Information Needs and Seeking Behavior of Santal Communities in Mayurbhanj: A Comparative Study of Urban and Rural Contexts

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Abstract

This study examines the information needs and information-seeking behaviors within the Santal community in Mayurbhanj, Odisha, utilizing a comparative framework between urban and rural contexts. The study is undertaken to examine how socio-economic factors, cultural influences, and technology accessibility shape information-seeking behaviors. Statistical tools used for the study include regression analysis, chi-square test, standard deviation, and mean calculation using SPSS and MS Excel. Regression analysis will be used to estimate the influence of socio-economic factors on information access and utilization. The Chi-Square test determines the association of different types of information needs among rural and urban Santal communities. The study indicates that socio-economic factors significantly affect access to information and availability, particularly in rural areas, where individuals lack access to technology and government resources, hindering their information-seeking behavior. Digital platforms and organized information conduits are more accessible to urban Santals.

Keywords: Information Needs, Information Seeking Behaviour, Santal Communities, Technological Usage

1. Introduction

The exponential expansion of information has divided the population into two separate groups: information haves, who have a plethora of information, and information have-nots, who do not have access to enough information. Rural communities are primarily classified as those who have nothing because they struggle to get the essential information to address their needs (Mallik & Sahu, 2022).

The progress of a nation is contingent upon the adequate growth of its rural populations. The "Community Information Service (CIS)"offers relevant information to specific communities based on their information needs (Majumder, 2016). Nevertheless, it is crucial to identify the information requirements of these communities in order to comprehend the specific type of information they need prior to providing it.

In 1981, Thomas D. Wilson introduced the term information behavior as an alternative to the concept of information needs. Wilson claimed that

studying how people behave in seeking information is more practical and observable than trying to directly observe their needs (Wilson & Streatfield, 1981).

The overabundance of information, also known as information explosion or information pollution, has caused people to get confused about accessing accurate information, determining their information needs, and identifying different sources of information (Ben-Shahar, 2019). Additionally, it encompasses individual motivations in seeking information, the specific type of information being sought, and the methods and sources used to obtain the necessary knowledge (Sinha and Das, 2015).

Information-seeking behavior encompasses the activities of searching for and gathering information (Bhabadand Bagade, 2015). It involves determining the specific type of information needed and the purpose of the search, as well as employing various techniques and processes to locate and collect information from different sources (Raising, et.al., 2021).

"Information needs and information-seeking behavior" are forms of communication behavior that are undoubtedly influenced by numerous circumstances. The tribal community in India, as a developing nation, is characterized by illiteracy, poverty, starvation, sickness, and a lack of essential infrastructure consisting of roads, schools, and electricity (Clarke, et.al., 2013). The combination of specific challenges faced by tribal communities, like early marriages, inadequate income, and high dropout rates, has resulted in a lack of motivation for any kind of development initiative (Soong, et.al., 2020).

The study is crucial because the Santal Communities in Mayurbhanj have vastly different information needs and access levels. Tribal groups often confront particular socio-economic issues due to restricted information resources. Understanding Santal information needs and seeking habits is essential to eliminating these inequities and empowering them socially and economically. The study compares both rural and urban Santal communities to identify nuances in information demands and availability.

2.   Review of Literature

Review related to the information needs of Santal communities in urban and rural areas: Phiri, A., et.al., (2019) examined the information needs and challenges faced by small-scale farmers in rural areas in Mzimba North, Malawi. The results indicated that the most significant challenge encountered by smallholder farmers in rural areas was a lack of mobility, as reported by most small-scale rural farmers (76.6%, n=147).M. S. B., et.al., (2024) conducted field research using a qualitative descriptive technique. The findings demonstrated that the Ha'a Luha Ritual serves as a cultural practice, a means of communication, and an information medium for the Kemak community. Sinha, A. K., and Hazra, A. K. (2021)noted that the Santals were unable to further their development on their own. Due to illiteracy, neo-literacy, language barriers, lack of supervision, ignorance of the programs, etc., many government programs and initiatives were still underutilized. Santal communities should be informed about the numerous government efforts and encouraged to leave their isolated lives. It was also noted that while there are not numerous mass media sources accessible to the Santals, access to them was marginally better.

Review related to the information-seeking behaviors of Santal communities in urban versus rural areas. Ganesan, D., et.al., (2024) examined the healthcare-seeking behaviors and related factors of the Orang Asli populations residing in isolated mountainous regions of Peninsular Malaysia. An exhaustive survey was conducted in 11 out of 28 communities that were picked at random. Older age, income exceeding 500 Malaysian Ringgit/month, seeing disease as

serious, and proximity to a health institution were correlated with the adoption of proper healthcare-seeking behavior. Sahoo, J. R. (2017) examined media life in terms of access to and consumption of modern mass media, as well as the cultural life of the Santal people. Media and communication consumption and production differ across individuals and groups.

Review related to the impact of socio-economic factors on information access and utilization among Santal communities. Tudu, M., & Das, S. K. (2022) observed that the status of the Santal was getting better day by day. Despite the existence of issues such as unemployment, poverty, education, and lack of electricity, improved communication, social safety, and clean drinking water basic health conditions and socio-cultural connections within communities are strong. Sarkar, A. K., & Singha, S. (2019)demonstrated the connection between educational, social, economic, and cultural aspects. The main factor limiting access to better healthcare facilities was determined to be a lack of economic independence. Santals communities in the investigated areas were influenced by low incomes, poor occupational standards, and a lack of investment in maintaining their health. According to the study, the current services were insufficient and frequently applied incorrectly.

3. Objectives of the Study
- To Identify the Information Needs of Santal Communities in Urban and Rural Areas of Mayurbhanj.
- To Compare the Information Seeking Behaviors of Santal Communities in Urban versus Rural Areas
- To examine the impact of socio-economic

factors on information access and utilisation among santal Communities in Mayurbhanj Odisha.

4. Research Methodology
The research methodology involves gathering primary and secondary data in the study area of Mayurbhanj, Odisha, with a particular emphasis on Santal tribal communities. A self-made questionnaire is used to gather primary data from people who belong to santal communities. Secondary data is taken from research studies, published papers, journals, and other verified material to improve understanding of cultural concerns and to strengthen the evaluation of the topic being studied. It ensures an extensive approach to the study. A total of 385 participants will be chosen via stratified random sampling using the Cochran formula. Out of them, only 200 were selected for the final analysis since the other 185 responses were omitted because they contained incomplete and irrelevant data. MS Excel and SPSS are research tools that may be used to analyze data using statistical methods. The dependent variables in the study include measures of information availability & utilization, as well as indigenous groups' information needs.

5. Results and Discussion
This study attempts to completely analyze the relationship between socioeconomic factors & current information transmission strategies in meeting the information needs of Santal communities in Mayurbhanj, Odisha. This section contains the findings and analysis of the data.

5.1. Demographic Profile of Respondents
Table 1 displays the respondents' demographic information along with their gender, age, location, degree of education, employment status, and income level.

Table 1 - Demographic Profile of Respondents

Sl. No.	Demographic characteristics		Category of Respondents	Number % of Respondents
1.	Gender	Male	105	52.5%
		Female	95	47.5%
2.	Income level	Below Rs. 20000	109	54.5%
		Rs 20000- Rs 40000	61	30.5%
		Above Rs. 40000	30	15%
3.	Location	Urban	133	66.5%
		Rural	67	33.5%
4.	Education Level	Primary Education	29	14.5%
		Senior Secondary Education	57	28.5%
		Graduate Degree	85	42.5%
		Post graduate Degree	29	14.5%
5.	Employment Status	Employed	129	64.5%
		Unemployed	71	35.5%
6.	Age	Below 20 years	68	34%
		20 years -40 years	65	32.5%
		Above 40 years	67	33.5%

Out of 200 respondents, 52.50% of respondents are male and 47.50% of respondents are female, according to the table. In terms of respondents' income, 54.5 per cent make less than Rs. 20,000, 30.5 per cent make between Rs. 20,000 and Rs. 40,000, and 15 percent make more than Rs. 40,000. 33.5% of participants live in rural areas, whereas the majority (66.5%) reside in metropolitan areas. Regarding the respondents' educational background, of the total, 14.5% have completed elementary school, 28.5% have completed senior secondary school, 42.5% have earned a graduate degree, and 14.5% have completed postgraduate work. Regarding employment, 35.5% of people are unemployed and 64.5% of people are employed. Based on the age distribution of the participants, 34% of the respondents are under 20, 32.5% are between 20 and 40 years old, and 33.5% are over 40.

5.2.   Information Needs of Santal Communities in Urban and Rural Areas of Mayurbhanj

Objective One: To Identify the Information Needs of Santal Communities in Urban and Rural Areas of Mayurbhanj.

H1: There is a significant difference in the types of information needs between Santal Communities in urban areas and those in rural areas of Mayurbhanj.

Table 2 - Cross Tabulation

Geographical Location	Types of Information needs					Total
	Healthcare Needs	Education Needs	Agricultural Needs	Livelihood Needs	Cultural Needs	
Rural	7	4	27	17	12	67
Urban	3	5	58	25	42	133
Total	10	9	85	42	54	200

5.3. Table 2 shows the distribution of various types of information needs among Santal Communities in rural and urban areas of Mayurbhanj. Education and cultural needs are more prevalent in urban areas, while healthcare, agriculture, and livelihood are more prevalent in rural areas. It seems that Santal communities may have different objectives and encounter various obstacles depending on where they are located.

5.4. Measurement of the significant associations between geographical location and types of information needs among Santal Communities in rural and urban areas of Mayurbhanj

Table 3 shows the significant associations between geographical location and types of information needs among Santal Communities in rural and urban areas of Mayurbhanj.

Table 3 - Results of Chi-Square Test

Statements	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.580a	4	.032
Likelihood Ratio	10.319	4	.035
Linear-by-Linear Association	5.874	1	.015
N of Valid Cases	200		

 "The Pearson Chi-Square test yielded a statistic of 10.580 (p = .032), the Likelihood Ratio test produced a statistic of 10.319 (p = .035), and the Linear-by-Linear Association test resulted in a statistic of 5.874 (p = .015)."These results show that people in rural areas have quite different information demands than those in urban areas. It's important to take geography into account while trying to solve the Santal communities' information gap.

5.5. Compare the Information Seeking Behaviors of Santal Communities in Urban versus Rural Areas

Objective Two: To Compare the Information Seeking Behaviors of Santal Communities in Urban versus Rural Areas

H2: Santal Communities in urban areas use digital means for information-seeking more frequently than those in rural areas.

Table 4 - Independent Sample test

Independent Samples Test	Location	N	Mean	Std. Deviation	Sig. 2 tailed	T	Mean Difference	Std. Error Difference
Digital means for information-seeking	Rural	67	14.5672	2.96047	0.036	2.112	-0.86141	0.40779
	Urban	133	15.4286	2.59453	0.045	2.022	-0.86141	0.42594

Table4 compares digital means for information-seeking between rural and urban participants. Rural participants (N=67) had a mean score of 14.5672 (SD = 2.96047), while urban participants (N=133) had a mean score of 15.4286 (SD = 2.59453). The mean difference between the two groups is -0.86141, with a standard error of difference of 0.40779 for rural and 0.42594 for urban participants. The t-test results show a statistically significant difference between the groups, with t-values of -2.112 (p = 0.036) for rural and -2.022 (p = 0.045) for urban participants. These results indicate that the urban population is significantly more likely to use digital means for information-seeking compared to the rural population.

5.6.   Impact of socio-economic factors on information access and utilisation among Santal Communities

Objective Three: To examine the impact of socio-economic factors on information access and utilisation among Santal Communities in Mayurbhanj Odisha.

H3: Socio-economic factors impact the access and utilisation of information among SantalCommunities in Mayurbhanj Odisha.

Table 5 - Regression Analysis

Objectives	Regression Weights	Beta Coefficient	R	R2	F value	T-value	P-Result	Hypotheses
Objective 1	Socioeconomic Factor > Information Access and Utilisation	-0.140		0.140	0.020	3.981	1.995	.047	Supported

Table 5 presents the results of the regression analysis conducted to determine whether socio-economic factors have a substantial impact on information access and utilization. Information access and use are the "dependent variable" used to evaluate the hypothesis. The impact of socio-economic determinants on information access and use is demonstrated by $F = 3.981$, $p<0.05$. ($p<.005$, $b = -0.140$). Furthermore, an alternate hypothesis is accepted based on the Information Access and Utilization $R2 = 0.020$.

6. Discussion

Individuals in Odisha's tribal communities exhibit diverse information needs and seeking behaviors, influenced by their unique sociocultural contexts (Mallik, et al. 2020; Tudu, 2023). Considering this, the study explored the "information needs and seeking behavior in Santal Communities in Mayurbhanj: a comparative approach between urban and rural areas."Through an accurate method of data collection and analysis using many programs (MS Excel and SPSS 26) and methodologies including regression analysis, the study's significant findings were found.

6.1. Socio-Economic Factors and Information Access

According to the regression analysis presented in Table 5, socio-economic factors significantly impact information access and utilization among Santal Communities in Mayurbhanj, Odisha ($F = 3.981$, $p < 0.05$). The beta coefficient ($b = -0.140$) and the R-squared value ($R² = 0.020$) support the concept by showing a small but significant connection between socioeconomic characteristics and information accessibility. These results are consistent with earlier studies that highlight how important socioeconomic circumstances are in determining information behavior (Tambotoh et al., 2015; Adekanye, 2014). The negative beta coefficient suggests that higher socio-economic challenges are associated with reduced information access and utilization, highlighting the need for targeted interventions to bridge this gap.

6.2. Role of Technology in Fulfilling Information Needs

The descriptive statistics in Table 4 reveal that technology, particularly mobile phones, and the internet, plays a significant role in fulfilling the information needs of tribal communities. Rural participants had a mean score of 14.5672 for using digital means for information-seeking, while urban participants had a higher mean score of 15.4286. The t-test results show a statistically significant difference between the two groups ($p < 0.05$), indicating that urban populations are significantly more likely to use digital means for information-seeking compared to rural populations. This finding suggests that technology is a crucial enabler of information access, particularly in bridging the urban-rural, corroborating studies emphasizing

the transformative impact of digital tools on information dissemination in marginalized communities (Borgatti & Cross, 2003; Frings Hessami & Oliver, 2023).

6.3. Addressing Information Needs Across Locations

Table 2 highlights the differing information needs of Santal Communities in urban versus rural areas, with rural areas showing a higher prevalence of healthcare, agricultural, and livelihood needs, while education and cultural needs are more significant in urban areas. The Chi-Square test results (Table 3) confirm these differences, indicating a significant association between geographical location and types of information needs ($p < 0.05$). This suggests that Santal communities encounter distinct challenges based on their location, and addressing these needs requires geographically tailored strategies. Urban areas may benefit from enhancing educational and cultural resources, while rural areas need more support in healthcare, agriculture, and livelihood-related information. It is essential to understand these details to create interventions that effectively close the information barrier in Santal communities..

7. Conclusion

The study explored the "information needs and seeking behavior santal communitiesin Mayurbhanj Odisha: a comparative approach between urban and rural areas," revealing significant insights into how these communities access and utilize information. The findings indicate that socio-economic factors significantly impact information access, with higher socio-economic challenges correlating with reduced information utilization. However, the results, are unique to that area and do not accurately reflect the experiences of Santal communities in other places or other indigenous groups with distinct socio-cultural contexts. In the future, its scope may be broadened to encompass additional regions and indigenous populations to enhance the

comprehension of the obstacles and opportunities in information access. Future research may investigate how developing digital tools and platforms, such as mobile applications, social networking sites, and e-governance initiatives, can enhance the spread and application of information among indigenous communities with rapid technological progress.

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