

Influence of Socio-Economic Background on Children's Foundational Literacy and Numeracy Skills: A Systematic Analysis in the Indian Context

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Abstract: Foundational Literacy and Numeracy (FLN) has emerged as a major educational priority in India because early acquisition of literacy and numeracy skills shapes the basis for lifelong learning, cognitive development, and future academic success. Despite improvements in school enrolment and policy initiatives such as the National Education Policy (NEP) 2020 and the NIPUN Bharat Mission, disparities in foundational learning continue to persist among children from different socio-economic backgrounds. The present review examines how socio-economic conditions influence children's foundational literacy and numeracy development in the Indian context. The study adopted a systematic review-based approach using secondary sources of data. Relevant literature was collected from peer-reviewed journal articles, government reports, policy documents, educational surveys, and institutional publications accessed through databases such as Google Scholar, ERIC, Scopus, SpringerLink, web of Science, ScienceDirect, and JSTOR. A total of 110 records were initially identified, of which 42 studies and policy documents published between 2020 and 2025 met the inclusion criteria and were selected for analysis. The collected literature was examined through thematic analysis to identify major socio-economic factors associated with FLN outcomes.

The review highlights a consistent association between socio-economic background and foundational learning achievement. Children from socio-economically advantaged families generally benefit from better educational resources, supportive home learning environments, and greater parental involvement, which contribute positively to literacy and numeracy development. In contrast, poverty, low parental literacy, limited learning resources, and inadequate educational support often restrict learning opportunities for disadvantaged children. Parental education, family income, occupation, and home learning practices emerged as key factors influencing children's foundational learning experiences. The review underscores the need for equitable educational opportunities, stronger parental engagement, improved learning environments, and targeted support for disadvantaged learners to achieve inclusive and sustainable FLN outcomes in India.

Keywords: Foundational Literacy, Foundational Numeracy, Foundational Literacy and Numeracy (FLN), Socio-Economic Background, Home Learning Environment, NIPUN Bharat Mission, National Education Policy 2020.

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I. INTRODUCTION

Education is widely recognized as a fundamental human right and a powerful tool for social transformation. However, the quality of learning, particularly in the foundational years, remains a major concern in developing countries like our country India. Over the past decade, India has made

substantial progress in improving access to schooling, still, learning outcomes particularly in the foundational years remain deeply concerning.

Foundational Literacy and Numeracy (FLN) focus on ensuring that children develop essential learning skills at an early stage, which are crucial for all future education. It

becomes important because many students struggle with basic learning, drop out of school, or lack strong language and mathematical abilities. The main goals of FLN are to build competence in language and mathematics and to strengthen students' basic understanding and skills. It emphasizes core abilities like listening, speaking, reading, and writing, along with developing number sense and logical thinking. In simple terms, literacy and numeracy together shape the foundation for meaningful learning (Kumar and Behera 2022). Foundational Literacy and Numeracy (FLN) has been identified as the most urgent priority of India's school education system under the National Education Policy (NEP) 2020 (Ministry of Education, 2020). Recognising the importance of early literacy and numeracy skills, the Government of India's (2020) National Education Policy (NEP) introduced a new 5 + 3 + 3 + 4 school structure. This framework emphasises early childhood care and education for children aged 3 to 8 years, covering preschool classes and Grades 1 and 2. The policy prioritises the attainment of FLN by the end of Grade 3, identifying it as an urgent national mission. To support this objective of NEP 2020, the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN BHARAT) was launched in 2021, aiming to ensure that all children aged 3 to 9 years acquire these foundational skills (MoE, 2021).

International assessments across developing countries highlight a serious learning deficit among school-going children, which has also been reflected in World Bank documents and is termed as "learning poverty" or a "learning crisis" (World Bank, 2019). This concern aligns with the global agenda of Sustainable Development Goal (SDG-4), particularly SDG 4.2, "*aims to ensure all girls and boys have access to quality early childhood development, care, and pre-primary education by 2030, preparing them for primary education*" which ensure access to quality early childhood care and pre-primary education to improve learning outcomes. Despite these efforts, the issue remains significant in India, where nearly 55% of school-going children cannot read and comprehend a short, age-appropriate text (World Bank, 2019). The National Council of Educational Research and Training (NCERT), under the aegis of the Ministry of Education (MoE), conducted the National Achievement Survey (NAS, 2021), which revealed substantial learning gaps in language and mathematics across multiple states, indicating that a significant proportion of Grade 3 learners perform below expected competency levels (MoE, 2021). Furthermore, recent national assessments indicate that a substantial proportion of children in early grades are unable to read grade-appropriate texts or solve basic arithmetic problems (ASER, 2024). These findings reinforce concerns raised in benchmarking reports and FLN assessment analyses regarding uneven foundational learning outcomes across regions and socio-economic groups (Institute for Competitiveness, 2024).

The importance of Foundational Literacy and Numeracy (FLN) in India has been strengthened through initiatives such as the National Education Policy 2020 and the NIPUN Bharat Mission, which recognize FLN as essential for educational development, social equity, and national progress

(Ghosh & Sarkar, 2025). However, the success of these initiatives is significantly influenced by socio-economic conditions that shape children's learning opportunities both at home and in school. Factors such as parental education, income, home learning environment, access to learning resources, and parental involvement strongly affect children's foundational learning outcomes (Kumar & Behera, 2022; Susperreguy et al., 2020). Additionally, inequalities related to language, gender, digital access, and infrastructure continue to influence FLN achievement across different social groups (Institute for Competitiveness, 2024; Ghosh & Sarkar, 2025).

Although policy initiatives have intensified, the achievement of foundational literacy and numeracy remains uneven across different social groups and regions of India. Educational outcomes are deeply influenced by children's socio-economic backgrounds, which shape access to learning opportunities, parental support, educational resources, language exposure, nutrition, and stimulating home environments (Kumar & Behera, 2022). Socio-economic status (SES), generally measured through indicators such as parental education, occupation, and income, significantly affects children's educational experiences and academic performance (Tahir et al., 2021). Children from economically disadvantaged households often encounter barriers including inadequate learning materials, limited parental literacy, unstable learning environments, poor access to quality schools, and insufficient academic support at home, all of which adversely affect foundational learning outcomes.

II. CONCEPTUAL FRAMEWORK

The conceptual framework of this study draws upon the integrated understanding of foundational literacy, foundational numeracy, foundational Literacy and Numeracy (FLN) and socio-economic context, synthesizing insights from empirical studies, policy documents, thematic reviews, and benchmarking reports.

➤ Foundational Literacy

Literacy is a fundamental area of learning that supports the holistic development of children beyond basic reading and writing abilities. It refers to the capacity to understand, interpret, apply, and critically respond to written texts. United Nations Sustainable Development Goal 4 strives to ensure inclusive and equitable quality education and has set a goal to achieve foundational literacy for all students by 2030.

Foundational literacy refers to the basic ability of children to read, write, comprehend, interpret, and communicate meaningfully during the early years of schooling. It includes skills such as letter recognition, phonemic awareness, vocabulary development, reading fluency, comprehension, and written expression. Foundational literacy enables children to understand classroom instruction and actively participate in the learning process. According to the Ministry of Education, foundational literacy is the capacity to read with meaning and understanding, which serves as the basis for all future learning (MoE, 2021).

Research indicates that early literacy acquisition significantly influences children's long-term academic achievement and cognitive development (Abella et al., 2024; Dong et al., 2020). Children who develop literacy skills during the foundational stage demonstrate greater confidence, improved communication abilities, and better academic performance in higher grades. Conversely, inadequate literacy acquisition at the primary level often leads to learning difficulties, reduced classroom participation, and poor educational outcomes (Bashir, 2023). The National Education Policy 2020 emphasizes that every child must attain foundational literacy by Grade III to ensure successful progression in education (MoE, 2020).

In the Indian context, foundational literacy remains a major educational challenge due to disparities in home environment, language exposure, school quality, and socio-economic conditions (ASER, 2024). Studies have shown that parental involvement, storytelling practices, and literacy-rich home environments positively influence children's reading comprehension and language development (Pandith et al., 2022; Srinivas et al., 2025). Therefore, foundational literacy is not only a school-based outcome but also a product of social, familial, and environmental influences.

➤ *Foundational Numeracy*

Numeracy is closely associated with mathematical literacy and is inherently quantitative in nature; therefore, it is often referred to as quantitative literacy. According to the Programme for International Student Assessment (PISA 2022) framework, "mathematical literacy is an individual's capacity to reason mathematically and to formulate, employ, and interpret mathematics to solve problems in a variety of real-world contexts" (OECD, 2023, p. 25).

Foundational numeracy refers to the basic mathematical understanding and numerical competencies that children acquire during the early years of education. It includes number recognition, counting, comparison, measurement, arithmetic operations, logical reasoning, problem-solving, and understanding mathematical relationships. Foundational numeracy enables children to apply mathematical concepts in daily life and supports future learning in mathematics and related disciplines (MoE, 2021).

The development of numeracy skills during early childhood is essential for cognitive growth, analytical thinking, and academic success. Studies have highlighted that children who acquire strong numeracy competencies at the foundational stage perform better in higher-level mathematics and problem-solving tasks (Abella et al., 2024; Grotlüschen et al., 2020). Conversely, weak numeracy skills often lead to persistent learning gaps and reduced confidence in academic settings (Chandra, 2024).

The NIPUN Bharat Mission recognizes foundational numeracy as a core educational priority and advocates competency-based approaches for strengthening early mathematical learning (MoE, 2021). However, children's numeracy development is influenced by several socio-economic and environmental factors, including parental

education, home learning support, access to educational materials, and quality of instruction (Kumar & Behera, 2022). Research further suggests that children from socio-economically advantaged households are more likely to receive exposure to stimulating mathematical activities and learning opportunities compared to children from disadvantaged backgrounds (Li et al., 2025).

➤ *Foundational Literacy and Numeracy (FLN)*

Foundational Literacy and Numeracy (FLN) is an integrated concept that combines the basic competencies of literacy and numeracy required for meaningful learning during the foundational stage of education. FLN serves as the cornerstone of children's educational development because the ability to read with comprehension and perform basic mathematical operations determines future academic progress and lifelong learning opportunities (MoE, 2020).

In India, FLN has become a major educational priority following the implementation of the National Education Policy 2020 and the NIPUN Bharat Mission. These initiatives aim to ensure that every child attains foundational competencies by the end of Grade III (MoE, 2021). The National Curriculum Framework for the Foundational Stage also stresses the importance of child-centered pedagogy, experiential learning, and inclusive educational practices for strengthening FLN outcomes (National Steering Committee for National Curriculum Frameworks & Kasturirangan, 2022).

Several studies have emphasized that FLN is influenced by multiple interconnected factors including home environment, parental support, teacher quality, school infrastructure, socio-economic conditions, and policy implementation (Ali & Khan, 2024; Kumar, 2023; Sthapak, 2025). Research conducted in India indicates that children from marginalized and economically weaker backgrounds often demonstrate lower FLN achievement due to inadequate educational resources, poor learning environments, and limited academic support (Mahapatra et al., 2025; Sethy & Behera, 2025).

FLN is therefore understood not merely as an educational target but as a multidimensional developmental outcome shaped by social, economic, institutional, and familial factors. Effective FLN development requires collaboration among schools, families, communities, and policymakers to ensure equitable access to meaningful learning opportunities for all children.

➤ *Socio-Economic Background and Foundational Literacy and Numeracy (FLN)*

Socio-economic background refers to the social and economic conditions in which children flourish and develop. It is generally measured through indicators such as parental education, occupation, family income, social status, housing conditions, and access to educational resources. Socio-economic background significantly influences children's educational experiences, cognitive development, and academic achievement (Tahir et al., 2021; Suna et al., 2020).

The role of socio-economic background on foundational literacy and numeracy (FLN) is very important because children's early learning experiences are deeply shaped by family and environmental conditions. Studies have consistently shown that children from higher socio-economic backgrounds tend to perform better in literacy and numeracy tasks due to access to quality education, supportive home learning environments, educational materials, and parental involvement (Vadivel et al., 2023; Uddin, 2025). Conversely, children from disadvantaged socio-economic backgrounds often face barriers such as low parental literacy, financial instability, inadequate educational resources, and limited exposure to literacy-rich environments, which negatively affect FLN achievement (Kumar, 2023).

Research also indicates that parental engagement plays a mediating role in strengthening children's foundational learning outcomes. Activities such as reading storybooks, assisting with homework, educational interaction, and creating supportive home learning environments positively contribute to children's literacy and numeracy development (Dong et al., 2020; Pandith et al., 2022; Shashidhara et al., 2025). Furthermore, socio-economic disparities intersect with rural-urban differences, gender inequalities, and educational access, thereby influencing variations in FLN achievement across different regions and communities in India (Ghosh & Sarkar, 2025; Vats & Malik, 2024).

The conceptual understanding of socio-economic background and FLN in the present study is therefore based on the assumption that children's foundational learning outcomes are not determined solely by school instruction but are also significantly influenced by family resources, parental support, social environment, and broader socio-economic conditions. Consequently, addressing socio-economic inequalities is essential for achieving equitable foundational literacy and numeracy outcomes among children in India.

III. RATIONALE OF THE STUDY

Foundational Literacy and Numeracy (FLN) has emerged as a core area of concern in educational research and policy because early acquisition of literacy and numeracy skills shapes the basis for all subsequent learning and cognitive development (Abella et al., 2024; Grotlüschen et al., 2020). Children who fail to attain foundational competencies during the early years often experience long term academic difficulties, reduced educational participation, and limited socio-economic opportunities later in life (Bashir, 2023; Chandra, 2024). Over recent years, both international and national educational frameworks have increasingly emphasized the importance of ensuring universal foundational learning as a prerequisite for quality and equitable education (UNICEF, 2024).

In India, concerns related to foundational learning have strengthened due to persistent learning deficits observed among primary school children. National educational surveys such as the Annual Status of Education Report (ASER) consistently indicate that a significant proportion of children enrolled in elementary schools are unable to read grade-

appropriate texts or perform basic arithmetic operations (ASER, 2024). Similar concerns have been highlighted in the Foundational Learning Study conducted by NCERT, which revealed variations in foundational learning achievement across different socio-economic and educational contexts (MoE, 2022). These findings suggest that enrolment expansion alone cannot ensure meaningful learning outcomes unless underlying structural and contextual inequalities are addressed.

Recognizing the urgency of this issue, the Ministry of Education introduced the National Education Policy 2020 and the NIPUN Bharat Mission to strengthen foundational learning across the country (MoE, 2020, 2021). These policy initiatives identify FLN as the highest educational priority and advocate competency-based learning, early childhood care, inclusive pedagogy, and community participation for improving foundational outcomes (Ali & Khan, 2024; Pagan & Behera, 2022). The National Curriculum Framework for the Foundational Stage also emphasizes the importance of holistic, child-centered, and equitable learning experiences during early childhood and primary education (National Steering Committee for National Curriculum Frameworks & Kasturirangan, 2022). Despite these policy reforms, disparities in foundational learning continue to persist, especially among children belonging to economically and socially marginalized groups.

Socio-economic background plays a significant role in shaping children's educational opportunities, learning experiences, and academic achievement. Studies have consistently shown that parental education, occupation, income, and family environment strongly influence children's literacy and numeracy development (Tahir et al., 2021; Vadivel et al., 2023). Children from socio-economically advantaged families generally receive greater educational support, access to learning materials, exposure to literacy-rich environments, and opportunities for cognitive stimulation, which positively affect foundational learning outcomes (Suna et al., 2020). Conversely, children from disadvantaged backgrounds often face multiple barriers such as inadequate educational resources, poor home learning conditions, low parental literacy, and limited academic support, which negatively impact their foundational competencies (Kumar, 2023; Uddin, 2025; Tahir et al., 2021).

Research on home learning environments further demonstrates that parental involvement and educational interactions significantly contribute to children's literacy and numeracy development. A positive home literacy environment, including storybook reading, parent-child interaction, and learning support, enhances reading comprehension and language acquisition among children (Dong et al., 2020). In the Indian context, parental beliefs, practices, and involvement have been identified as important determinants of foundational learning achievement (Pandith et al., 2022; Sampanna & Kumari, 2025; Srinivas et al., 2025). Similarly, Kumar and Behera (2022) emphasized that the quality of the home environment substantially affects children's FLN development, particularly during the

foundational years when children depend heavily on family guidance and support.

Recent studies have also highlighted the influence of parental engagement, gender dynamics, and family support on foundational learning outcomes among primary school children (Mallik & Suna, 2025; Shashidhara et al., 2025). Comparative and global perspectives further indicate that socio-economic inequalities continue to shape disparities in literacy and numeracy achievement across different educational systems (Sthapak & Sawlani, 2024; Uddin, 2025). Moreover, evidence suggests that socio-economic status indirectly influences children's reading abilities through mediating factors such as home learning environments and parental educational involvement (Li et al., 2025). These findings reinforce the argument that foundational learning cannot be understood solely through school-related factors but must also be examined within broader socio-economic and familial contexts.

Although numerous studies have examined FLN, existing literature in India remains fragmented across policy analysis, classroom practices, parental involvement, competency-based education, and implementation challenges (Bashir, 2023; Chandra, 2024; Sarkar & Gaur, 2025; Swargiary, 2024). Some studies have focused on regional assessments of foundational learning, including research conducted in Odisha and Cuttack district, which reported variations in FLN achievement among primary school students (Mahapatra et al., 2025; Sethy & Behera, 2025). Other studies have explored innovative strategies for strengthening FLN through libraries, pedagogical interventions, and early childhood education reforms (Kanujiya & Jaiswal, 2025; Shahane, 2024; Vasoya & Vansdadiya, 2023). However, comparatively limited research has systematically synthesized how socio-economic background influences children's foundational literacy and numeracy skills specifically within the Indian educational context.

Furthermore, recent scholarship has pointed out several practical and institutional challenges in achieving universal foundational learning goals. Teachers often encounter difficulties in balancing administrative responsibilities and competency-based instructional demands while implementing FLN reforms (Pandita et al., 2025). Similarly, studies on FLN implementation indicate that educational inequalities, infrastructural limitations, and varying levels of parental support continue to affect policy outcomes across regions (Ghosh & Sarkar, 2025; Vats & Malik, 2024). These challenges make it necessary to critically examine the socio-economic dimensions associated with foundational learning achievement in India.

Therefore, the present study is undertaken to systematically analyze the influence of socio-economic background on children's foundational literacy and numeracy skills in the Indian context. The study seeks to synthesize existing empirical and theoretical literature to identify the major socio-economic determinants affecting FLN outcomes and to understand how family environment, parental

education, economic conditions, and social inequalities shape children's early learning experiences. The study is expected to contribute to the existing body of educational research by providing a comprehensive understanding of socio-economic disparities in foundational learning and by generating insights useful for policymakers, educators, researchers, and curriculum planners working toward equitable and inclusive educational development in India. Additionally, the study aligns with India's commitment toward achieving inclusive and quality education under Sustainable Development Goal 4 (SDG 4), which emphasizes equitable access to foundational learning opportunities for all children.

IV. OBJECTIVES OF THE STUDY

- To study the influence of socio-economic background on children's foundational literacy and numeracy (FLN) skills.
- To study the role of parental education, income, occupation, and home learning environment in shaping children's foundational literacy and numeracy (FLN) skill development.

V. REVIEW GUIDING RESEARCH QUESTIONS

- How does socio-economic background influence children's foundational literacy and numeracy skills in India?
- What role do parental education, income, occupation, and home learning environment play in children's FLN development?
- What are the major socio-economic barriers affecting foundational learning outcomes among children?
- How do existing studies and educational policies address socio-economic disparities in FLN achievement in India?
- What measures can help improve equitable foundational literacy and numeracy outcomes for socio-economically disadvantaged children?

VI. METHODOLOGY

The present study employs a systematic review-based analysis. The review particularly focused on understanding how socio-economic disparities shape children's access to meaningful foundational learning opportunities in diverse Indian educational settings. The review was guided by well-defined research objectives, research questions and structured procedure followed to ensure transparency, replicability and comprehensive coverage of relevant studies.

➤ *Research Design*

The study is qualitative and analytical in nature. It focuses on reviewing and interpreting secondary sources of data related to foundational literacy, foundational numeracy, socio-economic background, parental involvement, home learning environment, and educational inequality. The study critically examines existing literature (published between 2020-2025) to understand how socio-economic conditions

influence children's foundational learning experiences and outcomes in India.

➤ Sources of Data

The present study is completely based on secondary data collected from various academic and policy sources. Relevant literature was gathered from peer-reviewed research articles, Journal publications, government reports, policy documents, national and international educational surveys, books and edited volumes and national and international reports related to FLN. To maintain the quality of the study major databases and digital sources consulted for literature collection included:

- Google Scholar
- ERIC (Education Resources Information Center)
- Scopus
- SpringerLink
- Web of Science
- ScienceDirect
- JSTOR
- Academic repositories
- Government and institutional websites

Most important policy documents and educational reports reviewed in the study include: National Education Policy (NEP) 2020, NIPUN Bharat Mission Framework 2021, National Curriculum Framework for Foundational Stage 2022, ASER Reports 2024, National Achievement Survey (NAS) 2021, Organisation for Economic Co-operation and Development (OECD), UNICEF and World Bank Reports.

➤ Search Strategy

A systematic literature search was conducted to identify relevant studies related to foundational literacy and numeracy (FLN) and socio-economic background in the Indian educational context. The literature search was conducted using combinations of keywords and Boolean operators such as "AND" and "OR" to refine the search results. The major search terms used in the study included:

- "Foundational Literacy and Numeracy"
- "FLN in India"
- "Foundational literacy"
- "Foundational numeracy"
- "Socio-economic status and education"
- "Socio-economic background and learning outcomes"
- "Parental involvement and literacy"
- "Home learning environment"
- "Educational inequality and FLN"
- "Early childhood learning in India"
- "NIPUN Bharat"
- "NEP 2020 and foundational learning"

➤ Inclusion and Exclusion Criteria

Relevant literature for the systematic review was rigorously selected from studies and policy documents related to foundational literacy and numeracy (FLN), socio-economic background, parental involvement, home learning environment, and educational inequality influence in foundational education. Priority was given to recent peer-reviewed studies published between 2020 and 2025. Both Indian and international empirical and theoretical studies were included to provide a comprehensive insight of how socio-economic background influences children's foundational skills.

Table 1 Criteria for Inclusion and Exclusion

Inclusion Criteria	Exclusion Criteria
• Focused on foundational literacy and numeracy among children. • Studies that examined socio-economic factors affecting learning outcomes. • Discussed parental education, income, occupation, or home learning environment. • Literature published between 2020 and 2025. • Related to the Indian educational context or comparable international perspectives. • Was published in journals, reports, policy documents, or academic sources relevant to education.	• Unrelated to foundational literacy and numeracy. • Did not discuss socio-economic or family-related influences on learning. • Focused exclusively on secondary and higher education or unrelated educational domains. • Studies that contained insufficient academic or methodological relevance to the present study. • Duplicate or incomplete studies • Non-English sources or inaccessible full text publications

➤ Literature Screening

Table 2 Search Results

Sl no.	Search Categories	Initial Results	Final Selection
1	Foundational literacy and numeracy studies	46	16
2	Socio-economic background and educational inequality in foundational education studies	27	11
3	Home learning environment and parental involvement influence in FLN studies	28	8
4	Policy documents and educational related to FLN reports	9	7
	Total	110	42

➤ *Data Analysis Procedure*

The collected literature was reviewed, categorized, and analysed thematically. Thematic analysis was employed to identify major dimensions associated with socio-economic background and foundational literacy and numeracy (FLN) development. The identified themes included:

- Foundational literacy and numeracy development
- Socio-economic inequalities and foundational education
- Parental education and involvement in FLN
- Home learning environment influence in foundational education
- Educational access and learning resources
- Policy initiatives related to FLN
- Challenges in achieving equitable foundational learning

The findings from various studies were systematically compared and synthesized to develop a comprehensive understanding of how socio-economic background influences children's foundational literacy and numeracy outcomes.

➤ *Ethical Considerations*

The study is based entirely on secondary sources and therefore did not involve direct interaction with human participants. Proper acknowledgment and citation of all sources were maintained throughout the study following APA 7th edition guidelines to ensure academic integrity and avoid plagiarism.

➤ *Limitations of the Study*

The study is limited to available secondary literature and published sources related to FLN and socio-economic background. Since the study does not involve primary data collection, the findings are dependent upon the scope, quality, and availability of existing literature. Additionally, variations in research methods, regional contexts, and sample characteristics across studies may influence the generalizability of findings.

VII. RESULTS AND DISCUSSION

The present review sought to understand how socio-economic background influences children's foundational literacy and numeracy (FLN) skills and to examine the role of parental education, income, occupation, and home learning environment in shaping foundational learning outcomes. Analysis of the selected literature revealed that socio-economic background is closely associated with children's early learning experiences and achievement in literacy and numeracy. Although educational policies in India have increasingly emphasized universal foundational learning, substantial differences in FLN outcomes continue to exist across socio-economic groups.

➤ *Influence of Socio-Economic Background on Children's Foundational Literacy and Numeracy skills*

The reviewed literature consistently suggests that socio-economic background plays a significant role in determining children's foundational literacy and numeracy achievement. Children belonging to socio-economically advantaged

families generally demonstrate stronger reading, writing, comprehension, and basic mathematical competencies than children from disadvantaged backgrounds. Access to educational resources, learning support, quality schooling, nutrition, and stimulating learning experiences appears to contribute substantially to these differences in achievement (Tahir et al., 2021; Suna et al., 2020; Vadivel et al., 2023).

The influence of socio-economic conditions extends beyond financial resources alone. Family circumstances often shape the quality of learning opportunities available to children both within and outside school. Children growing up in resource-rich environments are more likely to encounter books, educational materials, digital technologies, and learning activities that support the development of literacy and numeracy skills. In contrast, children from economically disadvantaged households frequently experience limitations in educational support and learning opportunities, which may affect the pace and quality of foundational skill acquisition (Kumar, 2023; Li et al., 2025).

Evidence from national assessments and educational surveys further indicates that learning inequalities remain closely associated with socio-economic disparities. Reports such as ASER and NCERT's foundational learning assessments continue to highlight differences in reading and arithmetic performance among children from varying socio-economic backgrounds. These findings suggest that improving school enrolment alone is insufficient unless equal opportunities for meaningful learning are also ensured (ASER Centre, 2024; Ministry of Education, 2022).

➤ *Role of Parental Education in Children's FLN Development*

Parental education emerged as one of the most influential family-level factors affecting foundational learning. The reviewed studies indicate that educated parents are generally better equipped to support children's academic development through regular learning interactions, educational guidance, monitoring of school activities, and encouragement of reading habits. Such practices contribute positively to children's language development, comprehension abilities, and numeracy skills (Pandith et al., 2022; Srinivas et al., 2025).

Parental education also influences children's attitudes toward learning. Households in which parents possess higher educational qualifications often place greater emphasis on academic engagement and educational achievement. As a result, children receive more consistent encouragement to participate in literacy and numeracy-related activities. Conversely, lower parental literacy levels may restrict the extent of academic support available at home, particularly during the foundational years when children require substantial guidance and reinforcement of classroom learning (Kumar & Behera, 2022; Sampanna & Kumari, 2025).

The reviewed evidence therefore suggests that parental education functions not only as an indicator of socio-economic status but also as an important mechanism through which learning opportunities are created and sustained within the household.

➤ *Influence of Family Income and Occupation*

Family income was found to influence foundational learning by determining access to educational resources and opportunities. Households with higher income levels are generally able to provide books, learning materials, digital devices, private tutoring, and supportive educational experiences that contribute to children's literacy and numeracy development. Such investments create favourable conditions for learning and help children engage more effectively with educational activities (Li et al., 2025; Vadivel et al., 2023).

Parental occupation also appears to affect children's educational experiences. Occupations associated with greater economic stability and educational awareness often provide families with more opportunities to support children's learning. In contrast, families experiencing economic insecurity or irregular employment may face challenges in maintaining consistent educational support. The influence of occupation is therefore reflected not only in financial capacity but also in the availability of time, educational expectations, and parental involvement in children's learning processes (Tahir et al., 2021; Uddin, 2025).

The findings indicate that income and occupation operate together in shaping children's learning environments and educational opportunities. Their combined influence contributes to differences in foundational literacy and numeracy achievement across socio-economic groups.

➤ *Home Learning Environment and Parental Involvement*

The home learning environment emerged as a critical factor linking socio-economic background with children's foundational learning outcomes. Across the reviewed studies, children who experienced supportive and stimulating learning environments at home demonstrated stronger literacy and numeracy competencies than those who lacked such opportunities.

A positive home learning environment is characterised by activities such as shared reading, storytelling, educational conversations, homework support, and numeracy-related interactions. These experiences help children practise emerging skills, strengthen conceptual understanding, and develop confidence in learning. Research further indicates that regular parental engagement contributes positively to language acquisition, reading comprehension, vocabulary development, and mathematical understanding (Dong et al., 2020; Pandith et al., 2022; Shashidhara et al., 2025).

The literature also suggests that parental involvement can partially mitigate the negative effects of socio-economic

disadvantage. Even in households with limited economic resources, active parental engagement and supportive educational practices can contribute meaningfully to children's foundational learning development. Nevertheless, socio-economic constraints often affect the availability of learning materials, dedicated study spaces, and time for educational interaction, thereby influencing the overall quality of the home learning environment (Kumar & Behera, 2022; Srinivas et al., 2025).

➤ *Socio-Economic Barriers and Implications for Equitable FLN Development*

The review identified several barriers that continue to affect equitable foundational learning outcomes in India. Poverty, low parental literacy, inadequate educational resources, uneven school infrastructure, and rural-urban disparities emerged as recurring challenges across the reviewed studies. These barriers often operate simultaneously and contribute to cumulative disadvantages in children's learning experiences (Mahapatra et al., 2025; Sethy & Behera, 2025; Vadivel et al., 2023).

Recent policy initiatives such as the National Education Policy 2020 and the NIPUN Bharat Mission have recognized the importance of addressing foundational learning gaps and promoting equitable educational opportunities. The literature reviewed generally supports the direction of these reforms and highlights the importance of parental engagement, teacher preparedness, inclusive pedagogy, and early intervention strategies in strengthening FLN outcomes (Ministry of Education, 2020; Ministry of Education, 2021; Sarkar & Gaur, 2025).

However, the findings suggest that policy interventions alone may not fully address disparities in foundational learning unless broader socio-economic inequalities are simultaneously addressed. Achieving equitable FLN outcomes requires coordinated efforts involving schools, families, communities, and policymakers. Greater attention to disadvantaged children, strengthened home-school partnerships, improved educational infrastructure, and equitable access to learning resources are essential for reducing learning gaps and ensuring meaningful foundational learning opportunities for all children.

Overall, the reviewed literature demonstrates that socio-economic background influences children's foundational literacy and numeracy development through multiple interconnected pathways. Parental education, family income, occupation, and home learning environment collectively shape children's early learning experiences and significantly contribute to variations in foundational learning outcomes.

VIII. FINDINGS

Table 3 Major Findings

Research Questions	Major Findings from Reviewed Literature	Supporting Studies
1. How does socio-economic background influence children's foundational literacy and numeracy skills in India?	Socio-economic background significantly influences children's FLN achievement. Children from higher socio-economic groups demonstrate better literacy and numeracy competencies due to better access to educational resources, quality schooling, nutritional support, and learning opportunities. Children from disadvantaged backgrounds often experience poor learning environments and lower foundational competencies.	Tahir et al. (2021); Kumar (2023); ASER (2024); Suna et al. (2020); Vadivel et al. (2023); Li et al. (2025)
2. What role do parental education, income, occupation, and home learning environment play in children's FLN development?	Parental education, income, and home learning environment strongly influence FLN development. Educated parents are more likely to support reading and numeracy activities at home. Family income affects access to books, digital resources, and quality schools. Positive home learning environments enhance literacy and numeracy skills.	Dong et al. (2020); Pandith et al. (2022); Kumar & Behera (2022); Srinivas et al. (2025); Shashidhara et al. (2025)
3. What are the major socio-economic barriers affecting foundational learning outcomes among children?	Poverty, low parental literacy, lack of educational resources, rural urban disparities, poor school infrastructure, and limited parental involvement emerged as major barriers affecting FLN outcomes. Institutional challenges and unequal access to quality education further widen learning inequalities.	Kumar (2023); Mahapatra et al. (2025); Sethy & Behera (2025); Pandita et al. (2025); Vadivel et al. (2023)
4. How do existing studies and educational policies address socio-economic disparities in FLN achievement in India?	Policies such as the National Education Policy 2020 and the NIPUN Bharat Mission emphasize equitable foundational learning, competency-based education, parental involvement, and inclusive pedagogy. However, implementation challenges continue to affect policy effectiveness across socio-economically disadvantaged regions.	MoE (2020, 2021); Kanujiya & Jaiswal (2025); Sarkar & Gaur (2025); Vats & Malik (2024)
5. What measures can help improve equitable foundational literacy and numeracy outcomes for socio-economically disadvantaged children?	Strengthening parental engagement, improving school infrastructure, providing learning resources, promoting early childhood education, enhancing teacher training, and ensuring equitable educational opportunities are important measures for improving FLN outcomes among disadvantaged children.	Ali & Khan (2024); Shahane (2024); Vasoya & Vansdadiya (2023); Shashidhara et al. (2025)

IX. EDUCATIONAL IMPLICATION

- Educational policies should ensure equitable access to quality foundational literacy and numeracy (FLN) education for children from socio-economically disadvantaged backgrounds.
- Schools in rural and marginalized communities should be provided with adequate infrastructure, learning materials, digital resources, and supportive learning environments.
- Parent-school collaboration should be strengthened through parental awareness programmes, community participation, and home-based learning initiatives.
- Parents should be encouraged to support children's reading, storytelling, and numeracy-related activities at home to improve foundational learning outcomes.
- Teachers should receive continuous training in child-centered, activity-based, and competency-oriented FLN pedagogy.
- Early childhood care and education programmes should be strengthened to improve school readiness and reduce socio-economic learning gaps among children.
- Government initiatives such as the National Education Policy 2020 and the NIPUN Bharat Mission should focus on inclusive and equitable implementation strategies.

- Special educational support should be provided to children belonging to low-income families, rural areas, and socially marginalized communities.
- Schools should adopt continuous and supportive assessment practices to identify children facing foundational learning difficulties at an early stage
- Effective collaboration among schools, families, communities, and policymakers is necessary for strengthening equitable foundational literacy and numeracy outcomes in India.

X. CONCLUSION

Foundational Literacy and Numeracy (FLN) is essential for children's future learning and overall educational development. Synthesizes all the evidence, it revealed that children's ability to acquire foundational literacy and numeracy skills is closely influenced by their socio-economic background. Factors such as parental education, family income, occupation, and the quality of the home learning environment play an important role in shaping early learning experiences and achievement. The reviewed literature suggests that children from socio-economically advantaged families generally have greater access to learning resources, educational support, and stimulating learning environments,

whereas children from disadvantaged backgrounds often face challenges that hinder their foundational learning progress. The review also emphasizes the positive contribution of parental involvement and supportive home learning practices in strengthening children's literacy and numeracy development. Although initiatives such as NEP 2020 and the NIPUN Bharat Mission have brought significant attention to foundational learning, socio-economic disparities continue to influence educational outcomes. Therefore, ensuring equitable access to quality learning opportunities, strengthening parental engagement, improving educational infrastructure, and providing targeted support to disadvantaged children are essential for achieving inclusive and sustainable FLN outcomes in India. Ultimately, strengthening foundational learning is not only an educational priority but also a necessary step toward promoting social equity and national development.

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