Correlation between Parental Involvement and Student Discipline on the Quality of Education in High Schools in Central Java

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ABSTRACT

This quantitative study investigates the influence of parental involvement and student discipline on the quality of education in high schools in Central Java. A sample of 110 participants, including students, parents, and teachers, provided responses on measures of parental involvement, student discipline, and perceptions of educational quality. Descriptive statistics, correlation analysis, and multiple regression analysis were employed to analyze the data. The results reveal significant positive correlations between parental involvement, student discipline, and educational quality. Moreover, both parental involvement and student discipline significantly predict perceptions of educational quality, highlighting their critical roles in shaping the overall educational experience. These findings underscore the importance of fostering collaborative partnerships between parents and schools, as well as implementing effective discipline practices, to enhance educational quality in high schools in Central Java.

Keywords:
Parental Involvement
Student Discipline
Educational Quality
High Schools
Central Java

1. INTRODUCTION

In the educational landscape of Indonesia, particularly in Central Java, various factors influence the quality of high school education. Studies emphasize the significance of human resource quality and Kaizen in enhancing the quality assurance system within high schools [1]. Additionally, student well-being, influenced by personal, social, and environmental factors, plays a crucial role in educational outcomes and policy development [2]. Furthermore, the motivation of high school students is intricately linked to perceptions of teacher quality and the learning environment, highlighting the importance of these aspects in fostering student engagement and success [3]. Parents in Indonesia prioritize teacher quality, tuition costs, facilities, and school achievements when selecting schools for their children, underscoring the multifaceted considerations in decision-making processes [4]. Moreover, the preference for general high schools over vocational ones and the impact of student self-efficacy and infrastructure on school quality status emphasize the complex interplay of factors shaping educational
outcomes and enrollment patterns in the country [5].

Central Java's educational landscape is multifaceted, as evidenced by various research findings. Studies on school enrollment rates reveal a clustering analysis using the k-means algorithm to map participation levels across different age groups [6]. Additionally, concerns about teacher professionalism and certification in Central Jakarta highlight the need for improved teacher quality and status in the region [7]. The implementation of school zoning policies in lower secondary schools has raised questions about equal educational access and the challenges faced by reputable institutions in maintaining academic standards [8]. Furthermore, spatial regression analysis in Central Java indicates disparities in development achievements at the district/city level, influenced by factors like regional capacity, operational resources, and poverty levels [9]. Lastly, a study on COVID-19 patients in Central Java provides insights into demographic characteristics and transmission patterns, emphasizing the diverse nature of cases and the spread across various cities and districts [10]. These diverse research findings collectively shed light on the complexities of educational quality determinants and the need for continuous enhancement efforts in Central Java's high schools.

**Problem Statement**

Parental involvement plays a crucial role in shaping student discipline and academic achievement, impacting the quality of education significantly. Studies emphasize the importance of parental engagement in correcting children's behavior at home [11], assisting with schoolwork, and communicating with teachers [12]. Research also highlights the positive correlation between parental involvement and student academic achievement [13]. However, the specific dynamics of parental involvement and student discipline in high schools in Central Java remain underexplored. Understanding how parental involvement influences student discipline and educational outcomes in this region is essential for enhancing the overall quality of education. Further exploration into the interplay between parental involvement and student discipline in Central Java high schools is warranted to optimize educational excellence in the area.

This research endeavors to unravel the intricate connections between parental involvement, student discipline, and educational quality in Central Java's high schools. Through a quantitative lens, it aims to elucidate the extent of parental engagement, the efficacy of disciplinary measures, and their collective impact on the overall educational experience. By delineating these relationships, the study aspires to offer insights that can inform policies, practices, and interventions aimed at enhancing educational outcomes.

### 2. LITERATURE REVIEW

#### 2.1 Parental Involvement in Education

Parental involvement plays a crucial role in students' academic achievement and overall well-being. Research indicates that active parental engagement, both at home and in school, positively influences academic performance, motivation, and socio-emotional development [12]–[16]. Studies have shown that when parents assist with homework, discuss school progress, and motivate children, students tend to achieve higher grades. Furthermore, parental involvement acts as a buffer against socioeconomic and familial challenges that may hinder academic success. It is evident that parental involvement is a significant factor in shaping students' educational outcomes, emphasizing the importance of fostering strong partnerships between parents, educators, and students to enhance
learning experiences and achievements.

2.2 Student Discipline

Effective student discipline is crucial for fostering a positive learning environment and enhancing academic achievement and social development in high schools. Research emphasizes the importance of fair and consistent discipline policies, such as school-wide programs [17], and the implementation of positive discipline strategies that focus on internal motivation and long-term behavior changes [18]. Studies also highlight the negative impact of punitive approaches on student mental wellbeing and social behavior [19]. Additionally, efforts to improve student discipline, including time management, adherence to rules, and strict consequences, have been shown to enhance learning outcomes and student compliance [20]. By combining supportive interventions with well-defined discipline protocols, schools can effectively reduce behavioral incidents, increase student engagement, and promote overall academic success and personal growth.

In the context of Central Java, where traditional values of respect for authority and communal harmony coexist with modern educational paradigms, student discipline assumes unique dimensions. Cultural norms, community expectations, and institutional practices shape the disciplinary landscape, underscoring the need for culturally responsive approaches that balance accountability with empathy.

2.3 Quality of Education

Educational quality is a multifaceted concept that extends beyond academic achievement to encompass various elements such as teacher effectiveness, curriculum relevance, and school climate [21], [22]. In Central Java, like in other regions, the pursuit of educational quality is intricately linked to broader socio-economic dynamics, infrastructure challenges, and policy imperatives [23]. High-quality education is not just an ideal but a fundamental right crucial for individual empowerment and societal advancement [24]. While existing studies have delved into the determinants of educational quality, contextual factors play a significant role in shaping outcomes, highlighting the need to consider the influence of the environment on educational processes and results [25]. In Central Java, where the convergence of tradition and modernity shapes educational practices, understanding these contextual nuances is imperative for designing interventions that resonate with local realities and aspirations.

3. METHODS

3.1 Research Design

This study employs a quantitative research design to investigate the relationship between parental involvement, student discipline, and the quality of education in high schools in Central Java. A cross-sectional survey approach will be utilized to collect data from students, parents, and teachers, allowing for the systematic measurement of variables of interest at a single point in time.

3.2 Sampling

The target population consists of high school students, parents, and teachers in Central Java. A stratified random sampling technique will be employed to ensure representation across different types of high schools (public and private) and geographical areas within the province. The sample size will be determined based on statistical considerations, with a minimum of 110
participants to achieve adequate power for analysis.

3.3 Data Collection

Data will be collected through self-administered surveys distributed to students, parents, and teachers in selected high schools. The surveys will include validated scales to measure parental involvement, student discipline, and perceptions of educational quality. Participants will be asked to rate their responses using a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The surveys will be designed to ensure clarity, relevance, and cultural appropriateness, with pilot testing conducted to assess the reliability and validity of the instruments.

3.4 Data Analysis

Quantitative data analysis will be conducted using the Statistical Package for the Social Sciences (SPSS) version 26. Descriptive statistics, including means, standard deviations, frequencies, and percentages, will be computed to summarize the characteristics of the sample and the variables of interest. Inferential statistics, such as correlation analysis and multiple regression analysis, will be employed to examine the relationships between parental involvement, student discipline, and the quality of education. Statistical significance will be set at p < 0.05.

4. RESULTS AND DISCUSSION

4.1 Sample Characteristics

A total of 110 participants were included in the study, representing a diverse range of stakeholders in the educational process. This group consisted of 55 high school students, 30 parents, and 25 teachers from various schools across Central Java. This sample composition ensures comprehensive insights into the factors influencing educational quality in high schools in the region, reflecting the perspectives of key individuals directly involved in the educational system.

4.2 Descriptive Statistics

Descriptive statistics were calculated to summarize the responses of participants regarding parental involvement, student discipline, and perceptions of educational quality. The following table presents the mean scores and standard deviations for each variable:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Involvement</td>
<td>3.78</td>
<td>0.92</td>
</tr>
<tr>
<td>Student Discipline</td>
<td>4.15</td>
<td>0.76</td>
</tr>
<tr>
<td>Educational Quality</td>
<td>4.02</td>
<td>0.83</td>
</tr>
</tbody>
</table>

These descriptive statistics offer a snapshot of the central tendency and variability within the data. Participants, on average, rated parental involvement relatively high (mean = 3.78), indicating a moderate level of parental engagement. Student discipline received even higher ratings (mean = 4.15), suggesting that participants perceived discipline standards to be generally strong. Additionally, perceptions of educational quality were favorable, with a mean score of 4.02, indicating positive overall perceptions of the quality of education in high schools in Central Java.

4.3 Correlation Analysis

Correlation analysis was conducted to explore the relationships between parental involvement, student discipline, and perceptions of educational quality. The following table presents the correlation coefficients:
Table 2. Correlation Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parental Involvement</th>
<th>Student Discipline</th>
<th>Educational Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Involvement</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Discipline</td>
<td>0.645</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Educational Quality</td>
<td>0.724</td>
<td>0.683</td>
<td>1.00</td>
</tr>
</tbody>
</table>

These correlation coefficients indicate the strength and direction of the relationships between variables, with a coefficient closer to 1.00 suggesting a stronger positive correlation, and a coefficient closer to -1.00 indicating a stronger negative correlation, while values around 0 suggest weak or no correlation. In this analysis, parental involvement demonstrates a significant positive correlation with educational quality (r = 0.724, p < 0.05), as does student discipline (r = 0.683, p < 0.05). Additionally, a moderate positive correlation is observed between parental involvement and student discipline (r = 0.645, p < 0.05). These findings suggest that higher levels of parental involvement and effective student discipline practices are associated with more favorable perceptions of educational quality in high schools in Central Java.

4.4 Regression Analysis

Multiple regression analysis was conducted to examine the predictive power of parental involvement and student discipline on perceptions of educational quality. The results of the regression analysis are presented below:

Table 3. Regression Analysis

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Beta</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Involvement</td>
<td>0.525</td>
<td>0.153</td>
<td>3.474</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Student Discipline</td>
<td>0.433</td>
<td>0.185</td>
<td>2.385</td>
<td>0.019</td>
</tr>
</tbody>
</table>

The regression coefficients in this analysis depict the strength and direction of the relationship between each predictor variable and the outcome variable, educational quality. A positive beta coefficient signifies a positive relationship, while a negative coefficient indicates a negative relationship. Parental involvement significantly predicts educational quality (Beta = 0.525, p < 0.001), indicating that higher levels of parental involvement are associated with more positive perceptions of educational quality. Similarly, student discipline also significantly predicts educational quality (Beta = 0.433, p = 0.019), suggesting that effective discipline practices contribute to favorable perceptions of educational quality.

4.5 Coefficient of Determination

The coefficient of determination (R-squared) in this analysis signifies the proportion of variance in the outcome variable, educational quality, that is elucidated by the predictor variables, namely parental involvement and student discipline. Calculated at 0.62, it indicates that approximately 62% of the variance in perceptions of educational quality in high schools in Central Java can be elucidated by the combined influence of parental involvement and student discipline. The residual variance may be attributed to other unaccounted factors, underscoring the multifaceted nature of educational quality as an outcome variable.

Discussion

The findings of the regression analysis provide valuable insights into the factors influencing perceptions of educational quality in high schools in Central Java. Both parental involvement and student discipline emerged as significant predictors of
educational quality, contributing to a better understanding of the dynamics shaping the educational landscape in the region.

The positive coefficients for parental involvement (Beta = 0.52, p < 0.001) and student discipline (Beta = 0.43, p = 0.019) indicate that higher levels of parental engagement and effective discipline practices are associated with more favorable perceptions of educational quality. These results underscore the importance of collaborative partnerships between parents, teachers, and students in creating a supportive learning environment that fosters academic success and personal development.

The significant predictive power of parental involvement aligns with previous research highlighting the positive impact of parental engagement on student outcomes. When parents are actively involved in their children's education, they provide essential support, encouragement, and resources that contribute to academic achievement and overall well-being. In the context of Central Java, where familial ties and community bonds are strong, leveraging parental involvement can be a powerful strategy for enhancing educational quality in high schools.

Similarly, the significant contribution of student discipline to perceptions of educational quality underscores the importance of maintaining a conducive learning environment characterized by clear expectations, consistent enforcement of rules, and supportive interventions for at-risk students. Effective discipline practices promote a sense of safety, order, and respect within schools, enabling students to focus on learning and maximizing their potential.

It is worth noting that while parental involvement and student discipline account for a substantial proportion of the variance in educational quality (R-squared = 0.62), other factors not included in the regression model may also influence perceptions of educational quality. Socio-economic status, teacher quality, school resources, and community support are among the myriad factors that shape the educational experience and warrant further investigation.

5. CONCLUSION

In conclusion, this study provides empirical evidence of the significant influence of parental involvement and student discipline on educational quality in high schools in Central Java. The findings highlight the importance of engaging parents as partners in the educational process and maintaining a supportive and disciplined learning environment within schools. By strengthening relationships between parents, teachers, and students, and implementing evidence-based discipline strategies, educational stakeholders can create an environment that fosters academic achievement, socio-emotional development, and overall well-being. These efforts are crucial for ensuring that all students in Central Java receive a high-quality education that equips them with the knowledge, skills, and attitudes necessary for success in an increasingly complex and interconnected world.
REFERENCES


