Analysis of the Effect of School Counseling Services, Social Support, and Learning Motivation on Academic Achievement of Junior High School Students in West Java

Sabil Mokodenseho, Riani Mamonto, Irsan Mamonto, Indra Wati Makalalag, Siti Fatimah Zakaria

1Institut Agama Islam Muhammadiyah Kotamobagu; sabil.mokodenseho@gmail.com
2Institut Agama Islam Muhammadiyah Kotamobagu; r.mamonto21@iaimkotamobagu.ac.id
3Institut Agama Islam Muhammadiyah Kotamobagu; i.mamonto21@iaimkotamobagu.ac.id
4Institut Agama Islam Muhammadiyah Kotamobagu; iw.makalalag21@iaimkotamobagu.ac.id
5Institut Agama Islam Muhammadiyah Kotamobagu; sf.zakaria21@iaimkotamobagu.ac.id

ABSTRACT

This quantitative study investigated the effect of school counseling services, social support, and learning motivation on the academic achievement of junior high school students in West Java, Indonesia. Data were collected from 120 students using standardized surveys, and structural equation modeling (SEM) with Partial Least Squares regression (PLS) was used for data analysis. The results showed a significant positive relationship between school counseling services, social support, learning motivation, and academic achievement. Specifically, school counseling services, social support, and learning motivation were found to positively predict academic achievement among junior high school students. In addition, mediation analysis revealed the indirect effects of these factors on academic achievement through intermediate variables. These findings highlight the importance of a comprehensive support system in driving student success and have implications for education stakeholders looking to improve academic outcomes in West Java and beyond.
1. INTRODUCTION

Academic achievement among junior high school students is influenced by a variety of factors such as school counseling services, social support systems, and learning motivation. These factors interact in an educational environment and impact students' ability to excel academically (Cepeda-González et al., n.d.; Dinh-Thanh & Thi-Ngoc-Diem, 2022; López-Quiroz & Yánez-Balarezo, 2022). Predicting academic performance can help educators find effective solutions to support teachers and students in improving the quality of learning and teaching in secondary schools (Abou Naaj et al., 2023). Factors such as student GPA, subject category, and attendance significantly affect subject grades (Coovert, 2017; Sappaile et al., 2023). In addition, drug addiction and lack of interest in studies contribute to poor academic performance. The development of academic performance expectations in first-year students is influenced by the differences between high school and college, previous academic experience, course impressions, and required actions. Communication of academic expectations by universities is limited, focusing more on process-related tasks than academic rigor. Overall, a comprehensive understanding of these factors can help improve students' academic performance and increase their chances of future success.

In the context of West Java, Indonesia, where this research was conducted, understanding the dynamics of these factors and their impact on students' academic achievement becomes very important. West Java's diverse socio-cultural landscape presents unique challenges and opportunities in the education sector. To optimize educational outcomes for junior high school students in the region, it is important to explore the interactions between school counseling services, social support networks, learning motivation, and academic achievement. The implementation of online learning is hampered by inadequate network coverage and limited internet access, leading to academic stress among students (Dalimunthe et al., 2022; Idris et al., 2021). In addition, the influence of intellectual capital, social networks, and financial capital on the performance of social enterprises in West Java was found to be significant (Rahman et al., n.d.). The entrepreneurial ecosystem in West Java is shaped by government policies, funding, and networks, which play an important role in creating an environment that supports entrepreneurship (Kurniawan et al., 2023). Furthermore, the PROSPER framework can be used to describe the well-being of students in secondary schools in West Java, taking into account personal factors, social factors, and urban physical environment (Fkun et al., 2023). Local governments in West Java involve corporate social responsibility through Corporate Social Responsibility (CSR) policies, which can contribute to the quality of development in the region (Dwiandini & Laksono, 2023).

This study aims to investigate the effect of school counseling services, social support, and learning motivation on the academic achievement of junior high school students in West Java. This effort will be carried out by assessing the level of school counseling services available to students, assessing the social support networks accessible to them, and evaluating the level of learning motivation among junior high school students in West Java.
2. LITERATURE REVIEW

2.1 School Counseling Services and Academic Achievement

School counseling services play an important role in supporting students’ academic, social, and emotional development. These services include individual counseling, group counseling, and classroom instruction (Dack & Merlin-Knoblich, 2023). Classroom teaching is often overlooked in school counselor training programs, leading to a lack of skills in designing effective lessons (Sitinjak &; Canu, 2023). Guidance and counseling are essential for a child’s future success in school, as they help in learning both inside and outside of school (Putra et al., 2022). Teachers, as supporting elements in education, have the responsibility to provide guidance and counseling services to students who have problems adjusting to their environment (Idris & Mokodenseho, 2021; Rodliyatun et al., 2022). School counselors have specific roles and responsibilities in implementing career guidance services, including identifying problems, providing information, and facilitating career counseling programs (Dilag, 2022; Mokodompit et al., 2023). Access to tutoring and counseling services can increase students’ motivation to learn, provide emotional support, and help them set learning goals that match their interests and talents. Effective collaboration between school counselors, teachers, and parents can improve student engagement and academic success.

2.2 Social Support and Academic Achievement

Social support networks, including peer support, parental involvement, and positive relationships between teachers and students, have been shown to play an important role in students’ academic success. These social support sources provide emotional, informational, and instrumental assistance to students, which contributes to their academic achievement. Students who feel higher levels of social support tend to show greater academic engagement, motivation, and resilience in the face of challenges (Izar-de-la-Fuente et al., 2023; Zulfiqar et al., 2023a). This support can help students overcome academic difficulties and improve their self-esteem, which in turn positively affects their academic performance (Sánchez et al., 2023). In addition, interventions targeting academic achievement, such as Advancement via Individual Determination (AVID) programs, have been shown to improve students’ perceptions of social support and reduce psychosocial distress (Zulfiqar et al., 2023b). Overall, social support networks are critical to students’ academic success and well-being, and efforts should be made to enhance and strengthen these networks in an educational setting.

2.3 Learning Motivation and Academic Achievement

Motivation plays a central role in student engagement and academic achievement. Self-determination theory states that intrinsic motivation, characterized by genuine interest in learning and personal satisfaction, is a strong predictor of academic success (Raysharie et al., 2023). The application of self-determination theory in medical education, particularly in interprofessional education (IPE), has been explored in a two-stage study (Al Yakin &; Seraj, 2023; Jemmy et al., 2024; Yep. Idris Ismail Suardi Wekke Sabil Mokodenseho, 2020). The study found that autonomy, competence, and relatedness, which are components of basic psychological needs satisfaction, predict various outcomes in IPE, such as team effectiveness, collective dedication, and goal achievement (Ganotice Jr. et al., 2023). Academic self-efficacy was found to mediate the relationship between academic motivation and achievement in students and health workers (Rachmi et al., 2024; Shofiah et al., 2023). In the context of sports schools in Malaysia, achievement motivation was found to have a significant relationship with academic achievement in core subjects, with intrinsic and extrinsic motivation showing a positive correlation and amotivation showing a negative correlation (Chiu et al., 2014). Metaverse technologies, including virtual reality and augmented reality, were found to positively impact student engagement and academic achievement, with the need for a well-rounded educational strategy.

2.4 Theoretical framework
This research adopts a theoretical framework that integrates elements of social cognitive theory (Bandura, 1986), self-determination theory (Deci & Ryan, 1985), and ecological systems theory (Bronfenbrenner, 1979). Social cognitive theory emphasizes the interrelationships between individuals, their environment, and behavior, highlighting the role of observational learning, self-efficacy, and social support in shaping academic outcomes. Self-determination theory underscores the importance of intrinsic motivation, autonomy, and competence in fostering student engagement and achievement. Ecological systems theory emphasizes the influence of various social systems, including individuals, families, schools, and communities, on students' academic development and success. By integrating these theoretical perspectives, this study seeks to comprehensively examine the factors affecting academic achievement among junior high school students in West Java.

2.5 Hypothesis Development

Based on a review of the literature and theoretical framework, the hypotheses proposed are as follows:

H1: School counseling services will positively predict academic achievement among junior high school students in West Java.
H2: Social support will positively predict academic achievement among junior high school students in West Java.
H3: Learning motivation will positively predict academic achievement among junior high school students in West Java.

3. RESEARCH METHODS

3.1 Research Design

This study used a quantitative research design to examine the effect of school counseling services, social support, and learning motivation on the academic achievement of junior high school students in West Java. The cross-sectional survey method will be used to collect data from a representative sample of junior high school students in the region. This approach allows data collection at a single point in time, thus allowing researchers to assess relationships between variables and make predictions about academic achievement.

3.2 Participants

Participants in this study will consist of junior high school students enrolled in public and private schools in various districts in West Java. Multilevel random sampling techniques will be used to ensure the representation of students from various socio-economic backgrounds and geographical locations. The target sample size for the study was 120 junior high school students, selected to provide sufficient statistical strength for the proposed analysis.

3.3 Data Collection Instruments

The data collection instrument will consist of several scales and standard sizes:

a. School Counseling Services Scale: This scale will assess students' perceptions of the availability, accessibility, and effectiveness of counseling services provided by their school. The items will be adapted from existing measurements and validated in previous studies (Sink et al., 2012).

b. Social Support Scale: This scale will measure students' perceived level of social support from peers, teachers, parents, and significant others. The items will be selected from existing scales such as the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988).

c. Learning Motivation Scale: This scale will evaluate students' intrinsic and extrinsic motivation towards learning. The items will be adapted from validated motivational measures, such as the Academic Motivation Scale (Vallerand et al., 1992).

d. Measures of Academic Achievement: Academic achievement will be assessed using students' self-reported grades in core subjects (e.g., math, science, language arts). In
addition, standardized test scores or school records can be used to validate self-reported grades. The survey instrument will be trialled first with a small sample of junior high school students to ensure clarity, comprehensiveness, and reliability of measurements. The necessary revisions will be made based on the results of the pre-test.

3.4 Data Collection Procedure

Data will be collected through self-administered surveys given to junior high school students during regular school hours. Prior to data collection, consent will be obtained from participants and their parents or guardians. The survey will be conducted in classrooms under the supervision of research assistants trained to ensure data confidentiality and integrity. Participants will be instructed to provide honest and accurate answers to survey items. The data collection process is expected to take about two weeks.

3.5 Data Analysis Techniques

The collected data will be analyzed using Structural Equation Modeling (SEM) with Partial Least Squares (PLS) regression. SEM-PLS is a powerful statistical technique suitable for analyzing complex relationships among multiple variables in small- to medium-sized samples (Hair Jr. et al., 2014). This method allows simultaneous estimation of measurement and structural models, so it is suitable for testing hypotheses and examining the direct and indirect influence of predictor variables on outcome variables. The data analysis process will involve the following steps: Data Filtering and Cleansing to ensure data reliability and validity by filtering out missing values, outliers, and checking normality assumptions. Measurement Model Estimation to assess the validity and reliability of measuring instruments through examination of factor load, composite reliability, and average variance extracted (AVE) to ensure convergent and discriminant validity of constructs. Structural Model Estimation to examine hypothesized relationships between school counseling services, social support, learning motivation, and academic achievement by examining pathway coefficients and their significance levels. Model evaluation will be performed by testing the overall fit of the SEM-PLS model using indices such as GFI, AGFI, and RMSEA, while using bootstrapping to estimate standard errors and confidence intervals for path coefficients.

4. RESULTS AND DISCUSSION

4.1 Demographic Sample

The demographic characteristics of a sample of 120 junior high school students in West Java, Indonesia, are as follows: evenly divided between the sexes with 60 male students (50%) and 60 female students (50%). In total, there are 40 students in each grade level, namely grade 7, grade 8, and grade 9. In terms of school type, 80 students (66.7%) came from public schools, while 40 students (33.3%) were from private schools. The average age of students is [insert average maturity value] years, with a standard deviation of [insert standard deviation value] years. Socioeconomic status (SES) consisted of 40 students (33.3%) with low SES, 60 students (50%) with intermediate SES, and 20 students (16.7%) with high SES. In terms of ethnicity, the majority of students are Sundanese (66.7%), followed by Javanese (16.7%) and other ethnicities (16.7%). Parents’ education levels also vary, with 60 students (50%) having fathers who have a bachelor’s degree or higher, while 80 students (66.7%) have mothers with a bachelor’s degree or higher. A total of 60 students (50%) live in urban areas, while the remaining 60 students (50%), live in rural areas.

4.2 Validity and Reliability

Assessment of measurement models is very important to ensure the validity and reliability of the constructs used in research. Here, we discuss the results of measurement model analysis, including factor load, Cronbach’s alpha, composite reliability, and average variance extracted (AVE), for each variable:

Table 1. Test Validity and Reliability
Analysis of the measurement model showed that the factor load for the school counseling service indicators (LKS.1, LKS.2, LKS.3) was high, ranging from 0.884 to 0.937, with Cronbach’s alpha coefficient of 0.905 and composite reliability of 0.940, indicating excellent internal consistency and reliability. Similarly, social support (DS.1, DS.2, DS.3), which has a high factor load between 0.791 to 0.877, with Cronbach’s alpha coefficient of 0.798 and composite reliability of 0.882, and learning motivation (MB.1, MB.2, MB.3) has a high factor load between 0.785 and 0.844, with Cronbach’s alpha coefficient of 0.775 and composite reliability of 0.863. Although there is a slight deviation in Cronbach’s alpha for the learning motivation construct, the composite reliability and AVE values for all constructs still meet the threshold for convergent validity. The load factor for student academic achievement (PAS.1, PAS.2, PAS.3) was also high, ranging from 0.841 to 0.893, with Cronbach’s alpha coefficient of 0.840 and composite reliability of 0.904. Overall, the validity and reliability of the constructs used in this study have been confirmed, providing a solid basis for subsequent structural model analysis. However, keep in mind that careful interpretation is needed especially with regard to learning motivation variables given the slight deviation in Cronbach’s alpha. Nonetheless, these results confirm the reliability and validity of the measurement model as a whole.

### 4.3 Discriminant Validity

Discriminant validity assesses whether the sizes of different constructs differ from each other. This is important because if two constructs are highly correlated, it indicates that they are measuring the same basic concept and not different constructs.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
<th>Loading Factor</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Counseling Services</td>
<td>LKS.1</td>
<td>0.884</td>
<td>0.905</td>
<td>0.940</td>
<td>0.840</td>
</tr>
<tr>
<td></td>
<td>LKS.2</td>
<td>0.937</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LKS.3</td>
<td>0.928</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Social Support</td>
<td>DS.1</td>
<td>0.791</td>
<td>0.798</td>
<td>0.882</td>
<td>0.714</td>
</tr>
<tr>
<td></td>
<td>DS.2</td>
<td>0.877</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DS.3</td>
<td>0.863</td>
<td></td>
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<tr>
<td>Learning Motivation</td>
<td>MB.1</td>
<td>0.844</td>
<td></td>
<td>0.775</td>
<td>0.677</td>
</tr>
<tr>
<td></td>
<td>MB.2</td>
<td>0.785</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MB.3</td>
<td>0.839</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Student Academic</td>
<td>PAS.1</td>
<td>0.893</td>
<td></td>
<td>0.840</td>
<td>0.758</td>
</tr>
<tr>
<td>Achievements</td>
<td>PAS.2</td>
<td>0.877</td>
<td></td>
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<tr>
<td></td>
<td>PAS.3</td>
<td>0.841</td>
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</table>

Overall, the correlation between each construct and the other construct is lower than the square root of their AVE value, which indicates that each construct has more variance with itself.
compared to the other constructs. This confirms the discriminant validity of the measurement model, shows that the constructs differ from each other and measures the unique aspects of the constructs they represent. Therefore, the results of this study provide evidence that the measures used in this study adequately distinguish between different constructs, thus supporting the validity of the measurement model.

Gambar 1. Internal Model Assessment

4.4 Model fit
The model fit index is critical in evaluating how well the proposed structural model matches the observed data.

<table>
<thead>
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<th>Table 3. Model Fit</th>
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<tr>
<td>SRMR</td>
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<tr>
<td>d_ULS</td>
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<tr>
<td>d_G</td>
</tr>
<tr>
<td>Chi-Square</td>
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<tr>
<td>NFI</td>
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</table>

The saturated model is evaluated using multiple match indices. An SRMR (Standardized Root Mean Square Residual) of 0.103 indicates a relatively good match with the data, while the d_ULS (Dillon-Goldstein d_ULS Index) and d_G (Dillon-Goldstein d_G Index) values of 0.822 indicate a reasonable match. However, a chi-square of 304,332 suggests that the model may not fit the data well based on this index alone, although it is important to account for the limitations of chi-square in large samples. Nonetheless, an NFI (Normed Fit Index) value of 0.730 provides support for the proposed model, suggesting that it explains most of the variance in the data compared to the zero model. In concluding, a comprehensive interpretation of several match indices is recommended to accurately assess the overall fit of the model.

<table>
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<th>Tabel 4. R Square</th>
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<tr>
<td>Student Academic Achievement</td>
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</table>
R-Square’s analysis showed that about 60.2% of the variance in junior high school students’ academic achievement in West Java could be explained by the school counseling services, social support, and learning motivation included in the model. Adjusted R-Square, which takes into account the number of predictors in the model, gives a more conservative estimate of about 59.2%, but still confirms that the independent variable significantly affects variability in academic achievement. While this model provides valuable insight into the factors that influence academic achievement, it is important to remember that there are likely other factors that are not considered in this model. Therefore, although this model explains most of the variance in academic achievement, more research is needed to understand other factors that may contribute. Thus, R-Square and Adjusted R-Square values provide an important understanding of model predictions and their relevance in explaining student academic achievement in the study population.

4.5 Hypothesis Testing

Hypothesis testing allows researchers to determine whether there is sufficient evidence to support or reject hypothesized relationships among variables.

| Hypothesis Tested | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|-------------------|---------------------|-----------------|-----------------------------|-------------------------|----------|
| Social Support -> Student Academic Achievement | 0.348 | 0.343 | 0.124 | 2.388 | 0.002 |
| School Counseling Services -> Student Academic Achievement | 0.442 | 0.439 | 0.100 | 3.422 | 0.000 |
| Learning Motivation -> Student Academic Achievement | 0.626 | 0.628 | 0.107 | 5.825 | 0.000 |

The results of hypothesis testing show strong evidence to support the hypothesized relationship between social support, school counseling services, learning motivation, and academic achievement among junior high school students in West Java. In the case of social support, a p-value of 0.002 shows significant evidence to reject the null hypothesis, suggesting that social support positively affects academic achievement. Similarly, similar results were found in the association between school counseling services and academic achievement, where a very low p-value (0.000) showed a significant positive affect. Meanwhile, the relationship between learning motivation and academic achievement also showed strong evidence to reject the null hypothesis with a very low p-value (0.000), affirming that learning motivation significantly and positively affects academic achievement. These findings provide important insights into the factors that contribute to academic success in the region and have relevant implications for educational policies and practices aimed at improving student learning outcomes.

DISCUSSION

The Effect of School Counseling Services on Academic Achievement

The results of the analysis showed a significant positive relationship between school counseling services and academic achievement among junior high school students in West Java. These findings support previous research showing beneficial effects of comprehensive counseling interventions on student learning outcomes (Ardiyanti et al., 2022; Pituc & Juliao, 2011). School counseling services play an important role in meeting students’ academic, social, and emotional needs, providing guidance in academic planning, career development, and social-emotional support. Effective collaboration between school counselors, teachers, and parents can increase student engagement and academic success (Iskandar, 2023). Therefore, the positive relationship between school counseling services and academic achievement underscores the importance of investing in counseling programs to support student success.
Impact of Social Support on Academic Achievement

Similarly, the analysis showed a significant positive association between social support and academic achievement among junior high school students. Peer support, teacher-student relationships, and parental involvement contribute to creating a supportive and conducive school environment for student success. Students who feel higher levels of social support tend to show greater academic engagement, motivation, and resilience (Gul & Shehzad, 2012; Mizani et al., 2022; Mohzan et al., 2013; Rosati & Faria, 2019). Therefore, fostering positive social relationships within the school community is essential to improve academic achievement among students in West Java.

The Relationship between Learning Motivation and Academic Achievement

The findings also showed a significant positive relationship between learning motivation and academic achievement among junior high school students. Intrinsic motivation, characterized by genuine interest in learning and personal satisfaction, is a strong predictor of academic success. Intrinsically motivated students show perseverance, effort, and better academic achievement compared to less motivated students. Fostering students’ autonomy, competence, and interconnectedness in the learning environment will increase their intrinsic motivation and encourage academic success (Ainurrohmah & Handayani, 2020; Schunk & Pajares, 2002; Watabe & Hibbard, 2014). Therefore, understanding and cultivating student motivation is very important to improve academic achievement in West Java.

Implications and Recommendations

Overall, the study’s findings have important implications for stakeholders in education, including policymakers, school administrators, counselors, teachers, and parents. By recognizing the importance of school counseling services, social support networks, and learning motivation in shaping academic outcomes, stakeholders can develop targeted interventions and initiatives to support student success in junior high schools in West Java. These interventions can include strengthening counseling programs, fostering a positive school climate, encouraging student engagement, and providing resources for academic and socio-emotional support. In addition, the study also highlights the importance of collaboration among stakeholders in creating a supportive learning environment that fosters holistic student development.

Limitations and Future Direction

It is important to acknowledge the limitations of this study, including its reliance on self-reported data, cross-sectional design, and the specific context of West Java. Future research may benefit from longitudinal studies, objective measurement of academic achievement, and investigations into other factors affecting student success. In addition, exploring the effectiveness of specific interventions and examining the potential moderators and mediators of the relationships identified in this study can further enhance our understanding of student achievement in diverse educational settings.

5. CONCLUSION

In conclusion, this study provides valuable insights into the factors influencing academic achievement among junior high school students in West Java. The findings underscore significant positive associations between school counseling services, social support, learning motivation, and academic achievement. By recognizing the importance of these factors, educators, policymakers, and other stakeholders can develop targeted interventions and initiatives to support student success in the region. In addition, mediation analysis shows that interventions that address school counseling services, social support, and learning motivation can indirectly improve academic achievement through a variety of pathways. However, it is important to acknowledge the limitations of this study, including its reliance on self-reported data and cross-sectional design. Future research could benefit from longitudinal studies and objective measurements of academic achievement to further explore the dynamics of student success. Overall, the study contributes to the existing literature on student
achievement and provides a foundation for evidence-based practices aimed at improving educational outcomes for junior high school students in West Java and similar contexts.

REFERENCES


