

# Impact of Socio-Economic Factors on Peer Pedagogical Support for Learning among Senior Secondary School Children in Sri Lanka

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## Abstract

This study investigates the role of peer pedagogical support for learning among senior secondary school children in Sri Lanka, considering socio-economic factors such as parental income and educational level. The specific objectives of the investigation were to (i) assess the level of peer pedagogical support for learning, (ii) examine differences in peer pedagogical support based on parental income, and (iii) investigate differences in peer pedagogical support based on parental educational level. The study's population consisted of senior secondary school children in Sri Lanka, with 1350 participants selected from the country's North, South, East, West, and Central regions using a stratified sampling technique. A survey research design was employed, employing a quantitative research approach. Data collection involved a self-administered questionnaire with a 5-point Likert scale to gather responses from the students. The Statistical Package for Social Sciences (SPSS) Version 23 was utilized for data analysis, employing descriptive and inference analyses such as frequency, percentage, mean, standard deviation, and MANOVA. To ensure the reliability of the instrument, a pilot study was conducted, and Cronbach's Alpha was used to assess the internal consistency of all variables. The pilot study demonstrated high reliability, with values ranging from 0.917 to 0.934. The results obtained from the survey, analysed using SPSS, revealed that a majority of students strongly agreed (mean = 4.325, SD = 0.695) that their peers supported their learning activities. Furthermore, the study found no significant differences in peer pedagogical support based on parental income and parental educational level. In summary, this study explored the role of peer pedagogical support for learning among senior secondary school children in Sri Lanka, considering socio-economic factors such as parental income and educational level. The findings highlighted the positive impact of peer pedagogical support on students' learning activities and emphasized the no significant differences in peer pedagogical support based on parental income and educational level. These results contribute to our understanding of the importance of peer support in achieving educational success, particularly in the context of Sri Lanka's secondary school education system.

**Keywords:** Peer Support, Learning, Gender, Secondary School Children

**Introduction**

As children transition towards independence, their peers become increasingly significant in their lives. Peers are individuals who share similar characteristics such as age, gender, socio-economic status, and interests. Peer support refers to the functions fulfilled by classmates and friends to aid an individual. Peer relationships play a significant role in promoting educational achievement in various ways (Hofman, 2016). Peer support encompasses various functions provided by classmates and friends, which include informational support (offering material or behavioral assistance to address practical tasks or problems), emotional support (demonstrating encouragement, appreciation, care, love, and sympathy), and instrumental support (providing advice and information to help individuals solve problems). These forms of support from peers contribute to the overall well-being and success of an individual (Evans-Whipp et al., 2017).

Children engage in social learning through their interactions with peers. Peer interactions provide opportunities for learning and development as children observe and imitate behaviors, exchange ideas, and acquire new knowledge and skills. These social interactions with peers play a crucial role in shaping a child's social, emotional, and cognitive development. Peers (Abd. Razak & Salleh, 2010). Peers are an informal agent for children and adolescents, providing experiences they may not have had with their family or school. From his peers, he/she learns many things he/she needs to know to become an adult (Brembeck, 1971). Peer influence is stronger among students who do not want much engagement with their parents and teachers (Kindermann & Vollet, 2014). While parents hold the primary influence over a child's long-term educational goals, peers exert the strongest influence on their daily behaviors within the school context. Peers have a significant impact on various aspects, such as the amount of time children dedicate to homework, their level of enjoyment attending school on a daily basis, and their classroom behavior. Peer interactions play a powerful role in shaping these day-to-day behaviors and experiences within the school environment (Steinberg et al., 1995). As children transition to secondary school, parental involvement in their education tends to decrease. Consequently, peer educational support becomes increasingly crucial. This study focuses on peer educational support, which encompasses activities such as sharing educational materials, providing information about school and class-related matters, encouraging participation in learning and programs, and assisting each other for educational purposes. The primary objective of this study is to examine the level of peer pedagogical support for learning. Additionally, the study aims to investigate differences in peer educational support based on parental income and parental educational level. By exploring these aspects, the study seeks to shed light on the role of peers in supporting learning and the potential influence of parental factors on the provision of educational support by peers.

**Literature Review**

Peers elucidate complex concepts and offer diverse perspectives and ideas. (Mishra, 2019), study together Cole & Espinoza (2008), share relevant educational materials and information about their education Martin (2009), mutually help to eliminate examination-related anxiety and mutually help clarify course-related expectations, enhance students' expectations Tinto, (2012), resulting in better outcomes (Pérez II & Taylor, 2016). Peer learning strategies encompass various learning techniques that involve students collaborating and interacting with their peers, both inside and outside the classroom. Some of these techniques include peer tutoring, small and large group discussions, and online discussions and feedback. When

implemented with proper monitoring and careful structuring, these methods have been shown to be effective in enhancing students' academic and social skills. Peer tutoring involves students assisting and teaching their peers in specific subjects or topics. This approach not only helps the tutees gain a deeper understanding of the material but also reinforces the knowledge and skills of the tutors. Peer tutoring fosters a supportive learning environment where students can explain concepts, clarify doubts, and provide personalized guidance to their peers (Wessel, 2015). Small and large group discussions provide opportunities for students to engage in collaborative learning. Through active participation in group discussions, students can share their perspectives, exchange ideas, and develop critical thinking and problem-solving skills. This collaborative approach encourages students to listen to diverse viewpoints, articulate their thoughts, and learn from their peers' experiences and knowledge. Online discussions and feedback platforms allow students to interact and collaborate virtually. These platforms provide a space for students to share ideas, ask questions, and provide feedback on each other's work. Online discussions can foster inclusive participation, as students who may be hesitant to speak up in traditional classroom settings can actively contribute to the conversation. Additionally, receiving feedback from peers can help students gain new insights and improve their work. To ensure the effectiveness of peer learning techniques, monitoring and careful structuring are crucial. Teachers and facilitators need to provide clear guidelines and expectations for peer interactions, establish a supportive and respectful learning environment, and intervene when necessary to maintain focus and ensure productive discussions. Regular assessment and feedback mechanisms can also help track progress and identify areas where additional support may be needed. Overall, peer learning strategies offer valuable opportunities for students to actively engage in the learning process, enhance their academic skills, and develop important social and collaborative competencies. By implementing these techniques with proper monitoring and structure, educators can harness the power of peer interaction to create a dynamic and enriching learning environment.

Cooperative learning is an instructional approach that promotes collaborative interaction among students to achieve common learning goals. In cooperative learning settings, students work together in small groups, often with assigned roles and tasks, to complete a task or solve a problem. This approach has been found to improve students' peer acceptance and perception of peer support in several ways. Firstly, cooperative learning encourages positive interdependence among group members. When students are assigned to work together and depend on each other's contributions to achieve success, it fosters a sense of belonging and camaraderie within the group. Students learn to appreciate the unique skills and perspectives of their peers, leading to increased acceptance and respect for one another. Secondly, cooperative learning promotes frequent interaction and communication among students. Through regular interaction, students have the opportunity to build relationships, establish connections, and develop a sense of community within the group. These positive social interactions contribute to a supportive and inclusive learning environment, where students feel valued and supported by their peers. Moreover, cooperative learning provides opportunities for students to engage in collaborative problem-solving and decision-making. Working together towards a common goal requires active participation, effective communication, and collective decision-making. Students learn to listen to each other, consider different viewpoints, and negotiate ideas, fostering a sense of peer support and cooperation. Cooperative learning also allows for the development of important social and emotional skills. Students learn to work in diverse groups, respect each

other's opinions, resolve conflicts, and provide constructive feedback to their peers. These experiences enhance students' social competence and interpersonal skills, which are essential for positive peer relationships and overall well-being. Research has shown that cooperative learning positively influences students' perceptions of peer support and acceptance. Students report higher levels of satisfaction and engagement in the learning process when they feel supported and accepted by their peers. This positive perception of peer support can enhance students' motivation, self-esteem, and overall academic performance (Smith, 2017).

Peer academic and emotional support are considered factors that influence students' classroom engagement, academic motivation, and school belonging. Peer support in terms of academic, emotional and social support is related to the responsive learning environment and have unique implications for supporting adolescents' academic motivation, classroom engagement, and school belonging and relationships with classmates cause students to feel "secure and happy", keeping their sense of school belonging (Kiefer et al., 2015).

There is a correlation between peer support for mathematics subjects and students' mathematics engagement among secondary school students in a boarding school in Malaysia (Din et al., 2016). Moreover, Din et al. demonstrated that secondary school students receive support from their peers to solve mathematical tasks, help each other in learning mathematics, and check each other's mathematical tasks and work. Moreover, they showed that support from peers is higher than support from parents.

Peer support causes student motivation to engage in learning and academics successively (You, 2011). Students' relationships with their best friends contributed more to engaging in the behavioural domain, and it was indicated that the girl's behavioural engagement was higher than the boys' engagement (Kilday & Ryan, 2019). Peer support in terms of academic aspiration and academic value significantly impacts adolescents' engagement and development, and children's expectations among peer group are one of the main factors which lead to positive or negative school experiences (You, 2011).

The relationship between peers and classmates immensely influences students' wellbeing (Ratnik & Rütel, 2017). Positive peer relationship is associated with a higher level of participation in learning, a higher level of school attendance and a higher level of completing school life (Noble & McGrath, 2015). Student and peer relationships play a more significant role in successive educational achievement in different ways (Hofman, 2016). Peer support effectively decreases school students; academic stress (Bariyyah, 2015).

There are concurrent associations between peer relationship experiences and academic performance, and better academic performance was associated with greater peer acceptance, more friends, and less rejection by peers (Zitzmann, 2005). Girls, but not boys, perform better academically in the years they have more friends and are not rejected by their classmates filed (Zitzmann, 2005).

Peer feedback is considered a productive pedagogical educational activity that improves student learning through giving and receiving feedback. Students perceived different levels of learning in terms of receiving and giving peer reviews and four different designs in value placement: advantage from giving feedback only, advantage from receiving feedback only, benefit from both receiving and providing feedback and advantage from neither receiving nor giving feedback and, students learning was mediated by motivation for peer feedback, group dynamics, engagement with evaluation criteria and within-group differences in writing ability (Cao et al., 2019).

Students seated close to or next to their peers may play a significant role in students' academic outcomes because they can interact with them during lesson activities in the

classroom. There is the importance of three types of peers for students' academic involvement and academic outcomes: friends, near-seated peers, and near-seated peers who are friends (Gremmen et al., 2018). When friends' scores are high, students' engagement and grades become higher, and students' engagement and grades are lower when near-seated peers who were not friends score high, and students' engagement and grades become high when friends who are near seated score high, showing more similarity (Gremmen et al., 2018).

Peer support has a significant impact on their academic achievement. Students will always imitate or follow their peers' gestures and behaviors (Alsagoff, 1983). Also, students' attitudes and behaviors are influenced by their peers. In individual development, everyone will tend to choose peers who share the same interests and aspirations. This makes it easier for them to share their ideas, opinions, and experiences with the same interests. The effects of such interactions will create a sense of comfort in the students' interactions with them (Abu & Eu, 2017).

Peer rejection refers to the experience of being excluded, ignored, or actively disliked by one's peers. When students face peer rejection, it can have negative consequences on their participation in lessons and school activities (French & Conrad, 2001). A lack of social support and peer rejection can have detrimental effects on students' school performance and well-being. When students feel isolated and rejected by their peers, it can negatively impact their academic performance, leading to lower grades and decreased motivation to engage in classroom activities. Additionally, the emotional distress caused by social rejection can increase the risk of isolation and contribute to long-term emotional and behavioral difficulties. Students may experience feelings of loneliness, develop low self-esteem, and be more prone to emotional and behavioral problems. It is crucial for educators and school communities to foster inclusive environments and promote positive social interactions to mitigate these negative effects and support students' overall development (Gest et al. 2001).

Peer support plays a crucial role in enhancing children's involvement in learning, academic achievement, development, and overall well-being. When children receive support from their peers, they experience a sense of belonging and connection within the learning environment. Peer support provides them with opportunities to engage in collaborative activities, share ideas, and exchange knowledge and perspectives. Through interactions with their peers, children can gain a deeper understanding of academic concepts, as peers often explain complex ideas in relatable and accessible ways. Moreover, peer support fosters a positive and supportive learning environment where children feel encouraged to take risks, ask questions, and actively participate in class discussions. This increased involvement in learning leads to improved academic achievement as children are more motivated, engaged, and receptive to new knowledge. Additionally, peer support contributes to children's overall development by promoting social skills, communication abilities, empathy, and teamwork. By working together with their peers, children learn to navigate interpersonal relationships, negotiate conflicts, and develop a sense of responsibility and cooperation. Furthermore, peer support positively impacts children's well-being by reducing feelings of loneliness, stress, and anxiety. It creates a network of social support and friendship, providing a sense of belonging and acceptance. In conclusion, peer support is an essential and inevitable factor that enhances children's involvement in learning, academic achievement, development, and overall well-being, making it a crucial aspect of their educational journey.

Peer support can be influenced by socio-economic status, which refers to an individual's social and economic standing within society. Socio-economic status encompasses factors such



as parental income, education level, and occupation, which can impact the resources and opportunities available to children. Children from different socio-economic backgrounds may experience variations in the level and quality of peer support they receive. In some cases, children from lower socio-economic backgrounds may face challenges in accessing resources that facilitate peer support, such as educational materials, extracurricular activities, or social networks. These limitations can affect their ability to engage in meaningful interactions with peers and hinder their overall peer support experiences.

On the other hand, children from higher socio-economic backgrounds may have greater access to resources that foster peer support. They may attend schools with more robust educational programs, participate in enrichment activities, and have opportunities to interact with peers from similar socio-economic backgrounds. These circumstances can provide a conducive environment for peer support and enhance their educational experiences. However, it is important to note that socio-economic status should not be viewed as a determinant of peer support alone. Peer support can also emerge through shared interests, common experiences, and mutual understanding, regardless of socio-economic backgrounds. The dynamics of peer support are complex and multifaceted, influenced by various factors beyond socio-economic status, such as individual personalities, social skills, and cultural contexts. Efforts to promote inclusive and equitable peer support should consider socio-economic disparities and strive to provide equal opportunities for all children to engage in supportive peer relationships. Schools and communities can implement strategies such as fostering inclusive environments, providing resources for all students, and promoting empathy and understanding among peers. Additionally, initiatives that bridge socio-economic gaps, such as mentorship programs or collaborative projects, can enhance peer support experiences and promote social cohesion among students from diverse backgrounds.

### **Aims of the Study**

This study attempted to identify the level of peer pedagogical support for student learning and differences in peer pedagogical support based on parental income and parental educational level among secondary school children in Sri Lanka.

### **Objectives**

The present study aims to

- (i) Identify the level of peer pedagogical support for learning among secondary school children in Sri Lanka
- (ii) examine peer pedagogical support differences based on parental income;
- (iii) investigate peer pedagogical support differences based on father's educational level.
- (iv) investigate peer pedagogical support differences based on mother's educational level.
- (v) examine peer pedagogical support interaction between the father's and mother's educational levels.

### **Methodology**

This survey employed a quantitative research design to investigate the perception of peer educational support among secondary schoolchildren in Sri Lanka. The study population consisted of 1350 secondary schoolchildren selected through stratified random sampling. The questionnaire included two sections: one gathering demographic information and the other

measuring students' perception of peer educational support. The Likert scale with five response options (ranging from Never to Always) was used to assess peer educational support. The questionnaire's validity and reliability were established with the input of experts in the sociology of education, and the instrument demonstrated high internal consistency (Cronbach's alpha coefficient = 0.933). Descriptive and inferential statistics, along with MANOVA analysis, were conducted using the Statistical Package for the Social Sciences (SPSS) Version 23. Descriptive analysis provided the mean and standard deviations to determine the overall level of peer pedagogical support. MANOVA analysis was utilized to identify significant differences in peer pedagogical support based on parental income and parental educational level among Sri Lankan secondary school children.

## Results

Descriptive analysis of the data provided measures such as the mean and standard deviation, which were used to assess the level of peer pedagogical support. The survey included seven items related to peer pedagogical support, which were rated by the respondents using a 5-level scale (Never, Rarely, Occasionally, Often, Always). Table 01 presents the items and their corresponding ratings for peer pedagogical support.

Table 01

### *Level of Peer Pedagogical Support for Learning*

No.	Item	Mean	S. D	Interpretation
<i>My peers /classmate/ friends .....</i>				
1	share with me educational and learning materials (pen, pencil, class notes etc.)	4.417	0.918	High
2	share with me school and class -related information (exam schedules, assignments etc).	4.273	1.000	High
3	share with me ideas and information related to our lesson activities	4.197	1.023	High
4	encourage me to participate in educational programs.	4.037	1.120	High
5	encourage me to participate in learning activities	4.068	1.120	High
6	assist me to involve myself in group discussions which enable me to participate effectively in the group discussions	4.025	1.131	High
7	help me to conduct group activities accepting my leadership.	4.003	1.160	High
	Overall	4.146	0.810	High

The level of peer pedagogical support for different items related to student learning is presented in Table 01. The overall mean for peer pedagogical support is 4.146, with an overall standard deviation of 0.810, indicating a high level of support. The highest-rated item in this category, which pertains to sharing educational and learning materials among peers (Item 1), has a mean of 4.417 and a standard deviation of 0.918, also indicating a high level of support. The second highest-rated item involves sharing school and class-related information among peers (Item 2), with a mean of 4.273 and a standard deviation of 1.000, again indicating a high level of support. The lowest-rated item in this category is helping peers conduct group activities by accepting peer leadership (Item 7). The mean for this item is 4.003, with a

standard deviation of 1.160, still indicating a high level of support. These results indicate that students receive a high level of pedagogical support from their peers, fostering their engagement in learning activities. Table 2 shows the MANOVA analysis for the difference in mean scores obtained for peer educational support based on gender.

Table 02

*MANOVA Difference Aspects of Peer Pedagogical Support based on Parental Income*

Level Variable	Income Level	N	Mean	S. D	Type III Sum of Squares	Df	Total Square	F	Sig.
Peer Support	>Rs. 15,000	487	4.114	0.843	1.388	3	0.463	0.705	0.549
	Rs.15,001-46,000	609	4.146	0.796					
	Rs.46,001-150,00	215	4.206	0.774					
	< Rs.151,001	39	4.201	0.795					

Table 4.29 shows there are no significant differences in pedagogical support [ $F = 0.705$  and  $\text{sig} = 0.549$ ] based on parental income. However, peer pedagogical support is highest among the students whose parental income is between Rs.46,001 and Rs.150,000, each with the highest mean value compared to others. On the other hand, peer pedagogical peer support (mean = 4.114 and S.D. = 0.843), is lower among the students whose parental income is less than Rs.15,000, each with a lower mean value than others.

Table 03

*Two Way MANOVA Difference Aspects of Peer Pedagogical Support based on Parental Educational Level*

Variable	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Father's Highest Educational Level	Peers Pedagogical Support	2.068	4	0.517	0.796	0.528
Mother's Highest Educational Level	Peers Pedagogical Support	3.532	4	0.883	1.360	0.246
Father's* Mother's Highest Educational Level	Peers Support	9.814	15	0.654	1.008	0.444

Table 3 shows there are no significant differences in peer pedagogical support [ $F = 0.796$  and  $\text{sig} = 0.528$ ] based on father's highest education level. Based on mother's highest education level, the table also shows no significant differences in peers' pedagogical support [ $F = 1.360$  and  $\text{sig} = 0.246$ ]. Table 4.23 also shows there is no significant interaction between father's and mother's education level towards peers' pedagogical support [ $F = 1.008$  and  $\text{sig} = 0.444$ ].



### Discussion and Conclusion

Peer pedagogical support is observed to be at a high level. The academic and social support provided by peers can contribute to the development of a responsive learning environment and hold distinct implications for adolescents' academic motivation, classroom engagement, and sense of belongingness within the school (Kiefer et al., 2015). The highest mean value of peer support in this study pertains to the item regarding the sharing of educational and learning materials among peers. This finding indicates that students engage in the practice of sharing relevant materials and information with their peers for educational purposes. Sharing educational and learning materials can have several benefits for students. Firstly, it facilitates access to resources that may not be readily available to all students. By sharing materials such as textbooks, notes, or study guides, peers can ensure that everyone has access to necessary learning resources, regardless of their individual circumstances. This promotes equity and equal opportunities for learning among students. Secondly, sharing materials encourages collaboration and cooperative learning. When students exchange educational materials, they can discuss and learn from different perspectives and approaches. This collaborative process enhances critical thinking skills, problem-solving abilities, and a deeper understanding of the subject matter. It also cultivates a supportive and inclusive learning environment where students actively help and support each other's educational endeavors. Furthermore, sharing educational materials can foster a sense of belonging and community among peers. It promotes a culture of mutual support and camaraderie, where students feel valued and connected to their peers. This sense of belongingness positively impacts students' motivation, engagement, and overall satisfaction with the learning experience. In summary, the high mean value for peer support in sharing educational and learning materials suggests that peers actively engage in the practice of sharing relevant resources. This behavior promotes collaboration, equity, and a sense of belonging among students, contributing to a more enriched and supportive educational environment (Martin, 2009). The lowest mean value in the study pertains to the item about peers helping each other conduct group activities by accepting peer leadership. Although it received a lower mean value, it is important to delve into the significance and potential benefits of small, peer-led collaborations in the learning process, particularly when dealing with complex tasks. Small, peer-led collaborations involve students working together in groups, with one of their peers taking on the role of a leader. While this item received a lower mean value, it does not necessarily imply a lack of support or engagement in group activities. Rather, it suggests that peer-led collaborations may not be as prevalent or as frequently observed compared to other forms of peer support. However, when students do engage in small, peer-led collaborations, it can have several advantages for their learning experience. Firstly, working in groups allows for the sharing of ideas, perspectives, and diverse approaches to problem-solving. Peers can bring different strengths, skills, and knowledge to the table, which enhances the overall quality of the group's work. This collaborative effort fosters critical thinking, creativity, and the ability to consider multiple perspectives when tackling complex tasks. Moreover, peer-led collaborations can make learning more enjoyable and meaningful. When students have the opportunity to work together and lead their peers, it promotes active participation, engagement, and a sense of ownership over the learning process. This sense of ownership and responsibility can motivate students to take a more active role in their education, leading to a deeper understanding and retention of the material. Additionally, peer-led collaborations provide a supportive learning environment where students can offer assistance, guidance, and constructive feedback to their peers. This form of peer support not only enhances the learning experience but also

cultivates important interpersonal and communication skills that are valuable for future endeavors. In summary, although the mean value for conducting group activities accepting peer leadership was lower, small, peer-led collaborations hold great potential for enriching the learning experience. They foster collaboration, critical thinking, enjoyment, and meaningful engagement, particularly when dealing with complex tasks. Encouraging and promoting peer-led collaborations can further enhance the positive impact of peer support on students' learning outcomes and overall educational experience (Hooker, 2011).

The study found that there were no significant differences in peer pedagogical support based on parental educational level and parental income. This means that regardless of the parents' educational background or income level, students in the study reported similar levels of support from their peers in their educational endeavors. These findings suggest that peer support for learning is not influenced by the educational qualifications of the students' parents or their income levels. It indicates that students' access to peer pedagogical support is not contingent upon their parents' educational achievements or socioeconomic status. This outcome can have several possible explanations. Firstly, peer support may be primarily influenced by factors within the school environment and the social dynamics among students rather than parental characteristics. Students may rely more on their immediate peers for academic assistance and guidance, regardless of their parents' educational background or income. Secondly, the study's findings may reflect a positive aspect of peer relationships, emphasizing the inclusive and supportive nature of peer interactions. It suggests that students are willing to provide assistance and support to their peers irrespective of their socioeconomic backgrounds. It is important to note that the absence of significant differences does not imply that parental educational level and income are irrelevant to students' educational experiences. Other aspects of parental influence, such as parental involvement in education, home learning environments, and access to educational resources, may still play a role in students' academic outcomes. Further research is needed to explore the complex interplay between parental factors, peer support, and academic achievement to gain a more comprehensive understanding of how these variables interact.

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