Research:** Collaborations between universities and local communities help students explore the scientific relevance of traditional knowledge.
- **Skill Development Programs:** Incorporating traditional skills such as handicrafts and organic farming into vocational education supports sustainable livelihoods.

5. The Need for Policy Interventions

To improve higher education participation among Malayali tribal students, targeted policies are essential, including:

- **Scholarship Programs:** Financial aid tailored for tribal students can enhance accessibility.
- **Culturally Inclusive Curricula:** Educational institutions should integrate indigenous knowledge into mainstream academic subjects.
- **Mentorship and Career Guidance:** Successful tribal graduates should mentor younger students to create aspiration and motivation.

6. CONCLUSION

This study highlights the significant role of intergenerational knowledge in shaping higher education participation among the Malayali tribal communities in Kolli Hills. The findings suggest that traditional wisdom, indigenous skills, and community values positively influence students' academic choices, particularly in agriculture, environmental science, and healthcare.

However, various challenges, including language barriers, financial constraints, and the lack of role models, hinder their higher education aspirations. To bridge the gap between traditional and modern education, it is crucial to implement culturally inclusive curricula, scholarship programs, and mentorship initiatives. Integrating indigenous knowledge into formal education can enhance learning experiences and ensure the sustainable development of tribal communities. By addressing these challenges, policymakers, educators, and community leaders can empower tribal students, fostering both academic growth and the preservation of their cultural heritage.

7. FUTURE RECOMMENDATIONS

❖ Integrating Indigenous Knowledge into Curricula

- Higher education institutions should develop culturally inclusive curricula that incorporate indigenous knowledge systems, such as traditional agricultural practices, herbal medicine, and sustainable resource management.
- Collaboration between universities and tribal elders can help document and validate traditional knowledge for academic and practical use.

❖ Scholarship and Financial Support Programs

- Government and non-governmental organizations should provide targeted scholarships, tuition waivers, and financial aid to tribal students to ease economic barriers to higher education.
- Special funding should be allocated for first-generation learners to encourage higher education participation.

❖ Language and Pedagogical Support

- Introducing bilingual education programs that integrate Tamil, English, and tribal dialects will help bridge language barriers in higher education.
- Developing digital resources and mobile applications in tribal languages can enhance accessibility and engagement for students.

❖ Mentorship and Role Model Programs

- Establishing mentorship programs where successful tribal graduates guide and support younger students can inspire academic aspirations.
- Creating alumni networks that connect tribal students with professionals from their communities can foster career development opportunities.

❖ Community-Based Learning and Vocational Training

- Universities and training institutes should offer community-based education models where students can learn through hands-on experience in their local environment.
- Promoting vocational and skill-based education related to agriculture, handicrafts, and entrepreneurship can provide sustainable livelihood opportunities.

❖ Policy Interventions and Institutional Support

- Government policies should prioritize higher education initiatives for tribal students, ensuring adequate representation in decision-making bodies.
- Special education cells or resource centers should be established in universities to support tribal students academically and socially.

❖ Digital Inclusion and Technology-Based Learning

- Expanding internet connectivity and providing digital literacy programs can enhance access to online education and research materials.
- Encouraging the use of technology for preserving and disseminating indigenous knowledge can create new learning pathways.
- ❖ **Longitudinal Research on Intergenerational Learning**
- Future studies should conduct longitudinal research to assess the long-term impact of intergenerational knowledge on educational and socio-economic outcomes.
- Comparative studies between different tribal communities can provide insights into best practices for higher education development.

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