



Home Ecological Set up as the Barriers for the First- Generation Learners in the Plateau Fringe of India

Article Record

Dr. Susmita Sengupta § § *

§ PhD, Associate Professor
ORCID 0000-0003-0602-8242

* Corresponding Author



Sanat Kumar Guchhait ‡ §

§ Professor



§ Department of Geography, Rabindra Mahavidyalaya, Hooghly, India

‡ Department of Geography, University of Burdwan (OA)

RECEIVED

2026-04-26

ACCEPTED

2026-05-06

ONLINE PUBLISHED

2026-05-30

PUBLISHED

2026-09-24

PEER REVIEW

Double Blind

Abstract

Human ecology is investigated in the diverse and complicated directions as it opts to intensify not only the relationship between man and its physical environment but also the socio-economic environment. Therefore, home ecological set up as the most intriguing factor for the access and success of school education of the plateau fringe areas of India is analyzed under the backdrop of first-generation learner. Taking a sizeable number of purposive sample descriptive statistics is employed to reveal the drop out and social category of the first-generation learners. Factor analysis is adopted to glean out the dimensions of learning environment at home. Mediation model assesses the impact of poverty on parental attitude towards the educational success of their wards.

barriers

desire

encouragement

Factor analysis

First-Generation Learners

Home ecology

Mediation model

AI USE STATEMENT

No generative AI was used for analysis or results.

FUNDING

There is no funding related to this research study.

CONFLICT OF INTEREST

The authors declare that they have no competing interests

DATA AVAILABILITY

The datasets generated during and/or analysed during the current...

ETHICS

No ethics committee approval was required for this article type.

CONSENT

Not applicable for this article.

TRIAL REG.

Not applicable.

Crossref DOI: 10.34257/GJHSSG256649

How to Cite: Sengupta et al. (2026). Home Ecological Set up as the Barriers for the First- Generation Learners in the Plateau Fringe of India. Global Journal of Human-Social Science, 26(4), 11-25. DOI: 10.34257/GJHSSG256649

LICENSE

© 2026 Global Journals. Open-access article under CC BY-NC-ND 4.0 International License.

AR Experience Web Page



DOI

Print ISSN 0975-587X



9 770975 587004

Online ISSN 2249-460X



9 772249 460013

Under the strict compliance and defined process of



METADATA CONTINUATION

FULL DATA AVAILABILITY STATEMENT

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

ARCHIVAL RECORD

GJHSS · Vol 26 · Issue 4 · 2026

Article ID GJHSS-256649 · DOI 10.34257/GJHSSG256649

Print ISSN 0975-587X · Online ISSN 2249-460X

Home Ecological Set up as the Barriers for the First- Generation Learners in the Plateau Fringe of India

Dr. Susmita Sengupta[§]  and Sanat Kumar Guchhait[‡] 

Affiliations

[§] Department of Geography, Rabindra Mahavidyalaya, Hooghly, India

[‡] Department of Geography, University of Burdwan ^(OA)

Qualifications / Designations

[§] PhD, Associate Professor

[‡] Professor

Abstract

Human ecology is investigated in the diverse and complicated directions as it opts to intensify not only the relationship between man and its physical environment but also the socio-economic environment. Therefore, home ecological set up as the most intriguing factor for the access and success of school education of the plateau fringe areas of India is analyzed under the backdrop of first-generation learner. Taking a sizeable number of purposive sample descriptive statistics is employed to reveal the drop out and social category of the first-generation learners. Factor analysis is adopted to glean out the dimensions of learning environment at home. Mediation model assesses the impact of poverty on parental attitude towards the educational success of their wards.

Keywords: *barriers, desire, encouragement, Factor analysis, First-Generation Learners, Home ecology, Mediation model*

* Corresponding Author

Dr. Susmita Sengupta

DOI

10.34257/GJHSSG256649

1. Introduction

Ecology, the study of the relations between organisms and their environments or of the organism-environment nexus, has been used as an interactive and also integrative interrelationship in the study of human society, popularly known as human ecology. The dimensions of human ecology are more dynamic as it is not guided by rigid laws of ecology. Extended from biotic ecology, human ecology is investigated in the diverse and complicated directions as it opts to intensify not only the relationship between man and its physical environment but also the socio-economic environment (Baker et al., 2016). It is used in the social interaction as social ecology, political dimension as political ecology. In the forgoing analysis it considers the interactive interaction in the context of school education.

Looking at this interactive interdisciplinary nature, sociologists, anthropologist and geographers of India are widely investigating ecology of school education for its diverse social, economic, educational and infrastructural problems which are posing the barriers for the access and the success to school education of under privileged society. In the realm of social and cultural geography, it basically portrays a diverse array of outlook and planning in regard to geographic (Hartshorne 2016; Berry 2005), economic and social (Zhan, 2005; World Bank Group District Level Survey, 2012) consideration analysing different attributes in spatio-temporal context (Sheppard, 2002; Dearing et al., 2006). A handful of studies of the ecology of school education deals with infrastructure, school climate, curriculum, and teacher-student interaction (Sudla et al. 2020; Berkowitz et al. 2017; Wang and Degol 2016; Hung et al. 2015; Ramelow et al. 2015; Motiram 2011; Huisman et al. 2010; Bacolod and Tobias 2006; Welsh 2000; Adeujimi, 2002; Wang & Degol, 2016),

while, the importance of home environment or home ecological set up in terms of desire, awareness, encouragement of parents and family members, economic support of the family etc. are not so much interactively interpreted. Therefore, home ecological set up is another intriguing factor for the access and success of school education of the backward areas. For the students of the under privileged society, home ecological set up seems to be the most important factor which sets barriers for each and every step for the success in school education. The grimness of the situation is more acute for the first-generation learners – the core area of this investigation.

First-generation learners are those who among the family members come for education for the first time in school, and their parents have no formal education at all. They lack any guidance from anyone neither at home nor there any stimulation for them to learn. Within the complex social landscape of the Jhalda plateau fringe, these 211 first-generation learners share distinct sub-ecologies that differentiate parental involvement. First, socio-cultural sub-ecologies, particularly tribal affiliations (mainly Santhal and Munda), feature varying traditional knowledge systems or communal attitudes toward formal schooling that moderate parental engagement. Second, spatial sub-ecologies based on proximity to the Jhalda urban center create a gradient, where families closer to the town have higher exposure to the formal education system and greater economic opportunities compared to those living in more isolated fringe areas near the hills and forests. By considering these factors, the study moves beyond a single definition of first-generation learners to capture the nuanced and diverse social landscape of the plateau fringe. Consequently, these learners have a number of handicaps while entering the school.

Unlike the second or third generation learners, they do not get the necessary motivation to pursue academic studies (Geeta 2001). They lack basic knowledge of time management, school finances, and bureaucratic operations of higher education (Richardson and Skinner 2000). They have been less likely to encounter a welcoming environment on campus (Terenzini et al. 1996; Welsh, 2000). Most of them get discouraging and dis-facilitating educational environment at home. This may result in poor academic achievement and less healthy attitudes towards life and society (Ghosh and Susmita, 2014).

2. Theoretical Framework

The home environment is ‘the most powerful informal learning’ (Doley 2017) space in which the family, especially parents, act as ‘an educator’. The term home environment refers to all objects, forces, and conditions prevailing at home which influence the child physically, intellectually and emotionally (Muola 2010; Nyarko, 2010; Oyserman et al., 2007; Ramelow et al., 2015; Reddy, 2004). An encouraging learning atmosphere at home and parents’ involvement carry huge importance in child’s educational performance in school (Hill & Tyson, 2009; Jeynes, 2005; Kim and Sheridan, 2015). The social environment of the family can be portrayed as the “interpersonal relationships among the family members, the directions of the personal growth and the family’s basic organizational structure” (Spokane et al., 2000) which are emphasized in the system. This environment positively influences mental development as healthy family relationships increase the level and the quality of the stimulations provided for the child (Motiram, 2011). The home and school are probably the two most influential contexts within which child develops. Besides, when parents and teachers both are focused on the child’s schooling simultaneously, this ‘mutual involvement’ will enhance child’s success in school (Sudla et al., 2020). Parent involvement in a child’s education, especially in earlier phase is consistently shown to be positively associated with the child’s academic performance (Hill and Craft 2003).

Considering this ideological perspective, school education in rural remote areas of India faces a dynamic reality where the hurdles are more, and opportunities are less. Physical barriers in terms of remote location, connectivity, accessibility is there. Social inertia of schooling is rampant. Participating in schools regularly and survive up to the last grade of the cycle with no one at home to support is an uphill task for first-generation learners. The backstopping support from home/parents and the sheer economics of school participation tend to push learners out of school.

Apart from this, each and every family possesses its distinct socio-economic individuality as well as parents’ participation in child’s access and success in schooling. Children whose parents are more concerned in child’s education achieve better performance in school than the children of parents involved in a lesser degree. It goes without saying that child’s education with lack of encouragement, limited or no involvement with least motivation from parents’ part reduce home effectiveness as a learning environment (Doley, 2017). Parents having low Socio-Economic Status (SES) with little or no formal education may devoid of the sense of efficacy in assisting their child succeed in school. These group of parents feel less potent to help their children in school related activities as compared to the educated parents, and also become less comfortable to interact with teachers whenever necessary (Zhan 2005).

Against this backdrop, some pertinent questions arise: To what extent does home ecology act as barriers for academic maladjustment in school for first-generation learners? Are their parents really interested about school education? Why do the first-generation students hardly achieve desired school success? The study opts to analyse the role of a learning home environment to child’s access and success in school education in rural context. It also seeks to measure the parental expectation as well as involvement in child’s education with little or no educational background.

In this study, Bronfenbrenner’s social ecological model and resilience theory have been applied as a framework to investigate the broader contextual ecological factors as well as academic resilience among the disadvantaged children, especially first-generation learners of rural and hilly background. In particular, this paper examines the role of home-ecology as barrier on school-level academic adjustment of these hard-to-reach learners of disadvantaged background.

2.1. Importance of Home Ecological Set Up Needed for First Generation Learners

“All the years that children attend school; they attend home” (Islam et al., 2021; Kumar et al., 2023; Flora et al., 2004; Froiland et al., 2013; Geeta, 2001). The impression of home and family factors on child’s education has been extensively acknowledged (Grolnick et al., 2008; Gwirayi and Shumba, 2007; Hill and Taylor, 2004; Hartshore, 2016; Hill and Craft, 2003; Hong and Ho, 2005). Family structure and demography, socioeconomic status (SES) and parental education, on the one hand, and parental involvement (Giallo et al., 2010; Stone et al., 2010; Agabrian, 2007; Lichter et al., 2003; Crosnoe and Benner, 2015) in terms of parental processes and parenting style, on the other, are considered mainly the home-ecological factors related to the child’s access and success in schooling. In addition, parents’ perception (Gi et al., 2018; Dusi, 2023; Lawson, 2003; Lisa et al., 2006) on child’s schooling, parental attitudes on teachers and schools exert great influence on child’s schooling (Lavenda, 2011; Huisman et al., 2010; Hung et al., 2015).

The **socio-economic status (SES) of a family** and the academic performance of children is well-established in the arena of sociological research (Järvinen et al., 2023; Paulus et al., 2025; Mullis et al., 2003; Muola, 2010). It may be defined as ‘a person’s overall social position...to which attainments in both the social and economic domain contribute’ (Considine and Zappalà, 2002; Jensen and Seltzer, 2000; Altschul, 2012). Socio-Economic status is determined by an individual’s condition in education, occupational status and income. In developing country’s context, specifically in India, research have already explored that children from low SES families do not perform good in school as per their potential compared to the children from high SES families (Dubey et al., 2024; Assan et al., 2021; Barro, 2013; Basant and Chandra, 2021; Green-Demers and Pelletier, 2003). Because “school success depends strongly on the socio-economic status of one’s parents” (Wise, 2003; Vaz et al., 2014). Lower SES parents usually feel less welcome at school as compared to higher SES parents and this perception in turn flows with low teacher perceptions about their child’s actual academic potentials and skills (Dumais 2006). A strong sense of internalized social marginalization often shapes these parents’ perspective, leading them to pre-assume that teachers will not favour their children due to the parents’ own lack of formal education. This perceived status differential creates a persistent social barrier between the home and the school. Rather than actively engaging with the educational institution, parents

adopt a passive role, believing their illiteracy renders them less capable in the eyes of school authorities. This expectation of bias operates as a self-fulfilling prophecy, where the parents' hesitance is misread by teachers as a lack of interest, further deepening the cycle of educational exclusion. A few social linkages and their less expectation will enhance worry and anxiety among the parents thinking that they will not be able to provide support their children in future due to the paucity of intellectual, material or cultural resources. With low expectation these parents tend to be less engaged in child's school-related activities, including encouraging them in co-curricular activities or monitoring their academic progress (Sy et al. 2005). Teachers also pay attention to those children whose parents regularly participate in child's education believing that their classroom effort are being reinforced at home (Pastorelli et al., 2001; Shams et al., 2011; Barley and Beesley, 2007; Berkowitz et al., 2017; Berry, 2005).

Parental education, specifically *mother's educational attainment* in the family is a strong predictor of child's good academic outcomes (Ekstrom et al. 1986; Renzuli and Park, 2004; Elffers and Oort, 2013; Van der Veen and Peetsma, 2006; Ghosh and Sengupta, 2014). The bio-ecological model of human development proposed by Bronfenbrenner (2006; 1986) adds flavour of the relationship between family and school as important for child's development contexts. Family with educated parents possesses enough expectations as well as quality involvement for child's positive school outcomes than do those whose parents have relatively low expectations. High parental expectation motivates a child to achieve in school, scholastic and social resilience, and aspirations to attend higher educational institutions (Richardson and Skinner, 2000; Robinson et al., 2001). On the contrary, parents with very little or no education and limited economic resources become less effective helping their children with school work and also feel become uncomfortable interacting with teachers, being influenced by internalized social barriers and perceived status differentials, leading them to assume that school teachers will not communicate productively with illiterate parents. These parents may develop low academic expectations for their children. Several researches uncover the racial/ethnic differences in parent expectation saying that "certain social class gives rise to a specific level of parent expectations which in turn affect students' educational and occupational attainment" (Sengupta and Ghosh, 2011).

The concerned literatures of **parents' involvement in child's schooling** have made two separated but interrelated stream of concepts, firstly, those related to parent-school involvement, such as parents' participation in school activities, parent-teacher communication (Hill and Taylor 2004; Dearing et al. 2006; Doley, 2018; Dumais, 2006) whereas the second stream explores parenting processes and parenting style at home which are related to child's school performance. Scott-Jones (1995) suggested four levels of parent-child interactions: '*valuing*', '*monitoring*', '*helping*' and '*doing*'. *Valuing* means self-awareness, self-respect, expectations and accomplishments. Generally, it is believed that monitoring develops 'self-management strategies' that facilitate achievement in school. *Helping* is the 'assistance of skill development of child through a tutorial relationship', directing the behaviour and helping in finding resources. Checking homework, keeping eyes on child's home and school activities, even limiting the leisure include the *monitoring* and lastly *doing* is excess involvement of parents in child's schooling.

However, **parents with academic expectation** for child generally *participate* in educational activities both at home and in school. A growing body of research has highlighted that child

performs better in school if their parents are more involved with their schooling (Froiland et al. 2013; Shaff et al., 2008). A study of Parcel and Dufur showed positive link of parental involvement with mathematics achievement of students. *Parental involvement* may cover a wide range of activities, from reading at home to attending school functions and participating in school governance. Another set of research has also shown that parental involvement varies widely by caste, social class, and even family structure and thus may help explain differential achievement levels among such families (Monserud and Elder, 2011). In addition, Parenting styles are instrumental to their children's learning achievement. Students develop more psychological maturity and do better in school when they come from families in which parents monitor and regulate their children's activities at the same time they provide *emotional support* and encourage *independent decision making* (Froiland and Oros, 2013; Stein et al., 2014; Baker, 2017). Again, these *parenting styles* have been proved to vary by family caste structure, socio-economic status resulting differential educational achievement (Fedak et al., 2015; Cooper and Stewart, 2020).

3. Methodological Framework

3.1. Methodological analytics

Bronfenbrenner (1986) and Ryan and Adams (1995) postulated a set of interrelated but distinct model that endeavored to provide "an organization for studying family processes, individual characteristics of child and children's school achievement and adjustment". The model considers child's personal behaviours in school as "most proximal", therefore, mediating family process and parenting style that work within the family. Moreover, the tone of family climate will determine what kind of parent-child interactions are likely to occur. These constitute the "distal" social contexts that probably influence the proximal effects of the child's characteristics on school success. Congruent with the Ecological theories (such as Bronfenbrenner 2013; Scaglioni et al., 2018), a hierarchy of several contexts or layers of within-family characteristics and processes influence child's educational outcome to a great extent.

The figure 1 displays the Ecological model of Family-School Relationships that encompasses all of the related family characteristics that may be interwoven in child's school adjustment as well as educational outcomes. The model is oriented along a proximal-distal dimension, where the child's schooling outcome is labelled as 'Level 0', the next adjacent place occupied by child's personal characteristics labelled by 'Level 1'. The successive levels are dragged out to exogenous socio-cultural and biological variables up to 'level 6'. Obviously, the intensity of interaction is generally highest between the adjoining levels.

Employing the concept into parents' involvement practices, the ecological model addresses four issues: 1. Parents' home-centric involvement; 2. Relevant educational atmosphere at home; 3. Family structure and SES and lastly 4. Physical aspects of the home learning environment. At the initial phase of child's schooling, parents do function like a school by extending their help with cognitive tasks to smooth child's schooling, motivate for better learning and guide school-related behaviour. Ryan and Adams (1995) outlined educational atmosphere at home as consisting of a few strata, viz. school-focused parent-child interaction, general parent-child interaction, family relations and parents' personal characteristics pertaining to exogenous socio-cultural (socio-economic status) and biological (gender of parent and child) variables. Family structure and its size play significant

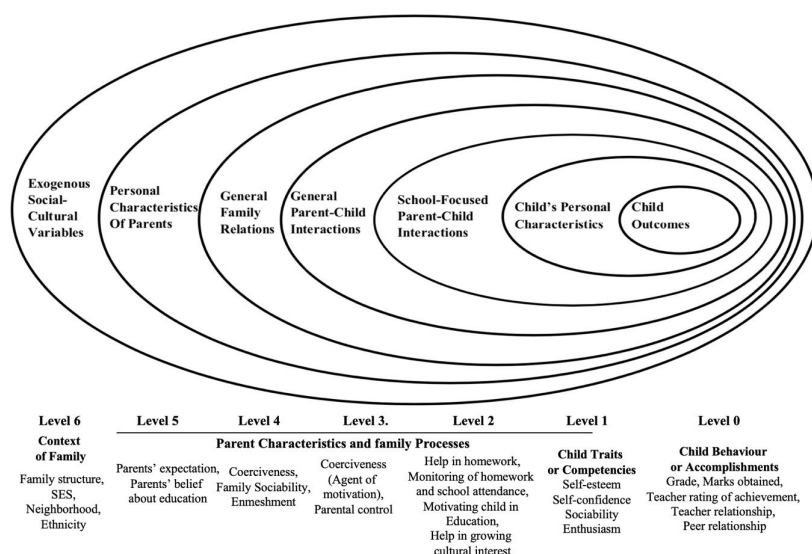


Figure 1. The Family-School Relationships Model (After Ryan and Adams, 1995)

roles in shaping child's educational outcome in school. Several recent researches (Mullis et al. 2003) have revealed positive impact of physical aspects of learning home environment (study hours, availability of learning materials, and place of study at home) on child's outcome. The present study has limited its focus on within the family processes and not wished to judge the role of all other socialization agents on child's academic outcome.

4. Study area

The rain-fed Purulia district is part of Chota Nagpur plateau representing an area of particularly low agricultural productivity and a high incidence of poverty among the rain-fed areas in Asia. High seasonality of rainfall confines the cropping period to only part of the year (mono-cropping). The district of Purulia is one of the most "resource-poor" districts dominated mainly by people of scheduled social affiliation. The population living below the poverty line is very high (35 percent). The district is positioned within the top three in respect of poverty (World Bank Group District Level Survey 2012). Unproductive land, extreme rurality, lack of proper industrialization, limited in-situ employment opportunities, the concentration of tribal population, and social customs and traditions have resulted in a totally stagnated region socially and economically. Being "resource-poor," the district has been ranked in the lower rung of the human development ladder (16th out of 17 districts, Human Development Report, West Bengal, 2004).

Livelihood exerts a typified impact on the educational scenario of any area. Besides socio-economic marginalization, also the educational scenario of the district is featured by distinct rurality. The Census reports in different decades reveal that the district's rural literacy rate has not changed significantly throughout the last 50 years. Various push-pull factors like poor accessibility, poverty and economic uncertainties, and socio-cultural discontinuities contribute a great deal to the educational marginalization of the rural pockets of Purulia district. Economic uncertainty and back-stopping support from family pushes these students to dropout prematurely from school.

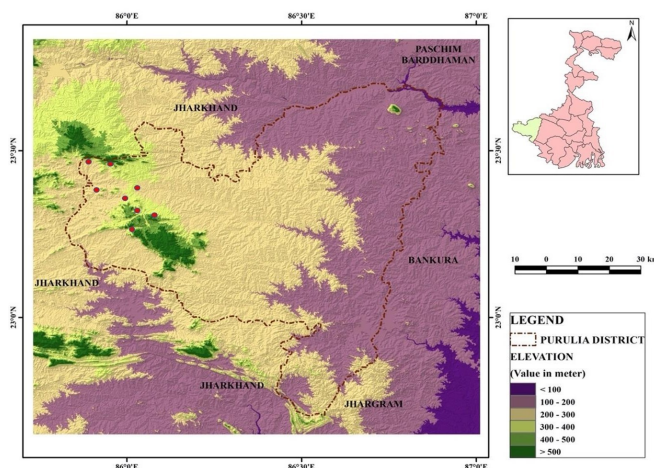


Figure 2. Map of the study area and the candidate villages (red dots) selected for micro-level analysis

4.1. Data Collection and Sampling Techniques

The necessary data for the present study have been collected through the household survey in two distinct phases. Firstly, a close-ended structured questionnaire was administered to each and every learner regarding learning atmosphere prevailing at their home. The questionnaire captured learners' socio-demographic status, economic condition of the households, parents' level of educational attainment; and the existing learning atmosphere at home and parenting processes. To have a quantitative flavour, most of the questions were in close-ended fashion, designed by Likert scale. In the next phase, to explain the quantitative findings collection of qualitative data were collected in semi-structured and open-ended fashion regarding parents' perception and attitudes on child's education. Key informant interviews and focus group discussions were arranged with learners, parents, teachers, and head of the institutions to supplement the quantitative findings. Multistage sampling techniques were used to select the candidate households for the present enquiry. After choosing the Chota Nagpur plateau fringe (Figure 2) as a broad study area, the district of Purulia was selected as micro-level study based on the criteria of marginality in the field of socio-economy and education. In the

next stage, the westernmost part of the districts was chosen due to its topographic uniqueness, prevalence of physical barrier in terms of poor accessibility and connectivity, and also stagnancy in socio-economic scenario. In recent past, the administrative area was declared the 'poorest in education' (18.4 percent literacy, Census 2001) within Asia continent. Still, ample illiteracy (39.53 percent), huge gender gap in education (36.24 percent, 2011) and quite high non-working population (59.61 percent, 2011) speak in favour of the backwardness of the area. The terms like 'remoteness', 'forest dependence', 'illiteracy', 'poverty', 'first-generation learner' are the keywords to diagnose the target group of the study. The home ecology of first-generation learners in the Jhalda plateau fringe is well-described by a material dependence on forest resources that directly hampers a consistent learning structure. For instance, during the winter season, when parents go outside for seasonal migration, the elder sisters mainly have to take over the domestic responsibilities, and the household's 'learning ecology' stays suspended. Similarly, the daily necessity of firewood collection—a time-consuming task exacerbated by receding forest covers—occupies several hours of a child's day, leaving no time for the 'study at home' envisioned by formal schooling models. Therefore, the forest's seasonal labor cycles form a 'rhythm of survival' that overlaps with the 'rhythm of the school's academic calendar,' where academic pursuits are frequently sacrificed for the immediate material needs of the family. Keeping these key terms in mind, specific villages were identified lying in the physically and socio-economically isolated pockets of western part of Purulia district for micro-level study. Eight villages of the district possessing relatively high relief have been purposively chosen to capture the essence of the study. The set of participants are exclusively first-generation learners (N=211), either 'school-going' or 'dropped out' status during the time of field investigation whose parents have no experience of formal school education at all. The 'Siksha Bandhu', the key participant of the study, helped a lot to capture the home learning atmosphere as barriers and resultant academic challenges leading to dropout of these 'uncertain climbers' from the school prematurely.

The first type includes variables of home ecology that consists of continuous variables of SES of the family and parental involvement. SES echoes with the parental educational attainment in years and monthly income of the family. The next category variables relating to family learning structure capture the background conducive to learning at home (Altschul 2012), i.e. (a) the amount of money the family spent on children's education, (b) the presence of reading materials, (c) private tuition fee of children provided by the family, (d) time of home assignment and (e) the time of engagement in domestic chore (inverse). The Likert scale fitted for the items include: (a) money spent on child's education [No money spent (1), less than Rs. 50/ (2), Rs. 50/ to Rs. 100/ (3), Rs. 100/ to Rs. 200/ (4) and more than Rs. 200/ (5)]; (b) reading materials available at home [No materials (1), less than 5 (2), 5 to 10 study materials (3), 11-15 study materials (4) and above 15 (5)]; (c) availing private tuition [Never (1), seldom (2), often (3), almost always (4) and always (5)]; (d) child spending for learning at home? [No time spent (1), Less than one hour (2), one to two hours (3), two to three hours (4), above three hours (5)]; and (e) child's engagement in domestic chores [No hour spent (5), less than 2 hours (4), 2-4 hours (3), 4-6 hours (2) and above 6 hours (1)].

Parental involvement generally refers to the extent and quality of helping child in doing homework, contacting with teachers and attending school meetings regularly, participating in school-related activities and facilitating cognitively stimulating activities (Sy

& Schulenberg, 2005). The typology of parental involvement is categorized broadly into two by various contexts in which it occurs, i.e., at home or school (Giallo et al. 2010; Godenberg et al., 2001). Parameters like (a) attending school meeting, (b) visiting school teacher (Nyarko 2010) whenever needed and (c) attending school function cater parents' school-based participation (Oyserman et al. 2007), whereas (a) helping child in doing homework, (b) checking homework (Nyarko 2010) and (c) talking with them about school represent parents' home-based participation (Sy et al., 2005) in child's schooling. The parents' responses range from 1 (never done) to 5 (always done) in Likert scale. The last but the most important parameters of parenting style include (a) encouraging the learners for education, (b) giving emotional support, (c) decision-making independence and (d) motivating them in continuing education. All responses have been scaled after Likert ranging from 1 (never) to 5 (always). Both the dimensions of parental involvement have maintained homogeneity (Cronbach's Alpha). In this study, academic performance is measured as a continuous variable, representing the aggregate percentage of marks obtained by the student in the final examination of their last completed academic session. For the active school-going students, these represent current records, whereas for the 93 dropped-out students, academic performance was obtained as the aggregate percentage in the final examination of their last completed academic year, retrieved directly from school databases. While a time gap exists between their departure and the current study's assessment of home ecological factors, the structural nature of these home environment variables (such as parental educational attainment and chronic economic insecurity) ensures a high degree of context-specific temporal consistency.

The grading system is aligned with the West Bengal Board of Secondary Education guidelines. The aggregate marks comprise seven core school subjects: Language-I (Bengali), Language-II (English), Mathematics, Physical Science, Life Science, History, and Geography. However, a deeper qualitative and quantitative analysis of the results reveals that first-generation learners face uneven academic challenges across these subjects. They struggle disproportionately in English (Language-II) and Mathematics compared to other subjects. The average marks in English (32.4 percent) and Mathematics (28.7 percent) are significantly lower than the average marks in History (46.2 percent) and Geography (44.8 percent). This disparity stems from the complete absence of academic guidance and language exposure at their home, as well as their parents' inability to afford private tuition, which is crucial for mastering subjects like English and Mathematics in these rural pockets. Academic performance, as detailed above, serves as the singular continuous outcome variable in our predictive models.

5. Data Analysis and Results

The study opts to address how the learning environment at home shapes a child's desired success in school under varying socio-economic contexts. Therefore, the study considers some specific hypotheses regarding socio-demographic features (gender, social group affiliation, generation status, family size and location) and SES (family income and parent education) determining child's achievement in school; The study hypothesizes that learning environment at home, especially parents' involvement in child's education bears positive relation with child's academic outcome. First-generation learners in rural areas may face more challenges in achieving school success. Poor socio-economic status, limited

educational attainment levels of parents and low income may be responsible for this uncertainty.

6. Sample Characteristics

The research participants comprise of 211 first-generation learners systematically and purposively selected from the candidate villages, out of which 118 are from school going students studying at Upper Primary and Secondary Grade (including Higher Secondary also). The little learners of S.S.K. have been carefully excluded from the survey due to their below the age and immature response. To capture the essence of socio-economic barriers, the study has included another 93 participants who dropped out of school at different grades. To sort out this group, the office of School Inspector (S.I.) helped to identify the houses of dropped out students which are marked as “D” by the *Siksha Bandhu* of S.I. Office. In addition, Village Information Center and Village Education Communities of Jhalda Blocks helped a lot recognize these groups and carry on survey of the parents as well.

6.1. First-Generation Learners – Descriptive Statistics

To analyze the sample features of first-generation learners, descriptive statistics have been summarized in table 1. Out of 211 learners, 120 (56.87 percent) were boys and 91 were girls (43.12 percent). Majority (55.92 percent) are currently enrolled in school (55.92 percent), others (44.08 percent) have dropped out in the mid-way. The enrolled learners’ average age is 14.76 years with SD of 1.449. These special types of learners mainly consist of first-generation type as stated earlier, out of which 72.99 percent participants belong to the scheduled group category with a tiny SD of 0.45. The literacy status of parents shown in the descriptive statistics reveals very gloomy picture; fathers on an average enjoyed 0.9 years of school education, whereas it is only 0.18 years for mothers, though in case of fathers the standard deviation is higher (1.238 years) than mothers (0.39 years). The Skewness of fathers’ (1.699) and mothers’ (2.312) education indicate shallow educational attainment levels of both holding the maximum frequency. It is also noteworthy that parental education exerts a strong influence (father’s education: $r^2=0.447$; mother’s education: $r^2=0.556$) on children’s education. Keeping in mind the economic condition, it has been found that more than the half of the learners’ family (63.51 percent) belong to the daily-wage labour group in various farm and off-farm sectors whereas 36.49 percent family are self-employed with very low SD of 0.67 and skewness (0.78).

6.2. Dominant Components of Learning Environment at Home

To investigate ‘which one dominates the learning atmosphere of a child at home?’ the study has performed Exploratory Factor Analysis (EFA) applying maximum-likelihood extraction and varimax-rotation method with Kaiser-Normalization and have identified three dominant components carrying significant weights (Table 2). The scree-plot reveals three components with Eigen values greater than one, which together explains 72.99 percent of the learning environment variance and parental involvement. The Kaiser-Meyer-Olkin (KMO) value of 0.960 tells in favour of sample adequacy.

The analysis reveals that demographic status along with SES and learning environment at home form the most dominant component explaining 35.094 percent (Eigen value: 8.072) followed by parent participation in child’s school activities explaining 20.883

percent (Eigen value: 4.803) of the variance and parenting style being the third and last component explaining only 17.014 percent of total Variance (Eigen value: 3.913) of the analysis. The magnitude of the factor loadings was acceptable, ranging from 0.55 to 0.84. The findings echo with the literature that the first-generation with scheduled groups does not get a healthy learning environment at home for smooth access to schooling (Bandyopadhyay and Subrahmanian 2008; Reddy 2004). A considerable family income with parental education, especially mothers’ education, is a strong predictor of the learning environment at home. The higher loading of parents’ education than income signifies the former variable’s importance for creating a healthy atmosphere at home that helps a child achieve school success (Baker et al., 2001; Rumberger and Rotermund, 2012). Likewise, availability of learning structure at home, i.e., private tuition, sufficient reading materials, money spent for child’s education and time of engagement at homework generate an effective learning home environment. In contrast, engagement in domestic chores speaks opposite and carry a negative sense. After SES, parental physical involvement, both at home, and in school, takes a major role in providing a good academic atmosphere at home, while internalized behaviour from parents is also in queue to support children in his/her education.

6.3. Determinants of Learning Environment at Home on School Performance

After exploring the dominant components creating a favourable learning environment at home, it is now pertinent to know ‘to what extent do these components predict learners’ success?’ The transition from Exploratory Factor Analysis (EFA) to Stepwise Multiple Regression is structured to test the predictive power of the distinct dimensions identified in the factor solution. The three-factor EFA solution (Table 2) reduced the complex learning environment variables into three core dimensions: (1) SES and Family Background, (2) Parents’ Participation, and (3) Parenting Style. To systematically evaluate how these factor dimensions determine academic success, our stepwise regression models (Table 3) introduce them sequentially, while controlling for baseline socio-demographic factors. Model 1 establishes the baseline predictive power of socio-demographic covariates. Model 2 introduces the variables loading heavily on Factor 1 (SES and Family Background), specifically monthly family income and parental educational attainment, to evaluate their incremental contribution. Model 3 adds the physical and material variables representing the home-based ‘Learning Structure’. Model 4 incorporates variables associated with Factor 2 (Parents’ Participation in school-centric and home-centric activities) to capture active behavioral engagement. Finally, Model 5 includes the variables defining Factor 3 (Parenting Style and internalized psychological behaviors), thereby completing the transition from distal socio-cultural structures to proximal active behavioral interactions, and demonstrating the unique predictive variance of each EFA-derived dimension on student academic achievement. The regression analysis starts (Table 3) with covariates of socio-demography that explain 65 percent of predicting school success. In the first step of the Regression analysis, out of six covariates, except gender and location, four are significantly related to school performance. A first-generation learner of scheduled group of Jhalda does not get desirable marks in school, large family size and increasing age hinder desired success in school.

In the second step, the analysis considers three more covariates of SES, family income and parents’ educational attainment explaining another 15 percent of school success. Family income

Table 1. Descriptive Statistics: First-Generation Learners

Variable	Frequency	Mean (SD)	Skewness	Kurtosis	Description
N	211				
Gender		0.58 ± 0.50	-0.33	-1.91	Boy (0) and Girl (1)
Boy	120 (56.87)				
Girl	91 (43.12)				
Age (Enrolled learners)		14.76 ± 1.449	0.106	0.589	Age (in years)
Social affiliation		0.72 ± 0.45	-0.96	-1.09	Social Affiliation status: Scheduled (1) and Non-Scheduled (0)
Scheduled group	154 (72.99)				
Non-Scheduled group	57 (27.01)				
Educational status		0.86 ± 0.14	0.15	-0.79	Currently enrolled (1) and dropped out (0)
Enrolled	118 (55.92)				
Dropped out	93 (44.08)				
Father's education		0.9 ± 1.238	1.699	2.893	Father's year of schooling
Mother's education		0.18 ± 0.39	2.312	5.106	Mother's year of schooling
Family Occupation		1.56 ± 0.666	0.779	-0.48	
Daily wage labour	134 (63.51)				
Self-employed	77 (36.49)				

**Values in parentheses indicate percentage*

Table 2. Dimensions of Learning Environment at Home

ItemDetails	SESandFamily Background	Parents' Participation	Parenting Style
Generation	-0.817		
Mother'seducation	0.798		
Father'seducation	0.790		
Caste	-0.788		
Privatetuition	0.716		
Monthlyincome	0.708		
Readingmaterialsathome	0.697		
Engagementinhomework	0.694		
Moneyspentineducation	0.683		
Engagementindomesticchore	-0.590		
Attendschoolmeeting		0.795	
Visitschoolteacher		0.794	
Helpchildindoinhomework		0.732	
Checkinghomework		0.691	
Attendschoolfunction		0.649	
Talkingwithchildaboutschoo		0.547	
Motivation			0.841
Emotionalsupport			0.677
Encouragement			0.571
Decisionmakingindependence			0.549
<i>EigenValue</i>	8.072	4.803	3.913
<i>ExplainedVariance (percent)</i>	35.094	20.883	17.014
<i>Accumulated (Rotated) Explained Variance (percent)</i>	35.094	55.977	72.992

Approx. Chi. Sq. 7.255, degree of freedom: 253, Sig. 0.000, Kaiser-Meyer-Olkin: 0.960

predicts better success than education level of parents in the initial model. All three are significantly correlated with school success. It is interesting to note that mothers' education ascertains a child's school performance better than the father's education level. The findings look similar to the work of Sengupta and Ghosh (2011), Cooper and Stewart (2020), Costello et al., 2003, Lai et al., (2020) and Beeber et al., (2008). In step three, availing learning structure explains only seven percent of students' success, in which recurring expenses for the smooth running of education and availability of reading materials are positively associated with child's school performance. The child engaged more in homework is more likely to succeed in school, in contrast, the child, who is busy in domestic chores perform poorer in the school examination than others.

The fourth step predicts children's better performance in school due to parents' more participation in school-centric activities, maintaining parent-teacher relationship, helping children at home in doing homework to lift ward's success. Parents' internalized behaviour explaining only two percent of child's success presents a gloomy picture of school education scenario, all covariates, though significant; carry very little weightages predicting good performance in examination. It is noteworthy that while considering all predictors, boys significantly perform better in school examination than girls; family size no longer remains a significant predictor of school success. Interestingly, parental education, especially mother's education determines child's school performance better than family income.

6.4. Parental Attitudes and Learning Outcomes

The parental expectation is a causal determinant of a child's academic success. Sociologists rely on the theory of membership of a certain 'social class' giving rise to a particular level of parental expectation that affects learners' academic outcome. Poor SES may generate low expectation, minimum awareness, and little knowledge regarding a child's education, thus, leading to an unhealthy and discouraging the learning environment at home. *Siksha Bandhu* opined that this depressive scenario aggravates native parents to hold a pessimistic perception towards the child's education a lot.

The mental map (Figure 3) shows that the parents hardly perceive any positive attitude regarding school education, and in all the cases, parents' perception work negatively. Nearly 88 percent parents (N=80) feel very pessimistic that education bears minimum significance, useless and nothing but a luxury. The sufficient number of responses, i.e., 'Education is not necessary' or 'a wastage' is also disappointing. Still, it is a hard reality to them. This kind of indifferent attitudes invite less expectation (Hong and Ho, 2005) and dissatisfaction (Ahmetoglu and Acar, 2017; Bacolod and Tobias, 2006; Bandyopadhyay and Subrahmanian, 2008) among the parents. This is quoted by the following interview narrative given by a father and confirmed by *Siksha Bandhu*:

"What is the benefit to become a graduate? In our village, a graduate student remains still unemployed. He goes to Jhalda for the daily casual job like us, what is the difference between this graduate and us- the illiterate people? He also teaches as a private tutor, but no one sends children to avail the tuition. Within the village, a so- called 'failure' graduate without salaried job lessens our expectation to the existing education system."

"Those who perform well in school migrate to town with the whole family and get admitted to the renowned school for better education. The educated parents also don't want to keep the children in that 'poor' environment. The low SES villagers cannot see anybody to become successful in staying in that remote village. This depressive scenario aggravates native parents to hold a pessimistic perception towards the child's education a lot."

6.5. Parental Attitude as Mediator of Poverty on Child's Learning Outcome

Following the relevant literature of parental negative attitudes in the context of India's rural and hilly pockets of India, several dimensions of low expectation, minimum awareness and little knowledge about child's schooling have been considered for the analysis. To acquire an idea of *parental expectation*, the parents were asked of how far educational achievement they think that their children will achieve in terms of formal schooling (Belardo and Candelaria, 2023; Sandra, 2021; Goldenberg et al. 2001); to realize *parental awareness*, they were asked to what extent they think education is necessary, and whether they have any knowledge of the present school education system. A mediation regression analysis is fruitful in establishing the mediator role of parents' negative attitudes towards education under specific SES. The study mainly concentrates on first generation learners' home environment featured by high poverty and low educational attainment. To measure the depth of the poverty, the study has taken the per capita MCE of each family and its gap from the calculated 'cut off' value, i.e., Rs. 594.49/. The relevant research question of the analysis includes: Does the negative attitude of parents mediate the influence of poverty on child's school outcome?

The hypotheses are as follows:

Hypothesis 1: Poverty significantly affects school outcome;

Hypothesis 2: Parents' negative attitude has a significant unique effect on school outcome;

Hypothesis 3: Parents' negative attitudes significantly affect parents' expectation;

Hypothesis 4: The effect of poverty on school outcome *shrinks upon the addition of the parents' negative attitude (Mediator) to the model*;

The equations are as follows:

$$\text{School Outcome} = b_0 + b_1(\text{Poverty Depth}) [\text{Significant}] \quad \dots \quad (1)$$

$$\text{Negative Attitude} = b_2 + b_3(\text{Poverty Depth}) [\text{Significant}] \quad \dots \quad (2)$$

$$\text{School Outcome} = b_4 + b_5(\text{Negative Attitude}) [\text{Significant}] \quad \dots \quad (3)$$

Table 3. Determinants of Learning Environment at Home by Stepwise Multiple Regression Analysis

Variable	Model1:Socio-Demographic	Model2: SES	Model3: Learning Structure	Model 4: Parents' Participation	Model5: ParentingStyle
R ² Adjusted (Sig.)	0.641(0.000)	0.789(0.000)	0.864(0.000)	0.926(0.000)	0.946(0.000)
ΔR ²	0.648	0.148	0.074	0.061	0.019
ΔH(Sig.)	91.724 (0.000)	71.215 (0.000)	33.267 (0.000)	62.97(0.000)	26.225 (0.000)
Predictors	b	b	b	b	b
Intercept	11.373*	11.944	15.121*	15.828*	15.992*
Socio-Demographic					
Gender	0.015	0.046	0.096*	0.053*	0.033*
SocialGroupAffiliation	-0.039*	0.012*	0.052*	0.023	0.013
Age	-0.093*	-0.094	0.046*	-0.05*	-0.046*
Generation Status Location	-0.092*	0.092*	0.002	0.001	0.006
FamilySize	-0.109	0.179*	0.179*	0.156*	0.171*
	-0.711*	-0.275*	-0.088*	0.028	0.008
SES					
Monthly Income		0.746*	0.333*	0.176*	0.122*
Fathers' Educational Attainment		0.141*	0.244*	0.054	0.253*
Mothers' Educational Attainment		0.168*	0.188*	0.033	0.288*
Learning Structure					
Money Spent in Education			0.381*	-0.092*	0.48*
Reading Materials at Home			-0.13*	0.223*	0.238
Availing Private Tuition			-0.01	-0.2*	-0.13*
Time of Doing Homework			0.157*	0.03	0.008
Engagement in Domestic Chores			-0.176*	-0.227*	-0.27*
Parents' Participation					
Attending SchoolMeeting				0.199*	0.141*
Visiting School Teacher				0.114*	0.084*
Attending School Function				0.074*	0.16*
Helping child in Homework				0.105*	-0.037
Checking Homework				0.056*	0.045
Taking with child about School				0.067*	0.234*
Parenting Style					
Encouragement Emotional Support					0.131*
DecisionMaking					0.13*
Independence					0.015
Motivation					0.08

Note: Δ denotes change; N = 211; *P<0.05.

$$\text{School Outcome} = b_6 + b_7(\text{Poverty Depth}) [\text{Insignificant}] + b_8(\text{Negative Attitude}) [\text{Significant}] \dots (4)$$

Primarily, the three models interacting separately with each other are associated in significant ways, i.e., poverty adversely affects school performance [(F1,118) =27.04, R²=0.27, p=0.003], parents' negative attitude also has ill-effect on the school performance [(F1,118) =83.69, R²=0.76, p=0.000] and poverty affects parents' negative attitude towards child's education [(F1,118) =8.80, R²=0.24, p=0.006]. Three regression analyses show that unit increase in poverty increases 0.19 negative attitude among the parents (a path). One unit more depth in poverty decreases

0.17 unit of child's school performance (c path) determining 27 percent of it. But coupled with parents' negative attitude, poverty hinders 0.67 unit of child's school outcome determining 76 percent of child's school performance that is far greater than the influence of poverty alone. It is to note that a full mediation occurs in the above analysis as the addition of parents' negative attitude totally makes the influence of poverty (c' path) insignificant on child's academic performance (Figure 4). Therefore, it is the parents' detrimental attitude, not poverty, that comes first to determine child's achievement in school.

However, this finding of full mediation must be qualified with caution, as poverty and parental attitudes are deeply endogenous. In the context of the Jhalda plateau, these attitudes are not independent psychological traits; rather, they are deeply embedded

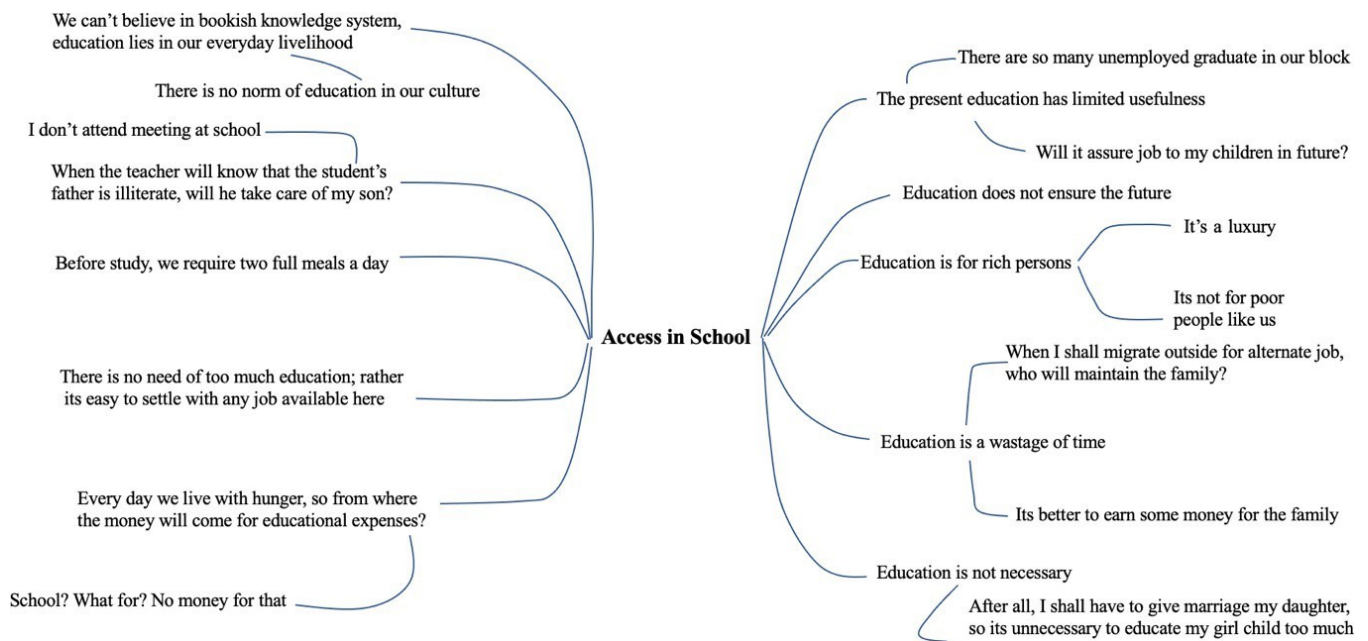


Figure 3. The mental map represents the negative attitudes of parents about the importance of school education.

in structural poverty. Parents' "negative attitude" is perhaps a logical survival adaptation; when families experience long-term economic instability, the immediate demands of the forest-based economy sometimes take precedence over the uncertain benefits of formal secondary education. Therefore, poverty "speaks through"

parental attitude, making the latter a psychological proxy for long-term material deprivation.

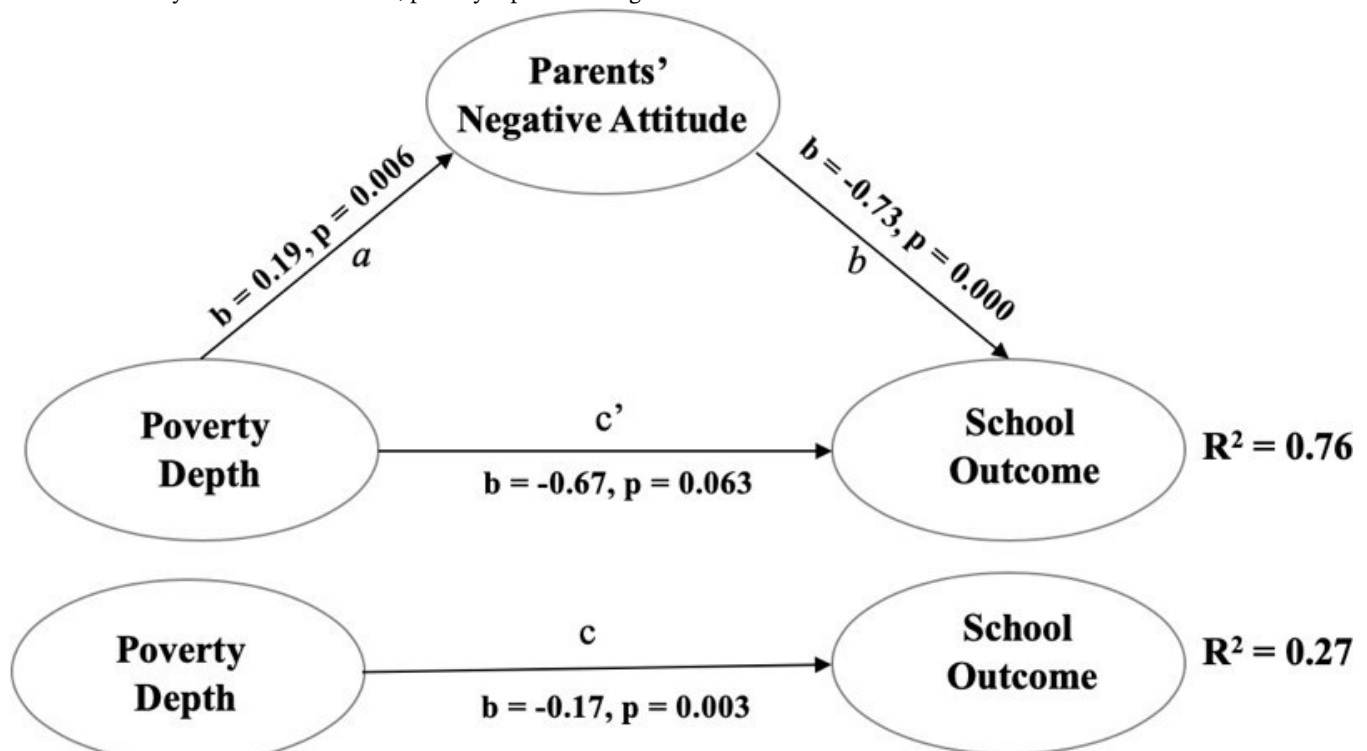


Figure 4. Full Mediation Model: Parents' negative attitude mediating the role of poverty on child's school outcome

This negative attitude of parents to child's access and success in school education flows into next-generation plaguing today's teenage youth of a lack of motivation towards academic activities (Lisa et al., 2006). A huge number of learners, especially of first

generation, locate themselves in a condition in which they do not desire to continue the school activities required for them (Green-Demers and Pelletier, 2003). This lack of motivation can give birth to the feelings of loneliness and frustration, thus hampering well-

being. This kind of home ecological issues is not alike to the home atmosphere of subsequent generation learners, a comparative view is pertinent to analyse to address the question: "To what extent does the home ecology differ by generations?"

7. Discussion

In the context of developing countries, particularly in India, children in rural India from poor economic and social backgrounds are disadvantaged concerning their development and learning potential (Kamper, 2008; Ademujimi, 2002; Oyeka, 2002). Research on rurality demand sensitivity to the uniqueness and individuality (Barley and Beesley, 2007). Practically, in rural areas hurdles are more and opportunities are less. Rural schools serve large number of scheduled social groups, families in socio-economic distress, and parents with little or no educational attainment (Flora et al., 2003; Pitan, 2012; Schneider, 2002). Students from rural base are at risk of low motivation and devoid of school success (Lichter et al., 2003). Parents of these children with no education and skill spend little or no quality time with them, mainly due to keep engaged in different income generating activities as survival strategy (Robinson et al. 2001). This lack of time deepened by the inability of poor parents to extend support due to their own levels of educational attainment hinders nourishing from within the families. Secondly, poverty decreases child's motivation for learning (Gwirayi and Shumba, 2007). Poverty aggravates discrepancy in academic aspiration with great number of children believing that they hardly possess any ability to achieve. Teachers also believe that these children, especially first-generation learners, are incapable of reaching their learning potential.

Children living with poverty are less likely to attend school regularly and pursue higher education, as it is an arduous task for them to break out of the poverty cycle. The association between poverty and academic achievement is complicated by social identity factor, as a large number of scheduled social groups with a long history of legal and social discrimination have hardly got any chances of academic and material success (Rienks et al., 2017; Kamper, 2008). Children of low SES parent usually lag behind academically in their school years and are more prone to dropout before the completion of school education cycle.

8. Conclusion

Agriculture is the backbone of economy of India even at the end of first quarter of the 21st century and agro-economy is too much regressive in the plateau fringe area and poverty is the integral part of household economy of this region. Under such consideration, most of the parents of school goers struggle for their livelihood where desire or success of school education of their wards is nothing but a luxury. Success completion of school education up to the last grade of the cycle with no one at home to support is an uphill task for first generation learners. Not only researchers, but policy makers also have felt the importance of learning environment and parental involvement on child's academic performance and have stated assimilated effort aimed at including parental involvement into broader educational policy initiatives. EFA clearly proves that learning environment at home comes first succeeded by parental participation in child's school activities. Poverty and livelihood struggle of parents seems to be the most crucial barriers in this context. Poverty not only affects their livelihood and household economy; it has some negative impact on parental attitudes to send their wards to attend school and also the learning outcome of the school goers.

Parents are more interested to engage their wards in farming, day labouring and household chore especially for the girl child. To sustain their family, most of the parents are engaged in day labouring frequently. Girl child have to take the responsibility to take care of the household duty of the mother in terms caring kids and other household chores. The scenario has slightly changed with the introduction of Universal Literacy programme. With such programme initiated from 2007, school goers up to 8th standard get mid-day meal, book grant, school dresses and even different scholarships under central and provincial government, but the desire of the parents about successful school education of their wards is drain out due to lack of gainful employability of the first-generation learner and even non- first-generation learners even after success completion of their higher education as stated by the respondents. The opportunity cost for school education of their wards is lessened now, but the non-encouraging home environment and psychological barriers of first-generation learners still prevails which is at the root for drop out. Psychological barriers are more pervasive for dropout. During their home study, they rarely get any help in understanding the lessons. As a result, they are afraid of attending school. Continuation of this process leads to drop out. Therefore, school curriculum and syllabus up to 8th standard should not be a burden to them. The moto of school education up to 8th standard is to be developed to gain knowledge and general understanding about the nature and society through which they will be in a joyful learning with subsequent development of sociability. Opportunity cost can be reduced through government planning which is gradually being established through Universal literacy programme, but psychological barriers can only be removed by joyful learning.

■ ACKNOWLEDGEMENT

The authors are grateful to the respondents for their kind cooperation in completing the study.

■ REFERENCES

- [1] Ahmetoğlu, E., and Acar, İ. (2017). PARENTS' SATISFACTION WITH THEIR CHILDREN'S EDUCATIONAL EXPERIENCES IN EARLY CHILDHOOD PERIOD. *Turkish Studies*, 12(6), 1-14. <http://dx.doi.org/10.7827/TurkishStudies.11550>
- [2] Altschul, I. (2012). Linking socioeconomic status to academic achievement of Mexican youth through parent involvement in education. *Journal of the Society for Social Work and Research*, 3, 13-30.
- [3] Ademujimi, I. M. (2002) Funding and academic performance of students in secondary education in Ondo State, Nigeria. Unpublished M.Ed Thesis, University of Ado Ekiti, Nigeria. 65-66
- [4] Assan, T. E. B., Dudu, W. T., Kunene, N. T., Mlambo, S., Mutsvangwa, A., Samuel, K. B., Nel, M., Nwosu, L. I., Petzer, V., ... Rambe, P. (2021). Quality education: The nexus of human capital development, economic growth and social justice in a South African context. <https://doi.org/10.4102/aosis.2021.bk287> DOI: <https://doi.org/10.4102/aosis.2021.BK287>
- [5] Bacolod, M.P. and Tobias, J.L., (2006). "Schools, school quality and achievement growth: Evidence from the Philippines," *Economics of Education Review*, 25(6), 619-632.

- [6] Bandyopadhyay, M. and Subrahmanian, R. (2008). Gender Equity in Education: A Review of Trends and Factors. CREATE Pathways to Access Research (Monograph No. 18). New Delhi/Falmer: CREATE and NUEPA.
- [7] Barley, Z. A., and Beesley, A. D. (2007). Rural school success: What can we learn? *Journal of Research in Rural Education*, 22(1). Retrieved from <http://www/jrre.psu.edu/articles/221.pdf>.
- [8] Berkowitz, R., Moore, H., Astor, R. A., and Benbenishty, R. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research*, 87(2), 425-469. doi:10.3102/0034654316669821
- [9] Berry, B. (2005). Approaches to Regional Analysis: A Synthesis. *Annals of the Association of American Geographers*. 54. 2 - 11. 10.1111/j.1467-8306.1964.tb00469.x.
- [10] Bronfenbrenner, U. (2013). Ecology of the family as a context for human development: Research perspectives. *Adolescents and their families*, 1-20.
- [11] Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742.
- [12] Baker, J. A., Derrer, R. D., Davis, S. M., Dinklage-Travis, H. E., Linder, D. S., & Nicholson, M. D. (2001). The flip side of the coin: Understanding the school's contribution to dropout and completion. *School Psychology Quarterly*, 16(4), 406-426. <http://psycnet.apa.org/doi/10.1521/scpq.16.4.406.19901>
- [13] Barro, R. J. (2013). Education and economic growth. *Annals of Economics and Finance*, 14(2), 301-328. <https://doi.org/10.2139/ssrn.1886131>
- [14] Basant, R., & Chandra, P. (2021). Innovation and education in India: Strategies for growth. Oxford University Press.
- [15] Beeber, L. S., Perreira, K. M., & Schwartz, T. (2008). Supporting the mental health of mothers raising children in poverty: how do we target them for intervention studies? *Annals of the New York Academy of Sciences*, 1136, 86-100. <https://doi.org/10.1196/annals.1425.008>
- [16] Agabrian, M. (2007). Relationships between School and Family: The Adolescents' Perspective. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*. 8.
- [17] Belardo, S. and Candelaria, A. (2023). Aspirations of Fisherfolk Communities on Their Children's Education in Albay, Asid, and Ragay Gulfs of Bicol, Philippines. *Journal of Geoscience and Environment Protection*, 11, 136-155. doi: <https://doi.org/10.4236/gep.2023.117009>.
- [18] Baker S. (2017). The Influence of Social Circumstances on "Risky" Patterns of Alcohol Consumption Among Mothers With Preschool-Aged Children in England. *Substance use & misuse*;52(5):624-31.
- [19] Baker, T. L., Wise, J., Kelley, G., & Skiba, R. J. (2016). Identifying barriers: Creating solutions to improve family engagement. *The School Community Journal*, 26(2), 161-184.
- [20] Crosnoe, R., & Benner, A. D. (2015). Children at school. In M. H. Bornstein, T. Leventhal, & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Ecological settings and processes* (7th ed., pp. 268-304). John Wiley & Sons, Inc. <https://psycnet.apa.org/doi/10.1002/9781118963418.childpsy407>
- [21] Considine, G., & Zappalà, G. (2002). The influence of social and economic disadvantage in the academic performance of school students in Australia. *Journal of Sociology*, 38(2), 129-148. <https://doi.org/10.1177/144078302128756543>
- [22] Census. (2011). Primary Census Abstracts, Registrar General of India, Ministry of Home Affairs, Government of India. Retrieved. From <http://www.censusindia.gov/>
- [23] Census. (2001). Primary Census Abstracts, Registrar General of India, Ministry of Home Affairs, Government of India. Retrieved. From <http://www.censusindia.gov/>
- [24] Cooper K, and Stewart K. (2020). Does household income affect children's out- comes? A systematic review of the evidence. *Child Indicators Research*: 1-25.
- [25] Costello, E. J, Compton S. N, Keeler G, Angold A. (2003). Relationships between poverty and psychopathology: A natural experiment. 290(15):2023-9.
- [26] Dusi, P. (2023). The family-school relationship in primary education. *International Journal about Parents in Education*. 12. 10.54195/ijpe.14109.
- [27] Dearing, E., Kreider, H., Simpkins, S., and Weiss, H. (2006). Family Involvement in School and Low-Income Children's Literacy: Longitudinal Associations Between and Within Families. *Journal of Educational Psychology*, 98, 653-664.10.1037/0022-0663.98.4.653.
- [28] Doley, L. (2018). The Impact of Home Environment Factors on Academic Achievement of Adolescents. *Researchers World. Journal of Arts, Science and Commerce*. IX (1), 137-147. DOI : 10.18843/rwjasc/v9i1/17
- [29] Dumais, S. A. (2006). Early childhood cultural capital, parental habitus, and teachers' perceptions. *Poetics*, 34, 83-107.
- [30] Dubey, V. A., Ranjan, R., & Nangia, R. (2024). Socio-economic Variables and their Effect on Education in India. *International Journal of Experimental Research and Review*, 44, 162-172. <https://doi.org/10.52756/ijerr.2024.v44spl.014>
- [31] Elffers, L., Oort, F.J. (2013). Great expectations: students' educational attitudes upon the transition to post-secondary vocational education. *Soc Psychol Educ* 16, 1-22 . <https://doi.org/10.1007/s11218-012-9192-4>
- [32] Epstein, J. L. (1986). Parents' reactions to teacher practices of parent involvement. *The Elementary School Journal*, 86,276-294.
- [33] Froiland, J., Peterson, A., and Davison, M. (2013). The long-term effects of early parent involvement and parent expectation in the USA. *School Psychology International*, 34, 33-50. 10.1177/0143034312454361.

- [34] Flora, C.B., Flora, J. L., and Fey, S. (2004). *Rural Communities: Legacy and Change*. (2nd ed). Boulder, CO: Westview Press.
- [35] Fedak, K. M., Bernal A., Capshaw, Z.A., Gross, S. (2015). Applying the Bradford Hill criteria in the 21st century: how data integration has changed causal inference in molecular epidemiology. *Emerging themes in epi- demiology*;12(1):1–9.
- [36] Gil, A. J., Antelm-Lanzat, A. M., Cacheiro-González, M. L., & Pérez-Navío, E. (2018). School dropout factors: A teacher and school manager perspective. *Educational Studies*, 45(5), 1-14. doi: 10.1080/03055698.2018.1516632.
- [37] Geeta, I. M. (2001). *A Psycho-social Study of First Generation Learners*. PG Department of Education. Goa University. <http://hdl.handle.net/10603/32078> on March 11, 2018.
- [38] Ghosh, S., and S. Sengupta. (2014). *Hard Realities of School Education in Rural Areas: A Profile of Balagarh Block, Hugli District, West Bengal*. *Eastern Geographer*, XX (1), 181-196.
- [39] Giallo, R., Treyvaud, K., Matthews, J., and Kienhuis, M. (2010). Making the Transition to School: An Evaluation of a Transition Program for Parents. *Australian Journal of Educational & Developmental Psychology*, 10, 1- 17.
- [40] Goldenberg, C., Gallimore, R., Reese, L., and Garnier, H. (2001). Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's school performance. *American Educational Research Journal*, 38(3), 547–582.
- [41] Government of West Bengal. (2004). *West Bengal Human Development Report, 2004*. Development and Planning Department, West Bengal.
- [42] Green-Demers, I., and Pelletier, D. (2003). *Motivation, goals, and future perspectives of high school students of the Outaouais area*, 1–14. Gatineau, Quebec, Canada: Université du Québec en Outaouais.
- [43] Grolnick, W. & Slowiaczek, M. (2008). Parents' Involvement in Children's Schooling: A Multidimensional Conceptualization and Motivational Model. *Child Development*. 65. 237 - 252. 10.1111/j.1467-8624.1994.tb00747.x.
- [44] Gwirayi, P. and Shumba, A. (2007). Students' self-concept and academic achievement in Zimbabwe: A preliminary study. *Journal of Psychology in Africa*, 17, 119-122.
- [45] Hartshorne, R. (2016). (Reprint) *The Nature of Geography. A Critical Survey of the Current Thought in the Light of the Past*. New Delhi: Rawat Publications.
- [46] Hill, N. E., and Taylor, L. C. (2004). Parent–school involvement and children's academic achievement. *Pragmatics and issues*. *Current Directions in Psychological Science*, 13, 161–164.
- [47] Hill, N. E. and Craft, S.A. (2003). Parent–School Involvement and School Performance: Mediated Pathways Among Socioeconomically Comparable African American and Euro-American Families. *Journal of Educational Psychology*, 95(1), 74-83. DOI: 10.1037/0022-0663.95.1.74
- [48] Hong, S., and Ho, H. Z. (2005). Direct and indirect longitudinal effects of parental involvement on student achievement: Second-order latent growth modeling across ethnic groups. *Journal of Educational Psychology*, 97, 32–42. doi:10.1037/0022-0663.97.1.32
- [49] Islam, S. M., Rahman, M. M., Moonajilin, M. S., & Chowdhury, M. A. R. (2021). Factors contributing to school dropout among adolescents in developing countries: A systematic review. *Children and Youth Services Review*, 129, 105-118.
- [50] Kumar, P., Patel, S. K., Debbarma, S., & Saggurti, N. (2023). Determinants of school dropouts among adolescents: Evidence from a longitudinal study in India. *PLoS ONE*, 18(3), e0282468. <https://doi.org/10.1371/journal.pone.0282468>
- [51] Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: a meta-analytic assessment of the strategies that promote achievement. *Developmental psychology*, 45(3), 740–763. <https://doi.org/10.1037/a0015362>
- [52] Huisman, J., Rani, U. and Smits, J.(2010). School characteristics socio-economic status and culture as determinants of primary school enrolment in India. NICE Working Paper 10-109. The Netherlands: Nijmegen Center for Economics (NiCE), Institute for Management Research, Radboud University Nijmegen.
- [53] Hung, A. H., Luebbe, A. M., and Flaspohler, P. D. (2015). Measuring school climate: Factor analysis and relations to emotional problems, conduct problems, and victimization in middle school students. *School mental health*, 7(2), 105-119. doi: 10.1007/s12310-014-9131-y
- [54] Jensen, B. and Andrew S. (2000) 'Neighbourhood and Family Effects in Educational Progress', *The Australian Economic Review* 33(1): 17–31. <https://doi.org/10.1111/1467-8462.00133>
- [55] Jeter, S. (2021). Exploring the Impact of School Factors on Expectations to Complete Post Secondary Education Among Black Girls. *Education and Urban Society*. 54. 001312452110484. 10.1177/00131245211048429.
- [56] Jeynes, W. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education*, 40, 237–269. <https://doi.org/10.1177/0042085905274540>
- [57] Kim, E. M., & Sheridan, S. M. (2015). Foundational aspects of family-school connections: Definitions, conceptual frameworks, and research needs. In S. M. Sheridan and E. M. Kim (Eds.), *Foundational aspects of family school partnership research* (pp. 1–14). Switzerland: Springer International Publishing.
- [58] Kamper, G. (2008). A profile of effective leadership in some South African high-poverty schools. *South African Journal of Education*, 28(1), 1-18.
- [59] Järvinen, T., Tikkanen, J., af Ursin, P. (2023). The Significance of Socioeconomic Background for the Educational Dispositions and Aspirations of Finnish School Leavers. In: Thrupp, M., Seppänen, P., Kauko, J., Kosunen, S. (eds) *Finland's Famous Education System*. Springer, Singapore. https://doi.org/10.1007/978-981-19-8241-5_15

- [60] Lena P, Frank M. S, Elisabeth H. (2025). How socioeconomic status affects a child's education – Investigating objective and subjective factors involved in shaping educational success in Germany, *Intelligence*, Volume 113, 101970, ISSN 0160-2896, <https://doi.org/10.1016/j.intell.2025.101970>.
- [61] Lavenda, O. (2011). Parental involvement in school: A test of Hoover-Dempsey and Sandler's model among Jewish and Arab parents in Israel. *Children and Youth Services Review*. 33. 927-935. 10.1016/j.childyouth.2010.12.016.
- [62] Lai ET, Schlueter DK, Lange T, (2020). Understanding pathways to inequalities in child mental health: a counterfactual mediation analysis in two national birth cohorts in the UK and Denmark. *BMJ open*;10(10):e040056.
- [63] Lichter, D., Graefe, D. and Brown, J. (2003). Is Marriage a Panacea? Union Formation Among Economically Disadvantaged Unwed Mothers. *Social Problems*, 50, 60-86. 10.1525/sp.2003.50.1.60.
- [64] Lawson, M. (2003). School-Family Relations In Context: Parent and Teacher Perceptions of Parent Involvement. *Urban Education - URBAN EDUC.* 38. 77-133. 10.1177/0042085902238687.
- [65] Lisa, L., Green-Demers, I., and Pelletier, L. (2006). Why Do High School Students Lack Motivation in the Classroom? Toward an Understanding of Academic amotivation and the Role of Social Support. *Journal of Educational Psychology*, 98 (3), 567- 582. DOI:10.1037/0022-0663.98.3.567
- [66] Mullis, R. L., Rathge, R., and Mullis, A. K. (2003). Predictors of academic performance during early adolescence: A contextual view. *International Journal of Behavioral Development*, 27(6), 541–548. <https://doi.org/10.1080/01650250344000172>
- [67] Muola, J. M. (2010). A study of the relationship between academic achievement motivation and home environment among standard eight pupils. *Educational Research and Reviews* 5: 213–217.
- [68] Monserud, M. A., & Elder, G. H., Jr (2011). Household Structure and Children's Educational Attainment: A Perspective on Co-residence with Grandparents. *Journal of marriage and the family*, 73(5), 10.1111/j.1741-3737.2011.00858.x. <https://doi.org/10.1111/j.1741-3737.2011.00858.x>
- [69] Motiram, O. S. (2011). Demand or Supply for Schooling in Rural India? WP-2011-010. Mumbai: Indira Gandhi Institute of Development Research.
- [70] Nyarko, K. (2010). Parental home involvement: The missing link in adolescents' academic achievement. *Educational Research*, 1, 340-344.
- [71] Oyserman, D., Brickman, D., and Rhodes, M. (2007). Racial-ethnic identity in adolescence: Content and consequences for African American, Latina, and Latino youth. In A. Fuligni (Ed.), *Social categories, identities, and educational participation*, pp. 91–114. New York: Russell Sage Foundation.
- [72] Oyeka, C.F. (2002). An analysis of resource management in public secondary schools in Edo State, Unpublished Doctoral Thesis, University of Benin, Benin City; Nigeria
- [73] Pastorelli, C & Caprara, G & Barbaranelli, C & Rola, J & Rózsa, S & Bandura, A. (2001). The Structure of Children's Perceived Self-Efficacy: A Cross-National Study. *European Journal of Psychological Assessment*. 17. 87-97. 10.1027//1015-5759.17.2.87.
- [74] Pitan, O.S. (2012). Analysis of internal efficiency in the utilization of human resources in selected secondary schools of Oyo state, Nigeria. *Journal of Emerging trends in Educational Research and Policy Studies*, 3(5):748-752
- [75] Ramelow, D., Currie, D., and Felder-Puig, R. (2015). The assessment of school climate: Review and appraisal of published student-report measures. *Journal of Psychoeducational Assessment*, 33(8), 731-743. doi: 10.1177/0734282915584852
- [76] Reddy, S. (2004). The Social Context of Elementary Education in Rural India. Bangalore: Azim Premji Foundation. Available from : [http:// scripts.mit. edu /~varun_ag/reading_group/media/1/1 /Social_context_of_elementary_education.pdf](http://scripts.mit.edu/~varun_ag/reading_group/media/1/1/Social_context_of_elementary_education.pdf)
- [77] Richardson, R & Skinner, E. (2006). Helping First-Generation Minority Students Achieve Degrees. *New Directions for Community Colleges*. 1992. 29 - 43. 10.1002/cc.36819928005.Renzulli, J. S., & Park, S. (2004). Gifted Dropouts: The Who and the Why. In S. Baum (Ed.), *Twice-exceptional and special populations of gifted students*: 117–137. Corwin Press.
- [78] Rienks S, Phillips J, McCrae J, Bender K, Brown S. Complex health concerns among child welfare populations and the benefit of pediatric medical homes. *Child Abuse Negl.* 2017 Mar;65:212-225. doi: 10.1016/j.chiabu.2017.01.021. Epub 2017 Feb 10. PMID: 28189959.
- [79] Robinson, C., Mandlco, B., Olsen, F., and Hart, C. (2001). The parenting styles and dimensions questionnaire (PSDQ). In: Perlmutter, B.F., Toulaitos, J., Straus, M.A., (Eds.) *Handbook of Family Measures Techniques*. Vol 3. Sage Publications; Thousand Oaks, CA, pp. 319–321.
- [80] Rumberger, R. W. & Rotermund, S. (2012). The relationship between engagement and high school dropout. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 491–513). Springer Science + Business Media. https://psycnet.apa.org/doi/10.1007/978-1-4614-2018-7_24
- [81] Sy, S. R., Rowley, S. J., and Schulenberg, J. E. (2005). Predictors of parent involvement across contexts in Asian American and European American families. *Journal of Comparative Family Studies*, 38(1), 1–29.
- [82] Spokane, A & Meir, E & Catalano, M. (2000). Person-Environment Congruence and Holland's Theory: A Review and Reconsideration. *Journal of Vocational Behavior - J VOCAT BEHAV.* 57. 137-187. 10.1006/jvbe.2000.1771.
- [83] Sengupta, S. and S. Ghosh. (2011). The Societal Momentum of Access and Success of Schooling at Pancha Block of Purulia District, West Bengal. *Advanced Journal of Geographical World*. Vol. 1(2). Pritam publications: Jalgaon.

- [84] Sudla, W., Wongwanich, S., and Sriklaub, K. (2020). Development of a School Climate Scale Based on School Members' Shared Experiences. *The Journal of Behavioural Sciences*. 15 (1): 52-72. <http://www.researchgate.net/publication/338984319>
- [85] Shaff, K & Wolfinger, N & Jones, L & Smith, K. (2008). Family structure transitions and child achievement. *Sociological Spectrum*. 28. 681-704. 10.1080/02732170802342966.
- [86] Shams, F., Mooghali, A.R., Tabebordbar, F., Soleimanpour, N. (2011). The mediating role of academic self-efficacy in the relationship between personality traits and mathematics performance, *Procedia - Social and Behavioral Sciences*. 29: 1689-1692, <https://doi.org/10.1016/j.sbspro.2011.11.413>.
- [87] Schneider, M. (2002). Do school facilities affect academic outcome: National clearing house for Educational facilities, survey of Chicago teachers. Unpublished manuscript, State University of New York: Stony Brook, Department of Political Science.
- [88] Sheppard, E. (2002). The Spaces and Times of Globalization: Place, Scale, Networks, and Positionality. *Economic Geography*, 78(3), 307–330. <https://doi.org/10.2307/4140812>
- [89] Scaglioni, S.; De Cosmi, V.; Ciappolino, V.; Parazzini, F.; Brambilla, P.; Agostoni, C. (2018). Factors Influencing Children's Eating Behaviours. *Nutrients*, 10, 706. <https://doi.org/10.3390/nu10060706>
- [90] Stein A, Pearson R. M, Goodman S.H. (2014). Effects of perinatal mental disorders on the fetus and child. *The Lancet*;384(9956):1800–19.
- [91] Stone L.L, Otten R, Engels R.C, Vermulst A.A, Janssens J.M. (2010). Psycho- metric properties of the parent and teacher versions of the strengths and difficulties questionnaire for 4- to 12-year-olds: a review. *Clinical child and family psychology review*;13(3):254–74.
- [92] Vaz, S., Parsons, R., Falkmer, T., Passmore, A., Falkmer, M. (2014). The impact of personal background and school contextual factors on academic competence and mental health functioning across the primary-secondary school transition. *PLoS ONE*, 9(3(e89874)): 1-13. <http://dx.doi.org/10.1371/journal.pone.0089874>
- [93] Van der Veen, I., & Peetsma, T. (2006). Parents' expectations and the development in motivation for school of migrant and Dutch background students in the lowest level of secondary school in the Netherlands. Paper presented at the 10th international conference on motivation, Landau, Germany.
- [94] Wise, S. (2003). *Family structure, child outcomes and environmental mediators: An overview of the Development in Diverse Families Study* (Research Paper No. 30). Melbourne: Australian Institute of Family Studies.
- [95] Wang, M. T., and Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review*, 28(2), 315-352. doi: 10.1007/s10648-015-93191
- [96] Welsh, W. N. (2000). The effects of school climate on school disorder. *The Annals of the American Academy of Political and Social Science*, 567(1), 88-107. doi: 10.1177/000271620056700107
- [97] World Bank Group District Level Survey (2012) West Bengal: Poverty, Growth and Inequality. Available at: <http://www.119344-BRI-P157572-West-Bengal-Poverty.pdf/>
- [98] Zhan, M. (2005). Assets, parental expectations and involvement, and children's educational performance. *Children and Youth Services Review*, 28, 961–975.