Parental socioeconomic status, school physical facilities availability, and students’ academic performance

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Abstract: Education is a key driver in reducing poverty and increasing shared prosperity. This study aimed to examine the impact of parental socioeconomic status and the school’s physical facilities availability on academic performance. A quantitative survey research approach was utilized taking the state junior high school students in Southern Papua Province, Indonesia, as the population and samples. Data on parental socioeconomic status and the school’s physical facilities availability were gathered using two quantitative survey questionnaires, while data on student academic performance was obtained by getting the surveyed students’ academic records. The obtained data were subjected to statistical analysis using the SPSS software version 21. The results revealed a significant positive impact of parental socioeconomic status and the school’s physical facilities availability on academic performance among the state junior high school students in Southern Papua Province, Indonesia, both partially and simultaneously. The result highlights the importance of addressing the disparities in access to quality education between students from different socioeconomic backgrounds. This study’s findings may endorse the efforts to eliminate class-based gaps in students’ academic performance in compulsory education. In addition, government policy on the socioeconomic status of parents and school grants should be implemented thoroughly to promote educational equity so that students from low economic backgrounds have equal access to quality education.

Keywords: Academic performance, Parents, Physical facilities, School, Socioeconomic status, Students, Survey study.

1. Introduction

Academic performance is critical for educators as it demonstrates how satisfactory a student accomplished particular learning objectives [1] as well as how well they fared in extracurricular activities [2]. It is believed that academic performance is nebulous, comprising aspects such as students’ qualified attainment and moral development [3]. Not surprisingly, Kuh, et al. [4] argued that student success in learning is not related only to the grades written in the academic record but also to changes in the students’ perceptions and behavior in social life, both inside and outside the school. Initial research on the state junior high school students of Southern Papua Province indicated that student academic performance was deemed inadequate. In the cognitive domain, for example, students often have difficulty understanding and reasoning the meaning of discourse. In the psychomotor domain, many students were still relying on the help of their peers to complete the work assigned by teachers. Meanwhile, in the affective domain, many students were sometimes using inappropriate language in communicating with peers and even with their teachers.
As educational researchers increasingly recognize the multifaceted nature of factors influencing students’ academic performance, it becomes imperative to explore the dynamic interplay between various aspects of a student's environment. In this context, the present study delves into two significant determinants. The first determinant factor is parental socioeconomic status. King [5] argued that the lack of resources has resulted in unequal access to quality education. As a result, too many young people graduate without the knowledge and skills required for 21st-century employment. Among other resources (such as educational curriculum, government educational policy, teacher competency, teacher commitment and performance, student temperament, and student motivation), King [5] referred to the socioeconomic status of parents as the most crucial factor that has restricted students’ rights to equitable educational benefits. Not surprisingly, the correlation between the socioeconomic status of parents and their children’s academic achievement stands as a crucial indicator in evaluating educational inequality [6].

The second determinant factor is the school’s physical facilities availability. School physical facilities play a crucial role in creating an environment that supports effective teaching and learning [7]. The availability and quality of school physical facilities wield a profound influence over the holistic educational experience.

When classrooms are meticulously designed and thoughtfully equipped, they offer students an environment that is remarkably conducive to learning. The amalgamation of comfortable seating, optimal lighting, and adequate ventilation synergistically fosters an atmosphere where students can concentrate effectively and engage wholeheartedly in the process of learning.

Despite the existing studies investigating how student academic performance was predicted by parental socioeconomic status [8-19] and school physical facilities availability [20-23] the lack of empirical studies on this topic in the eastern part of Indonesia in general and in Southern Papua Province, in particular, necessitates further exploration of this subject to effectively meet the specific demands of the community for ‘Papuan Children’s Educational Dormitories’ in protecting the right of Indigenous Papuans to quality education so that the stigma that Indigenous Papuan students are low-achievers can be adequately addressed [24-26].

Previous research studied how factors like parental socioeconomic status and school physical facilities individually or partially impact students’ academic performance. However, this study takes a fresh approach by exploring how these two factors—parental socioeconomic status and school facilities—simultaneously influence students' academic performance, providing a more comprehensive perspective than conventional research methods. While parental socioeconomic status has been extensively studied for its impact on student’s academic performance, emerging evidence suggests that the school's physical facilities and resources are equally pivotal factors. The synthesis of these two seemingly distinct influences represents a crucial step toward comprehending the holistic nature of academic success.

This study aimed to bridge the gap using the state junior high school students in Southern Papua Province as the Population and samples. We probed three research questions for guiding the study: (a) "Does the socioeconomic status of parents have a significant positive impact on the academic performance among the state junior high school students in Southern Papua Province, Indonesia?" (b) “Does the school's physical facilities availability have a significant positive impact on academic performance among the state junior high school students in Southern Papua Province, Indonesia?” and (c) "Do the parental socioeconomic status and the school’s physical facilities availability have a simultaneous positive impact academic performance among the state junior high school students in Southern Papua Province, Indonesia?” A quantitative survey research approach and a document study were utilized to answer the research questions.

2. Related Literature
2.1. Academic Performance

Academic performance has long been considered the most significant precondition for individual and community prosperity as well as physical and mental health. When it comes to education, academic performance is a crucial component of students’ success [27, 28] and one of the main aims of education.
Rono, et al. [29]. Kumar, et al. [30] defined academic performance as the amount of knowledge gained by students over a specific time, as measured by teachers’ grades. Academic performance was typically measured by the cumulative performance of each academic year, which culminated in a Grade Point Average (GPA) based on the performance of students on daily exams, class assignments, and final examinations [31].

The relationship between academic performance and future earnings is well-documented in various studies Hanushek [32]; Hanushek and Zhang [33] and Lazear [34] indicating a strong correlation between educational achievement and financial success. Individuals who excel academically often have better opportunities for higher-paying jobs, career advancement, and overall financial stability. However, despite the recognized significance of academic success, Indonesia continues to grapple with persistent disparities in learning outcomes Astawan, et al. [1].

Werang and Leba [25] pointed out that students from the eastern region of Indonesia exhibit lower academic performance compared to their peers in the western region. These latest findings contradict the high accreditation status typically awarded to state junior high schools in Southern Papua, which are commonly recognized as ‘excellent’.

The disparities in learning outcomes observed in Indonesia are multifaceted, stemming from various influential factors. These factors, categorized into three principal domains, significantly contribute to the existing gaps in educational achievements. The first is school factors. The quality of educational institutions and their resources profoundly impacts student performance. This includes the adaptation of curriculum content to suit the student’s needs, the adequacy of teaching and learning facilities, the preparation and experience of educators, and the effectiveness of their teaching methods. Research studies demonstrate how these factors have a direct impact on students’ academic progress. Variations in these characteristics between Indonesian regions may explain the apparent inequalities in learning outcomes. The second factor is family factors. Students’ academic achievement is heavily influenced by their family’s socioeconomic status and educational values. Parents’ socioeconomic status may limit students' access to broader educational resources.

Furthermore, parents’ educational awareness and priority may also impact substantially student academic progress and success. Flynn [35] has enormously emphasized how students’ learning experience is affected by their family backgrounds. The third factor is student factors. Students are at the core of the educational system. The high or low student’s academic performance is not only affected by external factors such as parents and teachers but also by their unique qualities and individual characters. Students’ characteristics, personal habits, temperament, preferences, and willingness to study all have a crucial impact on their engagement and attainment in their educational journey. Several studies [2, 5, 25] have shown how these student-specific factors determine their learning outcome gap.

This study intended to defray the learning outcome gap in Indonesia by concentrating on two major factors affecting high or low student academic performance – parents’ socioeconomic status and school physical facilities availability. We believe that these two factors are critical in formulating strategies to eliminate the academic performance gap among students. To ensure that no students are left behind and that all students have the same access to a high-quality education, families, local communities, educational institutions, and educational policymakers should work together intensively [35, 36].

2.2. Parental Socioeconomic Status and Student Academic Performance

Parental socioeconomic status is the parents’ relative economic and social position compared to others based on their occupation, education, and income level [37]. Parental socioeconomic status is a symbol of a family’s social position based on several factors such as financial, educational attainment, professional standing, and political position [38]. In a similar vein, Nwigwe, et al. [39] and Islam and Khan [40] viewed parental socioeconomic status as a blend of income, education, and occupation.

Nwigwe, et al. [39] and Islam and Khan [40] similarly define parental socioeconomic status as a balance of revenue, education, and employment. Goni and Bello [41] elaborate that parental socioeconomic status denotes the position parents hold within a community, shaped by the interplay of...
social and economic elements. In simpler terms, socioeconomic status encompasses both economic and sociological indicators of an individual's standing, including work experience, education, occupation, and income. In the context of this study, parental socioeconomic status can be straightforwardly described as the relative economic and social standing of parents within their community, based on their income, educational achievements, and occupational status.

The socioeconomic status of parents not only impacts students' academic achievement but also poses challenges for low-income children in competing effectively with their wealthier peers academically. Rothestein [42], White [43] pioneered research on the influence of parental socioeconomic status on student academic performance. Conducting studies in the United States, Canada, and England, White [43] revealed a significant link between parents' socioeconomic factors and students' learning outcomes. Perry and McConney [44] investigated the relationship between parental socioeconomic status and students' mathematical performance.

Analyzing data from PISA 2003, they consistently found a strong association between parental socioeconomic status and students' mathematical achievement. Additionally, Perry and McConney [44] noted that students from more affluent socioeconomic backgrounds tend to outperform their peers from less privileged backgrounds in mathematics. Corak [45] noted that students from impoverished families are forced to work and study because they value home duties over education. Children from impoverished families work menial jobs to live. Unfortunately, the little money earned and the lack of government funding for education cause these impoverished families to struggle to educate their children, resulting in low academic success [46].

Various current studies have shed light on the crucial role that socioeconomic background plays in shaping academic performance, whether it leans towards high or low achievement. This aspect has garnered increasing attention in educational research due to its profound implications for educational equity and policy formulation. Among these studies, two are particularly notable. The first study was conducted by Odour-Ofori, et al. [47] exploring the effect of parental socioeconomic status and the academic performance of senior high school students in Sefwi Wiawso Municipality in Ghana. Utilizing a sample of 203 students, the study found that parents' socioeconomic situation has a substantial impact on their academic performance and enthusiasm to learn. The study highlights the need for Ghana's government to intervene and prioritize programs to bridge the educational achievement gap caused by the socioeconomic disparity. Educational policymakers should promote standards that offer equal opportunity for all students, regardless of their background.

The second study was conducted by Etobro, et al. [48] in Ojo Local Government Area, Lagos State. Engaging 460 students as participants, the study explored how parental socioeconomic status and parenting style impact secondary school students' academic performance. Employing multifaceted statistical methods such as one-way ANOVA and regression, the study found a significant simultaneous impact of parental socioeconomic status and parenting styles on secondary school students' academic achievement in the surveyed area. The study underscored the multifaceted causal relationship between family background and academic achievement, emphasizing the crucial interventions and support systems to eliminate inequality among students.

2.3. School Physical Facilities and Student Academic Performance

The School's Physical Facilities are the foundation for generating an atmosphere that supports efficient teaching and learning [7, 49]. It encompasses an array of crucial components found in an educational institution, such as buildings, classrooms, labs, libraries, and recreational facilities. These facilities provide the basis for a learning environment that enhances the quality of education for both teachers and students.

From this viewpoint, the learning environment should be understood as more than just buildings. The accessibility of these places may create a feeling that supports an array of educational activities necessary for effective teaching procedures and collaborative learning experiences.
Schools equipped with sufficient physical facilities such as classroom furniture, lighting, internet, libraries, computer labs, and science laboratories can provide various learning resources for students [50]. Modern educational practices often involve technology integration. Schools with up-to-date technological facilities, such as computers, smartboards, and audio-visual equipment, enable teachers to employ innovative teaching methods and interactive learning experiences, which can stimulate students' interest and understanding [51-59]. These facilities are considered to improve students' access to knowledge, chances for independent study, and hands-on educational experiences [54]. Several studies have shown how important school physical facilities are in influencing students' academic achievement and how important they are as essential parts of the educational infrastructure. An increasing amount of research is showing how important well-maintained facilities are to creating situations that are constructive for learning and supporting academic success. There are several researches, but three stand out in particular. First, Emkawama [55] examined how Tanzanian students' academic performance was affected by their school's infrastructure. Employing a diverse sample of 315 students, 30 teachers, and 5 school principals, the study offered perspective evidence about the connectivity between the school's physical facilities availability and the student's academic performance. The results of this study showed a strong relationship between the quality of school physical facilities and student academic achievement, underlining the significance of a sympathetic learning environment in fostering student academic success. The results of this study call for educational stakeholders and policymakers to take strategic steps to improve school physical facilities nationwide to provide reasonable access to high-quality education for future generations.

The second study conducted by Kuresoi, et al. [56] in Tanzania's Longido District, investigated how school infrastructure impacts students' academic performance. Employing 196 samples, the study provided factual evidence of the negative impact of inadequate school physical facilities — such as those found in the classrooms, dorms, labs, and libraries — on students' academic performance in the surveyed area. The results of the study call for policymakers and all interested parties to spend resources properly and to grasp the pivotal role played by the school's physical facilities in affecting learning outcomes.

The third study conducted by Olugbenga [57] in Kaduna State, Nigeria, investigated how school physical facilities impacted secondary school students' academic performance. Involving 1000 students as a sample, the research shows a strong correlation between the availability of school physical facilities and student academic performance, as well as teacher teaching effectiveness. The study highlighted how the school's physical facilities' deficiencies affect greatly students' learning outcomes and teacher effectiveness. The findings of this study call for the need for collaboration between educational policymakers and all interested parties to address the urgent need for developing school facilities. By doing this, authorities may create an environment that improves students' academic performance and teacher teaching effectiveness. In other words, collaborative action among educational policymakers and all interested parties is needed to ensure that all students have equal access and opportunities required for academic success.

2.4. Hypothetical Framework

This study aimed to investigate how parental socioeconomic status and the school physical facilities availability impact the academic performance of the state junior high school students in Southern Papua Province, Indonesia. Based on the proposed research questions and the existing literature on this research topic, the hypothetical model of this study is demonstrated in Figure 1.
The proposed model shows that parental socioeconomic status and the school's physical facilities have a pivotal role in determining the high or low level of students' academic performance. It is argued that parents with higher socioeconomic status and schools equipped with adequate physical facilities significantly improve student learning environments and, in turn, impact greatly on the enhanced student academic performance. Nevertheless, to determine the real impact of parental socioeconomic status and the availability of school physical facilities on the academic performance of the state junior high school students in Southern Papua Province, Indonesia, actual research is needed to validate the claims. In other words, the model proposed above must be validated through extensive empirical research to validate whether the academic performance of public junior high school students in South Papua Province, Indonesia, is impacted by the socioeconomic status of parents and the availability of school physical facilities.

3. Research Methodology

3.1. Research Design

This study adopted a quantitative survey research design to explore how parental socioeconomic status and the availability of the school's physical facilities impact the academic performance of the state junior high school students in Southern Papua Province, Indonesia. In this study, parental socioeconomic status and the availability of the school's physical facilities stand as the independent variables, while the academic performance of the state junior high school students in Southern Papua stands as the dependent variable. In this study, we adopted a quantitative research approach as all the variables were measured quantitatively and the obtained data were subjected to a statistical analysis.

We employed a survey research design to collect numerical data as they are commonly used in a quantitative research approach [58]. The survey research design was utilized for this study based on the following reasons: (a) it offers a simple means for participants to share their views and knowledge about the investigated topic, (b) quick data collection processes, (c) low cost, and (d) low level of subjectivity [59-63].

3.2. Research Participants and Ethical Considerations

To explore factors influencing student academic performance in the Southern Papua Province of Indonesia, we use the state junior high school students as the population and samples. As the large portion of the Southern Papua Province area is swampy, using an extensive sampling technique was impracticable. Given the time constraints and geographical issues, we used convenience sampling to assure practicality.
and feasibility in data collection. Although this sampling technique may restrict the findings' pertinency to an enormous population, it offered us a productive way to collect data within a very limited time, allowing us to successfully address the proposed research questions.

Data for this study were collected from a total number of 652 students, conveniently established from among students studying at the state junior high schools of Southern Papua Province, Indonesia. Though the study involved humans as the subjects, the study did not hold the Institutional Review Board Statement as it is not a must in the Indonesian context. In line with Indonesian cultural norms, we hold the verbal consent of the surveyed students to participate as the basis for conducting the study.

3.3. Data Collection and Measurement

Using a survey questionnaire as a data collection instrument, a convenient sample of 652 students from the state junior high schools of Southern Papua Province, Indonesia, was selected to complete the 15 positive statements of the parental socioeconomic status questionnaire on a 4-point Likert scale. The survey questionnaire was made available to respondents online using a Google Form. The following are examples of an English version of questionnaire items: "My parents provide handbooks for me”, “When I study at home, my parents are always with me”, and "My parents assist me with classroom assignments that I do not understand”. The reliability of the instrument was assessed using the Cronbach alpha (α) coefficient. The Cronbach alpha coefficient of this study was .726.

Data about the variable of school physical facility availability were gathered by administering questionnaires to a sample of 652 teachers who were established as samples. We developed a questionnaire of 9 positive items that were distributed over three measurement indicators, namely: physical infrastructures (2 items), resource accessibility (3 items), and student support services and safety (4 items). All participants were asked to rate their responses on a four-point Likert scale, ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). To help participants understand the questionnaire items better, all items were given in the Indonesian language. Some examples of items included in the English version are as follows: "The school has a library that provides a variety of learning resources accessible to teachers and students in need," along with "The classrooms are always clean and tidy." The school offers access to a computer lab to teachers and students in need," "The school has designated areas for student activities," "The school has safety features like fire extinguishers, escape routes, and other security measures," "Teachers and students in need can access the school health facilities." The reliability of the instrument was assessed using the Cronbach alpha (α) coefficient. The Cronbach alpha coefficient of this study was .874.

Data about the academic performance of the state junior high school students in Southern Papua Province, Indonesia, were collected by collecting academic records of the surveyed students. We look at the student's academic records carefully and discuss them with the class teacher, known as the homeroom teacher, to get more detailed information about their academic performance. The thorough validation process was generated to make sure that the conclusions we made on the impact of parental socioeconomic status and the availability of the school's physical facilities on the academic performance of the state junior high school students in Southern Papua Province, Indonesia, were verified appropriately.

3.4. Data Analysis

The obtained data were statistically analyzed employing both simple and multiple linear regression analysis techniques. The simple linear regression analysis technique was used to examine the first two research questions, while, the multiple linear regression analysis technique was used to examine the third research question. To guarantee the accuracy of the results of data analysis, we employed the software Statistical Package for the Social Sciences (SPSS) version 21. By employing this software, we pursued to produce truthful results that may considerably advance the field's understanding.
4. Results of the Study

This study sought to describe how academic performance among state junior high school students in Southern Papua Province, Indonesia, was affected by parental socioeconomic status and the availability of school physical facilities. As aforementioned, obtained data were analyzed statistically using the software SPSS version 21. The significant results of the statistical analysis based on the formulated research questions and proposed hypotheses are presented sequentially in Table 1, Table 2, and Table 3.

Table 1. The impact of parental socioeconomic status (X1) on student academic performance (Y).

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>R²</th>
<th>t count</th>
<th>t table</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>652</td>
<td>0.717</td>
<td>0.515</td>
<td>26.253</td>
<td>1.964</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Data displayed in Table 1 revealed that at the level of alpha (α) = .05 the value of t count = 26.253 > t table = 1.963615. Based on this data, the research hypothesis that parental socioeconomic status has a significant direct impact on student academic performance is confirmed, while the reverse is unconfirmed. Further, data in Table 1 also revealed that the coefficient value of R² is .515 with the coefficient value of Sig. is 000. The data showed that approximately 51.5% of the variability in students' academic performance can be explained by the level of parental socioeconomic status they experience. This highlights the crucial role of parental socioeconomic status in shaping and supporting their children's educational experiences, ultimately contributing to improved academic performance. It also emphasizes the importance of fostering a supportive home environment that encourages and nurtures students' academic pursuits.

Table 2. The impact of the school physical facility (X2) on student academic performance (Y).

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>R²</th>
<th>t count</th>
<th>t table</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>652</td>
<td>0.739</td>
<td>0.547</td>
<td>27.999</td>
<td>1.964</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Data displayed in Table 2 revealed that at the level of alpha (α) = .05 the value of t count = 27.999 > t table = 1.963615. Based on this data, the research hypothesis that school physical facility availability has a significant direct impact on student academic performance is confirmed, while the reverse is unconfirmed. Further, data in Table 2 also revealed that the coefficient value of R² is .547 with the coefficient value of Sig. is 000. The data showed that approximately 54.7% of the variability in students' academic performance can be explained by the school physical facility availability they experience. This highlights the crucial role of school physical facility availability in shaping and supporting student learning experience, ultimately contributing to improved academic performance. It means that the school facility availability is crucial for student well-being, engagement, and overall satisfaction with the learning process, all of which are vital for academic success.

Table 3. Simultaneously impact of parental socioeconomic status (X1) and school physical facility (X2) on student academic performance (Y).

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>R²</th>
<th>F count</th>
<th>F table</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>652</td>
<td>0.817</td>
<td>0.668</td>
<td>652.360</td>
<td>3.010</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results presented in Table 3 indicate that at a significance level of alpha (α) = 0.05, the computed F-value (F count) is 652.360, which is greater than the critical F-value (F table) of 3.009603. This finding
suggests that the research hypothesis that parental socioeconomic status and school physical facility availability have a simultaneous positive impact on student academic performance is supported, while the opposite hypothesis is not confirmed. Furthermore, the data in Table 3 also demonstrates that the coefficient value of R-squared ($R^2$) is 0.668, with a corresponding significance coefficient (Sig.) value of 0.000. These results indicate that approximately 66.8% of the variability observed in students' academic performance can be collectively accounted for by the combined influences of parental socioeconomic status and the school physical facility availability they experience.

5. Discussion

The pivotal role of parental socioeconomic status and the availability of school physical facilities profoundly shape student academic performance. Parental socioeconomic status stands as a crucial factor influencing students' educational achievements. Parents, being both the legal custodians of children [36, 64] and the primary social group where children first learn to interact, significantly impacts their academic journey [10]. Statistical analysis, as demonstrated in Table 1, reveals a significant relationship, with an $R^2$ coefficient value of .515 and a Sig coefficient value of .000. This indicates that a rise of one point in the "socioeconomic status of parents" corresponds to a 0.515 increase in the "academic performance among the state junior high school students in Southern Papua Province, Indonesia." Conversely, a decrease in parental socioeconomic status correlates with a decrease in academic performance. Put simply, higher parental socioeconomic status aligns with better academic performance, while lower status relates to poorer academic outcomes among these students in Southern Papua, Indonesia. These findings align with Kapinga [65]; Soharwardi, et al. [66] and Suleman, et al. [67] research, which emphasizes the significant positive effect of parental socioeconomic status on academic achievement. Interestingly, it contrasts with Rumbaoa, et al. [68] research findings, indicating no significant impact of parental socioeconomic status on the academic performance of college students at the University of Santo Tomas, Manila, Philippines.

The socioeconomic status of parents impacts the academic performance of their children in some way. It is common knowledge that for students to derive the most out of their educational experience and reach their full potential, they will need the undivided attention and unwavering support of their families. Parents, regardless of their educational attainment, may help their children build confidence in school and, ultimately, in life by providing them with support and assistance as they enter the challenging era of globalization. Despite the direct and indirect consequences of parental socioeconomic status on children's academic performance are still blurred, it is well-accepted that parental socioeconomic status has an impact on student's academic success [69].

High-income parents typically engage in quality home-based activities [70]. Parents' unwavering support is believed to foster in children learning habits that may result in improved academic success [6]. Parents with greater resources focus on their children's mental and physical health, access to learning materials, and educational activities that shape their character. Parents with a high socioeconomic status offer their children an opportunity to maximize their potential, resulting in high academic performance. This finding is in line with Anetor [9]; Atto, et al. [10] and Nachinaab, et al. [15] research findings that students' academic performance is greatly influenced by their parent's socioeconomic status.

Parental socioeconomic status is tightly related to better or worse student academic performance. Zhang, et al. [64]. Zhang, et al. [64] argued that the higher socioeconomic status of parents is typically associated with a better academic performance of children; meanwhile the lower socioeconomic status of parents, on the other hand, is closely connected to a worse academic performance of children. Parents with a higher socioeconomic status are more likely to succeed in preparing their children for school because they have more resources available to support, promote, and explore their children's mental and physical growth than parents from lower socioeconomic backgrounds; while parents with a low socioeconomic status offer less opportunity for their children to maximize their potential, resulting in low academic success.
The parents' socioeconomic status has a direct effect on the children's educational resource availability. Parents with higher socioeconomic status can provide their children with technology, books, and other educational resources that improve their learning experiences. Children from wealthier socioeconomic backgrounds have an advantage in their academic efforts because of this access to resources. Besides, parents with higher socioeconomic status can also provide their children with better living conditions and more educational resources. They can devote more time to their children's schooling and typically have more flexible schedules. Meanwhile, parents of low socioeconomic status typically work full-time to support their families and have little to no time to participate in their children's education. Simply said, it is easier for parents with higher socioeconomic status to meet their children's needs than it is for parents with lower socioeconomic status.

In general, parental socioeconomic status has a crucial impact on both the parental level of involvement and children's academic success as it directly affects children's access to educational resources, the quality of the schools their children attend, and the opportunities available to them. Parents from higher socioeconomic status can support their children's learning by guiding them, assisting them with their homework, and participating in class discussions. As a result, children from wealthier socioeconomic homes perform better academically than those from poorer socioeconomic homes. Parents from poorer socioeconomic backgrounds frequently devote more of their time to providing for the family's financial needs, which limits their children's prospects for intellectual socialization. The disparity in parental involvement can strengthen the impact of children's socioeconomic background on their academic path, underscoring the necessity of all-encompassing assistance programs to close this gap.

In addition to the parents' socioeconomic status, a student's educational experience is also greatly influenced by the school's physical facilities such as buildings, furnishings, and overall environments that are conducive to learning. Therefore, it is crucial to acknowledge the interconnection of these different components in establishing a student's success as these differences can either boost or weaken the impact of parental socioeconomic status on their children's academic performance.

The school's physical facilities are critical components of student success as they greatly influence the quality of the educational process and services provided in a school. As the availability of the school's physical facilities can increase teacher teaching motivation and effectiveness as well as student engagement and academic achievement, the school management should seriously ensure that all students have equal access to the various facilities without exception, regardless of their background. Since the students' academic performance and the learning environment are commonly dependent, well-structured school physical environments are necessary to encourage teamwork and help students feel like they belong to a particular school.

Schools with well-maintained facilities and appropriate security measures provide a sense of safety for students, staff, and even parents. A secure learning environment positively impacts students' emotional well-being, enabling them to focus more on their studies. The results of the statistical analysis, as presented in Table 2, revealed an R² coefficient value of 0.547 with a significance (Sig) coefficient value of .000. This indicates that each incremental point or digit increase in "school physical facilities" corresponds to a 0.547-point or digit increase in "academic performance among state junior high school students in Merauke, Indonesia." Conversely, a reduction of one point or digit in "school physical facilities" corresponds to a 0.547-point or digit decrease in "academic performance among state junior high school students in Merauke, Indonesia." In simpler terms, higher-quality school physical facilities are associated with higher academic performance among state junior high school students in Merauke, Indonesia, while lower-quality school physical facilities are linked to lower academic performance.

The finding of this study is in line with Afework and Asfaw; Osuji and Utami that the presence of adequate school physical infrastructure remains a pivotal element in achieving a school's objectives. These earlier studies suggest that having sufficient and appropriate physical facilities within a school is of paramount importance for realizing the intended goals of the school. This implies that the physical environment of a school, encompassing elements like classrooms, laboratories, sports facilities, and more, significantly contributes to the attainment of the school's overall objectives in terms of
educational outcomes, student engagement, and potentially even the overall quality of the learning environment. The finding of this study contrasts with Sam-Kalagbor [50] and Etobro, et al. [48] research findings as those prior studies discovered a notable negative correlation between the availability and quality of school physical facilities and student academic performance. This implies that the higher quality of school physical facilities doesn't necessarily translate to improved academic performance and vice versa. These contrasting findings underscore the significance of factoring in various elements, such as differences in specific contextual conditions or the particular dimensions of physical facilities being examined in each study, which could contribute to the divergent outcomes.

6. Conclusion

Taking into consideration the results of statistical data analysis, it might be possible for us to conclude that the socioeconomic status of parents and school physical facilities availability significantly affect significant positively the academic performance of students at the state junior high schools of Southern Papua Province, both partially and simultaneously.

The findings of the study may hypothetically add to the preceding studies by providing precious information on how parental socioeconomic status and school physical facilities affect academic performance among students enrolled in the state junior high schools in eastern Indonesia. This study’s findings may also endorse the efforts to eliminate class-based gaps in students’ academic performance in compulsory education. In addition, government policy on the socioeconomic status of parents and school grants should be implemented thoroughly to promote educational equity so that students from low economic backgrounds have equal access to quality education.

Recognizing the role of parental socioeconomic status and school physical facilities availability in educational outcomes is crucial for addressing educational inequalities and ensuring that all children have an equal chance to succeed academically, regardless of their socioeconomic background. Despite the significance of findings in demonstrating the benefits of parental socioeconomic status and school physical facilities availability in improving student academic performance, the research was hindered by at least two shortcomings. The first shortcoming is related to the surveyed variables. As was widely acknowledged, the academic performance of students is influenced by numerous internal and external factors. The second shortcoming is related to the surveyed area and samples. Since this study only focused on the parental socioeconomic status and school physical facilities availability taking the state junior high school students in Southern Papua Province as the population and samples, future studies with a large number of variables predicting the academic performance of students and the wide range of areas and samples will be fully endorsed.

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**Transparency:**
The authors confirm that the manuscript is an honest, accurate and transparent account of the study that no vital features of the study have been omitted and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

**Competing Interests:**
The authors declare that they have no competing interests.
Authors’ Contributions:
All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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References


