Original Research Article

Parental Income's Impact on Student Participation in Lesson Activities for Equitable Educational Outcomes

ABSTRACT

Aims: This study aims to investigate the relationship between parental income and student participation in lesson activities among secondary schoolchildren in Sri Lanka. The primary objectives is identifying potential differences based on parental income levels, and providing valuable insights into the broader implications for educational equity.

Study design:Employing a survey and quantitative research design, this study gathers data from 1350 secondary school students. The research focuses on diverse aspects of student participation, including group work, discussions with teachers and family, experiments, practical activities, and interactions through social media. A Likert Scale with five response options is utilized to measure student engagement, offering a comprehensive view of their involvement.

Place and Duration of Study:The study is conducted in secondary schools across Sri Lanka. Data collection spans a specified duration, ensuring a representative sample of participants. The diverse geographical and socio-economic landscape of Sri Lanka enriches the study's scope, allowing for a nuanced understanding of the interplay between parental income and student participation.

Methodology: A stratified random sampling technique is employed to select 1350 participants, ensuring a diverse representation of secondary school students. The questionnaire, validated by experts in the sociology of education, comprises two sections: one gathering demographic information and the other assessing students' perceptions of their involvement in lesson activities. Descriptive and inferential statistics, facilitated by the Statistical Package for the Social Sciences (SPSS) Version 23, enable a comprehensive analysis of the data.

Results:Descriptive analysis reveals a moderately high overall level of student participation in various lesson activities. Notably, group activities receive the highest mean value, indicating a strong positive correlation with student engagement. The multivariate analysis of variance (MANOVA) demonstrates significant differences based on parental income levels, with upper-middle-class students exhibiting higher participation than their peers from lower-income backgrounds.

Conclusion: The study concludes by highlighting the crucial role of parental income in shaping students' educational experiences. Findings underscore the disparities in engagement levels, emphasizing the need for targeted interventions and policy initiatives to promote educational equity. Educators, policymakers, and parents are urged to consider these insights to foster a more inclusive and equitable educational system in Sri Lanka.

Kewwords: Student Participation, Lesson Activities, Parental Income, Secondary School

1. INTRODUCTION

Learning can evolve in the classroom or outside the school through interactions. Active participation in lessons has become essential to engaging students in learning. Students' active classroom participation supports education, pushes motivation, promotes H.O.T., and improves communication skills (Aziz et al., 2018). In the concept of social capital, networks refer to relationships that enable information or knowledge of something to be shared and disseminated (Putnam, 2000). Field Tu (2000) states that

social interaction is fundamental in explaining the relationship between social presence and the social learning theory. When social interaction becomes part of classroom dynamics, classrooms transform into active places. Also, the social interaction of learning is essential for successful learning and supports productive and meaningful learning. Besides, social interaction promotes learning engagement which has been identified as positively affecting learning outcomes. Students tend to learn more when students participate actively in the learning process. Students should participate in various learning activities, events, and programmes to enhance their competencies, abilities and skills. Students' active classroom participation supports student learning, motivates them, promotes higher-order thinking skills and improves their communication skills (Aziz et al., 2018). Dancer and Kamvounias (2005) divided student participation into five categories: preparation, group skills, communication skills, contribution to discussion and attendance. There are two different teaching approaches in the classroom: the teacher-centred method and the student-centred method. In the teacher-centred method, the teacher becomes a dominant person who only talks in the classroom, and students become passive learners by only listening.

On the other hand, in the student-centred method, the teacher promotes two-way communication. The teacher encourages and makes students participate in lesson activities by allowing and persuading students to discuss, debate, exchange ideas and opinions, argue, etc. Active participation and meaningful learning occur when the teacher implements the student-centred approach. If the lesson activities are carried out in group activities, the teacher becomes one of the classroom participants. (Ee Ah Meng 1995).

Education plays a vital role in shaping individuals' and societies' futures, offering opportunities for personal growth, intellectual development, and socioeconomic mobility. Researchers and policymakers have long explored the various factors influencing student participation in lesson activities in pursuing equitable education. One such factor that has gained considerable attention is parental income, which has been shown to significantly impact students' educational experiences and outcomes. Parental income serves as a key indicator of socioeconomic satus, reflecting the econmoic resources available within a household. It encompasses not only the earnings of parents but also their access to finacial stability, educational opportunities, and other socioeconomic advantages. Consequently, parental income can influence a range of educational factors, including student engagement, motivation, and participation in lesson activities Ogur, 2014)

Several reasons affect children's education and lead to school dropouts in Sri Lanka. Socioenvironmental and demographic factors such as low parental educational support, parent illiteracy, poverty and family disharmony, and parent disinterest in their children's education (Aturupane et al., 2018; Little et al., 2011; Rasmy, 2018; Vengadeshvaran et al., 2108)

In this study, student participation in lessons focuses on teaching and learning in the classroom or outside the school via face-to-face or social media through interactions with teachers, classmates and family members. Interactions occur through discussions, presentations, collaborations, experiments and practical activities with others and participating in various educational initiatives. This study explores the relationship between student participation in lesson activities and parental income as a significant factor. By examining how parental income affects student engagement and involvement in classroom activities, it can be gained valuable insights into educational disparities are crucial for designing targeted interventions and policy initiatives that promote equal educational opportunities for all students, regardless of their family's financial circumstances.

Overall, this study aims to shed light on the role of parental income as a factor influencing student participation in lesson activities. By exploring this relationship, it hoped to contribute to the ongoing efforts to promote equitable education and bridge the gap in educational outcomes, ultimately fostering a more inclusive and fair educational system.

2. LITERATURE REVIEW

In the concept of social capital, networks refer to relationships that enable information or knowledge of something to be shared and disseminated (Putnam, 2000). According to Tu (2000), social interaction is fundamental in explaining the relationship between social presence and the social learning theory. When social interaction becomes part of classroom dynamics, classrooms transform into active places. Also,

the social interaction of learning is essential for successful learning and supports productive and meaningful learning. Besides, social interaction also promotes learning engagement which has been identified as positively affecting learning outcomes.

Learning evolves in the classroom or out of the school through interactions. Students' active participation in lesson activities has become essential to engaging students in education. Students tend to learn more when students participate actively in the learning process. Students should participate in various learning activities, events, and programmes to enhance their competencies, abilities and skills. Students' active classroom participation supports student learning, motivates them, promotes higherorder thinking skills and improves their communication skills (Aziz et al., 2018). Student participation can be divided into five separate categories: preparation, group skills, communication skills, contribution to discussion and attendanceDancer and Kamvounias (2005). There are two teaching approaches in the classroom: teacher-centred and student-centred. In the teacher-centred method, the teacher becomes a dominant person who only talks in the classroom, and students become passive learners by only listening. On the other hand, in the student-centred method, the teacher promotes two-way communication. The teacher encourages and makes students participate in lesson activities by allowing and persuading students to discuss, debate, exchange ideas and opinions, argue, etc. Active participation and meaningful learning occur when the teacher implements the student-centred approach. If the lesson activities are carried out in group activities, the teacher becomes one of the classroom participants. (Ee Ah Meng 1995).

Several influential motivational factors encourage student participation in lesson activities, such as positive lecture traits, positive classmate traits, engaging class content, and a conducive physical setting. Participation in lesson activities in the classroom occurs in two-way interactions between teachers and students and students with students. Moreover, lesson activities' involvement can be taken place through social media. Several empirical studies show that student participation in lesson activities enhances knowledge, attitude, skills and academic performance. Empirical studies show several influential motivational factors encourage student participation in lesson activities. For instance, Mustapha et al. (2010) showed the four most influential factors that encourage student participation in lesson activities: positive lecture traits, positive classmate traits, engaging class content, and physical setting. In terms of lecture trait, lecturers who make students feel comfortable sharing their thoughts and answers and lecture with a sense of humour tend to cause student participation in the lesson.

Moreover, lecture traits such as open-mindedness, pleasantness, friendliness, approachability, flexibility, and encouraging and allowing classroom debate were identified as motivating factors. In terms of classmate traits, familiar and supportive classmates and encouragement were identified as motivating factors. In terms of class content, interesting topics and fun activities such as role play were identified as motivational factors. Moreover, in terms of physical settings, a comfortable classroom was mentioned by students as motivational factors for student participation in lesson activities.

Both active and passive students agreed that teachers' teaching methods are essential motivating factors that support their speaking engagement in the classroom; teachers' traits such as being approachable, friendly, always maintaining an excellent mood, knowing each student well and refraining from criticising students they favour. Moreover, they demonstrated that peer contributions also influenced the student speaking skills in the classroom (Abdullah et al., 2012)

Moreover, Lei et al. (2018) found that a higher level of student involvement in behavioural, emotional, and cognitive engagement was related to higher academic achievement. Furthermore, Heng (2014) showed that student engagement in periods spent out of class, academic activity, homework, and active classroom participation is associated with student achievement. Moreover, Ing et al. (2015) found that student participation is positively corrrelated with students' mathematics achievement. They demonstrated that students with a high achievement score engaged more actively in class, engaging with other students' ideas and explaining their reasoning. Further, they found that teacher support for student participation is related to student participation and that the relationship between teacher support for

student participation and student achievement is positively correlated with the mediating effect of student participation.

With the advancement of digital technologies, students can now interact with teachers and classmates online to discuss academic activities. Nearly 63% of students use social networking for educational purposes; among those who use it for academic purposes, 94% use it for academic discussion, 61% for sharing course materials, and 63% for tutorial space (Shembilu, 2013). Teacher perceptions on social media affect teacher-student relationships through their interactions with students and their learning and behavioural outcomes; sharing educational resources online with students leads to learning more efficiently because it always involves more phones (Keasberry, 2018). "Classroom WhatsApp group" is becoming a primary communication network for school-related topics, managing learning activities, and sending and receiving updates among secondary school children in Israel(Rosenberg & Asterhan, 2018).

Evidence indicates that the process by which students participate in learning is dependent on their family income. Students from low socioeconomic backgrounds demonstrate a lower level of involvement, whereas students from higher socioeconomic backgrounds participate more in behavioural and cognitive aspects(Tomaszewski et al., 2020). The school's socioeconomic status strongly correlates with student participation in mathematics learning and educational achievement in the Australian context(Murphy, 2019). Children from low-income families often start school behind their peers who come from more affluent families, as shown in school readiness, and poverty adversely affects student learning (Ferguson et al., 2007). Besides, a meta-analysis based on the review of 74 samples (>100,000 students) by Sirin (2005) provided strong evidence for the link between (a) parental income, education, and occupation and (b) various academic achievement outcomes. The author found that financial and social background determines the opportunity structure for parents to positively impact children's educational development.

Nearly 96% of girls agreed that parental income is a factor which influences their participation in education because the high income of the parents help them to obtain food, school uniforms, sanitary towels and learning materials for their education (Kipkulei, 2008). Ogur (2014) found that student participation in education is low because of low parental income, low parental education, lack of parental support. It is also due to the fact that parents do not visit the school to discuss their children education and parental lack of involvement in their children's education. They demonstrated that socio-cultural factors affecting students' low participation include early marriages, helping with housework, caring family members, cultural beliefs, and education preference for boys than girls. Moreover, it was emphasised that children's formal education is attached to family wages, which is considered an important variable. Many studies show that students' enrollment in formal education, where every learning facility is provided is linked to high-income parents, which seriously influences their performance (Glewwe & Chang 2010).

3. METHODOLOGY

This study employed a survey and quantitative research design to investigate student participation in lesson activities based on parent income among secondary schoolchildren in Sri Lanka. The survey population consisted of secondary schoolchildren, and 1350 participants were selected using a stratified random sampling technique. The questionnaire, tailored to meet the survey's objectives, comprised two sections. The first section aimed to gather demographic information about the students, while the second section assessed their perception of their involvement in lesson activities. To measure student participation in lesson activities, a Likert Scale with five response options ranging from "Never" (1) to "Always" (5) was utilized. To ensure the questionnaire's validity and reliability, the opinions of experts specialising in the sociology of education were sought. The internal consistency of the questionnaire was assessed through Cronbach's alpha coefficient, yielding a value of 0.939, indicating a high level of reliability.

Analysis encompassed both descriptive and inferential statistics. Descriptive analysis was employed to calculate the mean and standard deviations, providing insights into student participation in lesson activities. The Statistical Package for the Social Sciences (SPSS) Version 23 was employed as the software for data analysis.

In order to investigate potential parental income differences in student participation in lesson activities among Sri Lankan secondary school children, a multivariate analysis of variance (MANOVA) was conducted. This analysis aimed to determine if significant variations existed between various level of income regarding their engagement in lesson activities.

4. RESULTS

The descriptive analysis values (mean and standard deviation) were used to determine the level of students' involvement in lesson activities. Seven items were constructed to determine the respondents' 5-scale ratings for this category, as shown in Table 01

Table 01 Level of Students' Participation in Lesson Activities

No.	Item	Mean	S. D	Interpretation
1	I present group work after group discussion in front of my classmate using language appropriate to the level of the listeners	3.796	1.085	Moderately High
2	I work actively with other students on the assigned task(s) in small group activities in class	4.234	0.971	High
3	I discuss ideas from my reading on the lesson with teachers, classmates and family members	3.885	1.074	Moderately High
4	I do experiments and practical (Science, Mathematics, ICT, Agriculture) with teachers and classmates to enhance my learning experience	3.757	1.149	Moderately High
5	I discuss subject matter with my teachers via social media (Facebook/ WhatsApp/Viber)	3.279	1.329	Moderately High
6	I discuss the subject matter with my classmates via social media (Facebook/ WhatsApp/Viber)	3.560	1.299	Moderately High
7	I participate in various educational activities (role play, drama, debate etc.)	3.468	1.253	Moderately High
	Overall	3.711	0.823	Moderately High

Table 01 shows the level of students' participation in various lesson activities by expressing their values; the overall mean is 3.711, overall S.D. is 0.823, and the interpretation moderately high. The highest item for this construct is 2, which is about students who work actively with other students on the assigned task(s) by engaging in small group activities in class; the mean for this is 4.234 (S.D. = 0.971) and the interpretation is high. The second highest item (3) is about students' discussion of the ideas they get after reading the lesson with their teachers, classmates and family members; this has a mean of 3.885 (S.D. =1.074), with the interpretation being moderately high. The lowest item (5) is about students' discussion of the subject matter with their teachers via social media such as Facebook/ WhatsApp/ Viber, etc. The mean for this is 3.279 (S.D. =1.299) and the interpretation is moderately high.

Table 2 MANOVA Difference Aspects of Socio-Educational Participation based on Parental Income Level

Variable	Income Level	N	Mean	S. D	Type III Sum of Squa res	D f	Total Squar e	F	Sig.
Student Participatio n in	>Rs. 15,000 Rs.15,001- 46,000	487 609	3.667 3.689	0.830 0.808	6.15 4	3	2.051	3.03 6	0.02 8
Lesson Activities	Rs.46,001- 150,00	215	3.859	0.823					
,	150,00 < Rs.151,001	39	3.783	0.915					

As per Table 2, it was found that there were significant differences in terms of student participation in lesson activities (F = 3.036, sig = 0.028, p < 0.05) based on parental income. This shows that socio-educational participation in terms of student participation in lesson activities (mean = 3.859 and S.D. = 0.823) is highest among the students whose parental income is between Rs.46,001-150,000, each with a higher mean value than others. On the other hand, student participation in lesson activities (mean = 3.667 and S.D = 0.830) is lower among those students whose parental income is below Rs. 15,000, each with a lower mean value than others. However, student participation in lesson activities (mean = 3.783 and S.D = 0.915) is higher among students whose parental income is < Rs.150,000 than those students whose parental income is between Rs.15,001-46,000 and below Rs. 15,000. This means that upper-middle-class students' participation in lesson activities is higher than that of other classes, while upper-class students' involvement is above that of middle-class students. It was also found that the involvement of students from the poor class in lesson activities is lowest when compared with other students.

Table 3 Post Hoc Analysis of Difference Aspects of Socio-Educational Participation based on Parental Income

Dependent Variable	(I)Parental Income	(J)Parental Income	Mean difference	Std. Error	Sig
Student	>15,000	15,001-46,000	02225	.04997	.978
Participation		46,001-150,000	19216*	.06730	.043
in Lesson		<151,001	11624	.13679	.868
Activities		>15,000	.02225	.04997	.978
	15,001-46,000	46,001-150,000	16991	.06521	.079
		<151,001	09399	.13577	.923

	>15,000	.19216*	.06730	.043
46,001-150,000	15,001-46,000	.16991	.06521	.079
	<151,001	.07592	.14306	.963
<151,001	>15,000	.11624	.13679	.868
	15,001-46,000	.09399	.13577	.923
	46,001-150,000	07592	.14306	.963

Post Hoc Test results given in Table 3 were obtained using the MANOVA analysis. According to the student participation in lesson activities, significant differences were seen between students with parental income below Rs.15,000 and students with parental income in the Rs. 46,001-150,000 range.

4. DISCUSSIONANDCONCLUSION

[Student participation in lessons is moderately high. The findings are contradictory to those of Ghalley and Rai (2019), who found that most Bhutanese higher secondary students are passive participators by listening, writing notes, paying attention and sitting quietly. However, many Bhutanese students are also considered active participators by seeking help and discussions, responding to opinions, giving opinions, asking questions and commenting. In the present study, the only element reported as high For student participation in lessons is the active involvement in group activities. Similarly, Kumaraswamy (2019) found that student participation in lessons improved due to group activities and led to good academic achievement. Moreover, students consider group strategies as practical, functional and enjoyable to participate in. The lowest mean value (3.279) for student participation in lessons is for the statement 'I discuss the subject matter with my teachers via social media (Facebook/ WhatsApp/Viber)'. This finding contradicts Rosenberg and Asterhan (2018) that 'classroom WhatsApp group' is becoming a major communication network for school-related topics and used for managing learning activities, sending and receiving updates among secondary school children in Israel. Keasberry (2018) found that social media influences teacher-student relationship through their interactions and student learning and behavioural outcomes. Mustapha et al. (2010) found that the four most influential factors that encourage student participation in lessons are positive lecture traits, positive classmate traits, engaging class content and physical setting.

This study finds significant differences in student participation in lessons. Student participation in lessons are higher among upper-middle-class than in other classes, while those in upper class is close to upper middle class and lower middle class. This finding shows that student involvement in lessons among the poor are lowest compared with other students. Post Hoc Test analysis using MANOVA shows significant differences between parent income below Rs.15,000 and those with Rs. 46,001–150,000. The findings agree with Kipkulei (2008), that nearly 96% of female students agree that parental income is a factor that influences their participation in school because the high income of their parents help them receive food, school uniforms, sanitary towels and learning materials.

The results relate to those of Ferguson et al. (2007), that children from low-income families often start school already behind their peers from more affluent families, given that school readiness and poverty adversely affect student learning. The findings also agree with Ogur (2014) that student participation in education in Kenya is low because of low parent income, low level of parent education, lack of parental support, parents do not visit schools to discuss their children's education and lack of parental involvement in their children's education. Notably, Glewwe and Chang (2010) show that students' enrolment to standard schools where every learning facility is provided relates to their parent's high income, which highly influences their academic performance. The most contributory factor that eventually leads students

to drop out of school is inadequate parent income. Tomaszewski et al. (2020) also found that students with low socio-economic backgrounds have a low involvement, while those with high-level socio-economic backgrounds participate more in behavioural and cognitive aspects. Similarly, Murphy (2019), showed that in the Australian context, a school's socio-economic status strongly ties with student participation in mathematics learning and educational achievement.

Understanding the role of parental income in student participation in lesson activities holds important implications for educators, policymakers, and parents alike. By identifying important factors that influence student engagement, educators can tailor their instructional strategies to accommodate diverse socioeconomic backgrounds. Policymakers can leverage these findings to develop targeted interventions and support systems for students from economically disadvantaged households. Lastly, parents can gain insights into the potential impact of their income on their child's educational experience and make informed decisions to promote active participation and academic success.

In conclusion, this study aims to shed light on the relationship between parental income and student participation in lesson activities. By employing a quantitative approach, we hope to contribute to the existing body of knowledge and provide practical insights to foster inclusive and equitable education for all students, irrespective of their socioeconomic backgrounds.

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