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School Dropout in the Indonesia-Timor Leste Border: Moderating Role of Social Environment and Learning Motivation

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Abstract
This study is motivated by persistently high dropout rate at senior high school level in the border region between Indonesia and Timor-Leste. The school participation rate at this level reaches only 60.42%, indicating that 39.58% of students do not continue or complete their education. The purpose of this study is to examine the influence of family environment and peer on the tendency to drop out of school, as well as to evaluate the moderating role of learning motivation in these relationships. This research employed a quantitative approach using an explanatory survey method. The study population included all high school dropouts across 12 sub-districts in Malaka Regency. A proportional sampling technique was applied, resulting in a total sample of 180 dropout students. Data were collected using a questionnaire with a five-point Likert scale. The data were analyzed using multiple regression analysis and Moderated Regression Analysis (MRA) with the assistance of SPSS version 27. The results of the study showed that the family environment and peer have a significant negative effect on school dropout. Learning motivation significant moderates, the relationship between the family environment, peers and school dropout. In conclusion, both the family environment and peer groups significantly influence school dropout rates in border areas, while learning motivation serves as a protective factor that can mitigate these effects. Therefore, efforts to enhance students' learning motivation may be an effective strategy to reduce dropout rates in such regions.

Keywords: family environment, peers, learning motivation, school dropout

INTRODUCTION

Education is a fundamental right essential for individual development. Despite various government programs to boost participation, dropout remains a major issue in Indonesia. High dropout rates indicate weaknesses in education quality, policy effectiveness, student transition and adjustment, and the implementation and outreach of existing policies (Neupane, 2024). The substantial rate of school dropout highlights structural deficiencies within the education system. It indicates that educational services have not yet succeeded in equitably addressing the diverse needs of all learners. This shortfall may stem from multiple factors, including inadequate access, substandard instructional quality, insufficient support from the learning environment, or misaligned educational policies. In academic discourse, such a phenomenon serves as a critical indicator of the system's limited effectiveness in fulfilling its fundamental role as a driver of educational equity and human resource development (Sorensen, 2019).

Indonesia continues to face serious challenges in reducing its relatively high school dropout rate. According to the 2024 report by the Central Statistics Agency (BPS), dropout rates increased at all education levels, with the highest at primary school (0.46%), followed by vocational high school (0.27%), junior high school (0.19%), and senior high school (0.18%). This issue is most prevalent in underdeveloped, frontier, and outermost (3T) areas, which struggle with limited access, poor infrastructure, and a lack of qualified teachers. In East Nusa Tenggara (NTT), particularly Malaka Regency—located on the border with Timor Leste—the dropout problem remains severe. Malaka has been designated an education red zone, with a senior high school/vocational school participation rate of only 60.42%, meaning 39.58% of students do not continue or complete their education. Educational inequality in Indonesia's 3T regions (underdeveloped, frontier, and outermost) remains a critical issue. In areas such as Malaka Regency, East Nusa Tenggara, the education sector faces serious challenges, including inadequate school infrastructure, a shortage of qualified teachers, and low parental involvement in children's education (Arsita et al., 2022). Many schools in peripheral regions face shortages of classrooms, inadequate sanitation, and limited access to modern learning technologies. Students often travel long distances across difficult terrain, hindering regular attendance. Dropout rates remain high, especially at senior high school levels, driven by economic hardship and the need to support family income. Additionally, a weak learning culture, peer pressure, low motivation, and a lack of educational role models exacerbate the problem. These conditions highlight the unfulfilled national education goals of equitable and quality education, revealing a disconnect between central policies and their local implementation, particularly in addressing the region's unique social and geographical challenges.

Social Cognitive Theory, developed by Albert Bandura, emphasizes that human behavior is influenced by the dynamic reciprocal interaction between personal factors, environmental influences, and behavior. A central concept in this theory is reciprocal determinism, which refers to the idea that individuals are not only influenced by their environment but can also shape their environment through their thoughts, attitudes, and actions. Bandura also introduced key concepts such as observational learning, self-efficacy and reinforcement (Ryan, 2019). Bandura's Social Cognitive Theory helps explain the factors influencing students' risk of dropping out. The family and peer environment shape students' behavior and thinking—supportive families and positive peers promote school persistence, while dysfunctional families and negative peer influence increase dropout risk. Learning motivation, as a personal factor, enhances

students' resilience and moderates the negative effects of the social environment. This theory provides a framework for understanding how social and personal factors interact to influence students' educational continuity. This theory is supported by the results of research Nurmalitasari et al., (2023) that states the factors that influence dropping out of school are economic conditions, academic satisfaction, academic performance and family. According to the opinion that the factors that support the intention to drop out of school are social context, self-efficacy, motivation, academic achievement (Alivernini & Lucidi, 2011). The forms of social support identified in the findings include peer support, parental motivation and involvement, family economic status, parents' educational background (Liubana et al., 2025).

Families play an important role in children's educational success through emotional support, motivation and provision of learning needs. Without this support, children are more vulnerable to dropping out of school (Pedditzi, 2024). This is supported by research findings Kholidah & Widjayatri, (2025) showing that family support, particularly parental encouragement to continue education, influences students' decisions to maintain their schooling. Thus, it can be concluded that students who come from a supportive family environment tend to have a lower risk of dropping out of school than those who do not receive similar support.

Research by Tefa (2023) shows that peers can be a cause of dropping out of school when students are influenced by negative peer environments, such as truancy or lack of interest in learning. These social influences can encourage students to leave school, especially if not supported by adequate motivation and supervision. Peers are a predictor of school dropout due to their strong influence on student behavior. A negative peer environment can reduce interest in learning and encourage students to leave school (Pedditzi, 2024). Therefore, it can be indicated that peers have a significant role in students' decision to stay in school or drop out. A positive peer environment can encourage enthusiasm for learning, while negative peer influences increase students' risk of dropping out. Therefore, the quality of social interactions with peers is an important factor in dropout prevention efforts.

Learning motivation is an important indicator in predicting dropout risk. Students with low motivation tend to be lackluster, unfocused on educational goals, and more prone to dropping out. In contrast, high motivation can encourage students to persist and complete their education (Biasi et al., 2018). Highly motivated students are more resilient to environmental pressures and stay committed to education, reducing dropout risk. In contrast, low motivation makes students more vulnerable to negative social influences. Therefore, learning motivation is key in moderating the impact of social factors on students' educational decisions (Ning & Downing, 2012). Learning motivation serves as a protective factor that reduces the negative impact of family and peer environments on students' risk of dropping out.

This study presents a novelty contribution by examining how learning motivation moderates the relationship between family environment, peer influence, and school dropout in Indonesia's border region with Timor Leste. Unlike previous research that often isolates these variables or focuses on urban settings, this study integrates them within a marginalized socio cultural context. It highlights how internal factors like learning motivation can strengthen or weaken the impact of social environments on students' decisions to stay in school. The study aims to analyze the influence of family and peer environments on students' dropout tendencies and assess the moderating role of learning motivation. It goes beyond direct effects by exploring how motivation shapes

the impact of social factors on dropout risk. Theoretically, the study extends Social Cognitive Theory by integrating external (family and peers) and internal (motivation) factors in a disadvantaged border area. Practically, it offers insights for parents, educators, and policymakers to design more effective interventions in regions with limited access to education. Based on the above explanation, the hypotheses formulated in this study are as follows:

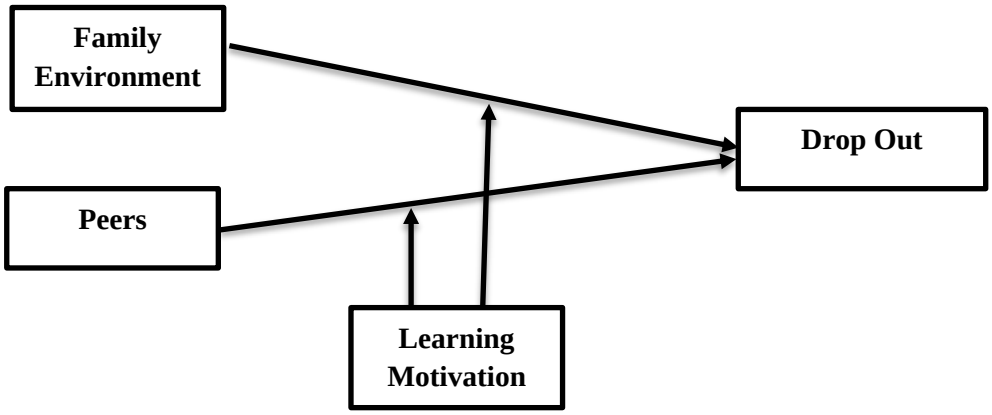

Figure 1. Research Model

H_1 = The family environment has a significant negative effect on school dropout.
H_2 = Peer influence has a significant negative effect on school dropout.
H_3 =Learning motivation moderating influence the relationship between the family environment and school dropout
H_4 = Learning motivation moderating influence the relationship between peer influence and school dropout.

METHOD

This study employs a quantitative approach with a correlational design of an explanatory nature. The primary objective is to examine the extent to which family environment and peer influence affect school dropout, and to analyze the moderating role of learning motivation, which may either strengthen or weaken these relationships. The research was conducted from April to June 2025 in Malaka Regency, covering 12 subdistricts. The population consisted of students who had dropped out of school within these subdistricts. A proportional sampling technique was employed to ensure representation across all areas. The total sample size was 180 students. Data were collected using a questionnaire instrument developed by the researcher, based on Likert-scale responses. This scale consists of five categories of answers, namely very appropriate (SS), appropriate (S), neutral (N), not appropriate (TS), and very inappropriate (STS). The questionnaire was constructed independently and guided by theoretical indicators derived from relevant literature.

The family environment scale used in this study was developed based on indicators from the Family Environment Scale (FES), which includes dimensions such as warmth, expressiveness, conflict, independence, achievement orientation, intellectual orientation, active recreational orientation, moral and religious values, order, and control within the family structure (Lanz & Maino, 2023). The scale initially consisted of 20 items, with content validity coefficients ranging from 0.800 to 0.975. A trial of the scale

was conducted with 30 respondents, revealing that 4 items had correlation coefficients of $p < 0.40$, and thus were excluded from the instrument. The removed items were numbers 3, 7, 14, and 19. Based on the data analysis results, 16 items were retained, representing the 10 dimensions of the family environment construct. The overall reliability coefficient of the family environment scale was 0.901, indicating a high level of internal consistency and suitability for research use.

The peer environment scale used in this study was developed based on indicators reflecting peer involvement in problem-solving, emotional support, and the reflection of values and norms within peer relationships (Desmita, 2010). The scale initially consisted of 22 items, with content validity coefficients ranging from 0.795 to 0.980. A pilot test was conducted with 30 respondents, and the results indicated that 5 items had correlation coefficients below $p < 0.40$, leading to the exclusion of items 2, 5, 9, 13, and 17 from the final instrument. After data processing, 17 items were retained, representing the key dimensions of peer support. The reliability coefficient for the final peer environment scale was 0.887, indicating that the instrument has strong internal consistency and is suitable for measuring peer-related influences in the school context.

The learning motivation variable is measured through key dimensions such as achievement drive, internal motivation, future orientation, engaging learning activities, and a supportive learning environment (Sauri et al., 2022). The initial scale consisted of 18 items, with content validity coefficients ranging from 0.810 to 0.980. A pilot test was conducted with 30 respondents, and the results showed that 4 items had correlation coefficients of $p < 0.40$, resulting in the removal of items 4, 8, 15, and 20. After item analysis, 14 items were retained, representing the key dimensions of learning motivation. The reliability coefficient of the final scale was 0.913, indicating a high level of internal consistency and confirming the instrument's appropriateness for assessing students' learning motivation.

The school dropout variable is measured through dimensions such as low attendance, grade repetition, disciplinary issues, socioeconomic background, low school engagement, and placement in special education programs (Sivakumar et al., 2016). The initial instrument consisted of 25 items, with content validity coefficients ranging from 0.805 to 0.970. A pilot test was conducted involving 30 respondents, and the results indicated that 5 items had correlation coefficients of $p < 0.40$. Consequently, items 3, 6, 10, 14, and 19 were removed. After the item analysis, 20 items were retained, representing the essential dimensions related to school dropout. The reliability coefficient of the final scale was 0.894, indicating strong internal consistency and suitability for use in measuring dropout tendencies among students.

Classical assumption tests were conducted, including tests for heteroscedasticity, multicollinearity, and normality, to confirm that the data met the requirements for statistical analysis. Data were analyzed using multiple linear regression and Moderated Regression Analysis (MRA) with the assistance of SPSS version 27, allowing for a detailed examination of the relationships among the variables. Moderated Regression Analysis (MRA) is applied by creating an interaction term between the independent variable and the moderator. In SPSS, this involves computing the interaction variable, and then entering the independent variable, moderator, and interaction term into a multiple regression model. A significant interaction term indicates a moderating effect.

FINDING AND DISCUSSION

Findings

Description of Respondent Data

Respondents in this study amounted to 180 dropout students in Malaka district. The following is a description of respondent data based on parent's income, parent's education and family background.

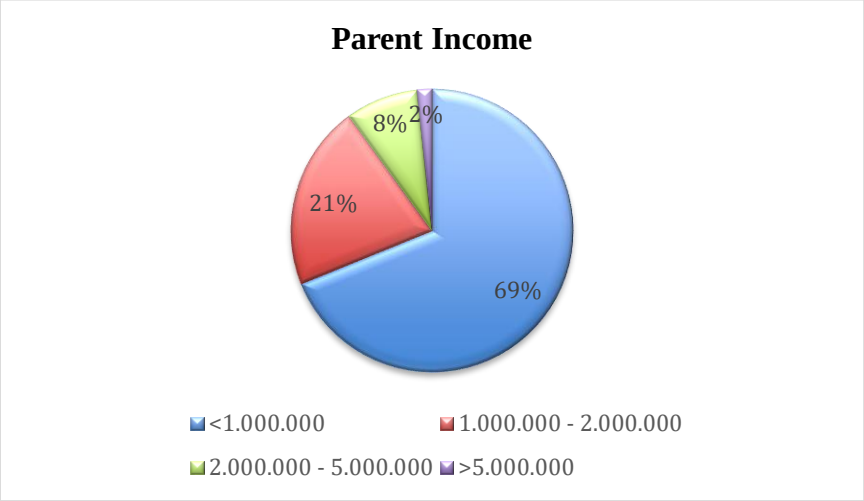

Diagram 1. Parents Income

The chart shows that 90% of respondents come from families earning less than Rp2,000,000 per month, with 69% earning below Rp1,000,000. This indicates that most students live in severe economic hardship, which limits their ability to afford school-related expenses and may increase their likelihood of dropping out.

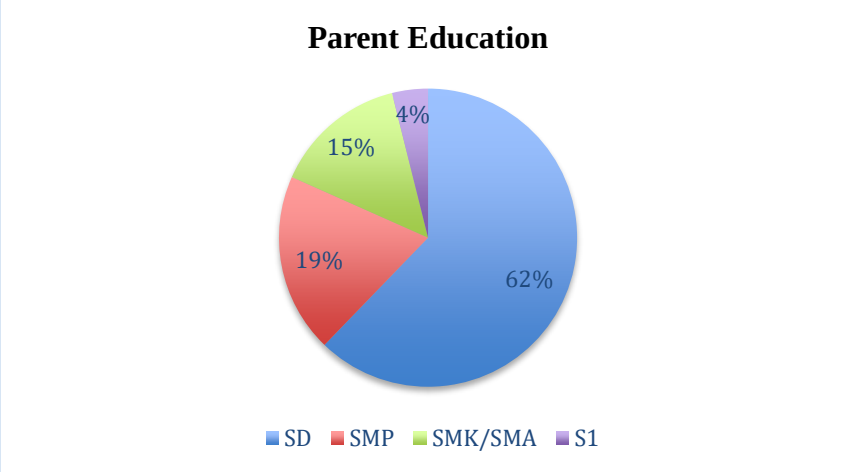

Diagram 2. Parents Education

The chart shows that most parents (62%) only completed primary school, reflecting low educational backgrounds. This may reduce their ability to support their children's learning, potentially increasing the risk of school dropout due to limited academic guidance and motivation at home.

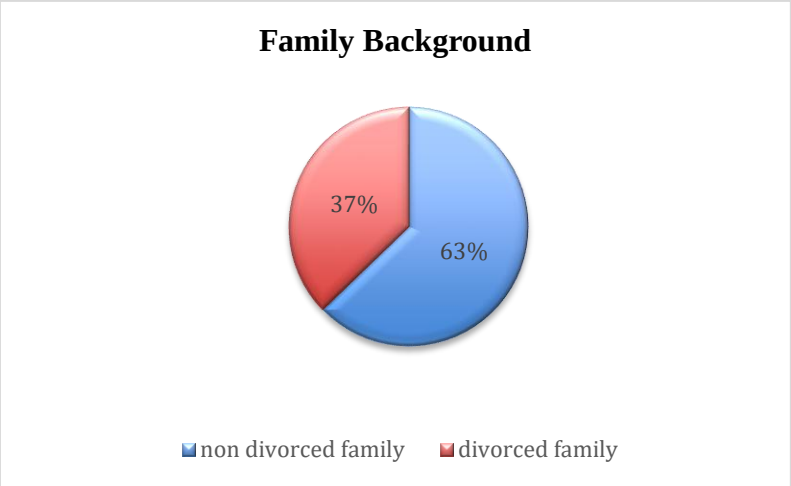

Diagram 3. Family Background

The chart indicates that 37% of students come from divorced families a relatively high proportion. This condition may increase dropout risk due to emotional stress and reduced support, while students from non-divorced families generally experience more stability that supports continued schooling.

Tests of Classical Assumptions

The normality of the data in this study was tested using the One-Sample Kolmogorov-Smirnov method. The test yielded a significance value of 0.200, which is higher than the 0.05 threshold. Therefore, it can be inferred that the data follows a normal distribution. To assess the presence of heteroscedasticity, the Glejser test was applied by examining the significance values of each independent variable. If the significance exceeds 0.05, it indicates the absence of heteroscedasticity. The results show that the significance values for the family environment, peer, and learning motivation variables are 0.495, 0.195, and 0.642, respectively. Since all values are greater than 0.05, it can be concluded that the data does not exhibit heteroscedasticity.

A multicollinearity test was also conducted to examine whether a strong linear correlation exists among the independent variables in the regression model. This test utilized the tolerance and Variance Inflation Factor (VIF) values. The model is considered free from multicollinearity if the tolerance value is greater than 0.10 and the VIF is less than 10. The results indicate that the family environment variable has a tolerance of 0.893 and a VIF of 1.120; the peer variable has a tolerance of 0.784 and a VIF of 1.276; and the learning motivation variable shows a tolerance of 0.780 and a VIF of 1.282. As all tolerance values are above 0.10 and all VIF values are below 10, it can be concluded that the model is free from multicollinearity issues.

Multiple Regression Analysis

Multiple linear regression analysis was used to test the first and second hypotheses, which relate to the influence of family and peer environment on dropout risk. The results of the analysis are presented as follows.

Table 1. Multiple Regression Analysis Results

Model		Coefficients[a] Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	93.111	4.344		21.435	.000
	FamilyEnvironment	-.685	.209	-.333	-3.278	.001
	Peer	-.828	.207	-.406	-3.993	.000

a. Dependent Variable: Dropout

Source: SPSS Results 27, 2025

The multiple regression results show the simultaneous correlation between the variables. The following multiple regression equation is obtained:

$$Y = 93.111 – 0{,}685X^1 - 0{,}828X^2$$

The equation above shows the correlation between the variables of family environment and peers on dropping out of school. The simultaneous relationship between family and peer environment variables on dropping out of school by paying attention to the coefficient of determination, as follows:

Table 2. Determination Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693[a]	.481	.472	8.433

a. Predictors: (Constant), Peer, FamilyEnviroment

Source: SPSS Results 27, 2025

The table above shows the contribution of family and peer environment variables to dropout behavior, which is 0.472 or 47.2%.

Hypothesis 1

The first hypothesis posits that the family environment has a significant negative influence on student dropout rates in Malaka Regency. This hypothesis is supported by the results of the multiple linear regression analysis, which indicate a significance value (p-value) of 0.001 for the family environment variable. Since this value is less than the significance level of 0.05 (0.001 < 0.05), the effect is statistically significant effect. Furthermore, the t-value of 3.278 exceeds the critical t-table value of 1.653, reinforcing the conclusion that the relationship is statistically reliable.The regression coefficient for the family environment variable is -0.685, with a constant value of 93.111, yielding the following regression equation:

$$Y = 93.111 - 0.685\ X1$$

This equation implies that for every one-unit increase in the quality of the family environment, the predicted dropout score decreases by 0.685 units. The negative coefficient indicates an inverse relationship, suggesting that a more supportive or stable family environment is associated with a lower likelihood of school dropout (Weridity & Manuputty, 2024). Substantively, this finding underscores the critical role of the family environment in influencing educational persistence. A negative and statistically significant effect means that interventions aimed at improving family dynamics uch as parental involvement, emotional support, and household stability may be effective in

reducing dropout rates among students in Malaka Regency. Therefore, the first hypothesis is empirically supported and accepted.

Hypothesis 2

The second hypothesis posits that peer influence has a significant negative effect on student dropout rates in Malaka Regency. This hypothesis is substantiated by the results of the multiple linear regression analysis, which reveal a significance (p-value) of 0.000 for the peer variable. Since this value is below the significance level of 0.05 (0.000 < 0.05), the relationship is considered statistically significant. Additionally, the t-statistic of 3.993 exceeds the critical t-table value of 1.653, further confirming the reliability of the effect. The regression coefficient for the peer variable is -0.828, with a constant value of 93.111. This produces the following multiple regression equation:

$$Y = 93.111 - 0.828\ X2$$

This equation indicates that for each one-unit increase in peer influence, the predicted dropout score decreases by 0.828 units. The negative coefficient signifies an inverse relationship, suggesting that more positive or constructive peer influence is associated with a lower tendency for students to drop out of school. From a substantive perspective, the results emphasize the important role of peer relationships in shaping students' educational outcomes (Rosada & Lestari, 2023). A significant negative association implies that supportive, academically motivated peer groups can serve as a protective factor against dropout behavior. Therefore, fostering positive peer environments such as peer mentoring programs, collaborative learning groups, or extracurricular involvement can be a strategic approach to reducing school dropout rates. Based on these findings, the second hypothesis is empirically validated and accepted.

Moderated Regression Analysis (MRA)

Table 3. Moderated Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	68.235	27.248		2.504	.014
	FamilyEnviroment	-1.434	1.034	-.698	-1.887	.002
	Peer	-1.343	.912	-.659	-1.773	.002
	LearningMotivatiion	.361	.660	.274	2.546	.001
	X1M	.020	.024	.832	1.813	.002
	X2M	.044	.022	1.836	2.022	.046
a. Dependent Variable: Dropout						

Source: SPSS Results 27, 2025

So, the equation can be formulated as follows.

$$DO = 68.235 – 1.434X^1 - 1.343X^2 + 0{,}361Z + 0.\ 20X1.Z + 0.44X^2.Z$$

Hypothesis 3

The results of the Moderated Regression Analysis (MRA) indicate that the interaction term between the family environment (X_1) and learning motivation (Z) yields a significance value (p-value) of 0.002, which is below significance level of 0.05 (0.002

< 0.05). Additionally, the t-value for the interaction term is 1.813, which exceeds the critical t-table value of 1.653, indicating that the interaction effect is statistically significant effect. Therefore, it can be concluded that the third hypothesis stating that learning motivation moderating influence the relationship between the family environment and student dropout is accepted.

$$DO = 68.235 - 1.434X1 + 0.361Z + 0.20X1.Z$$

The equation indicates that learning motivation moderates the negative effect of the family environment on dropout rates. The positive interaction coefficient suggests that students with high motivation are less affected by an unsupportive family environment. This highlights the importance of fostering motivation as a key strategy to reduce dropout, especially among at-risk students (Tirado et al., 2025)

Hypothesis 4

The results of the Moderated Regression Analysis (MRA) indicate that the interaction between the peer variable (X_2) and learning motivation (Z) yields a significance value (p-value) of 0.046, which is lower than the significance level of 0.05 (0.046 < 0.05). Additionally, the t-value of 2.022 exceeds the critical t-table value of 1.653, confirming that the interaction effect is statistically significant effect. Therefore, the fourth hypothesis, which states that learning motivation moderating influence the relationship between peer influence and student dropout, is empirically accepted.

$$DO = 68.235 - 1.343X2 + 0.361Z + 0.\ 44X2.Z$$

The analysis shows that learning motivation moderates the effect of peer influence on dropout risk. Students with high motivation are more likely to benefit from positive peer support, making them less likely to drop out. Conversely, without strong motivation, even positive peer influence may not be sufficient (Passeggia et al., 2023). This finding highlights the importance of strengthening internal student factors, such as learning motivation, in efforts to prevent school dropout.

Discussion

The Influence of Family Environment on School Dropout

The analysis results indicate that the family environment has a statistically significant effect on students' decision to drop out of school. This is evidenced by a p-value of 0.001, which is below the significance threshold of 0.05 (0.001 < 0.05), indicating a statistically significant relationship. Furthermore, the t-value of 3.278 exceeds the critical t-table value of 1.653, suggesting that the family environment variable significantly contributes to explaining the variance in students' dropout decisions. These findings affirm that the family environment is a determining factor in school dropout behavior within the study area.

This study supports the results of research (Chenge et al., 2017; Putrik et al., 2024; Marlina et al., 2018) show a family environment that lacks emotional, economic, and academic support can negatively affect students' educational continuity, ultimately increasing the likelihood of them dropping out of school prematurely. Research by Guzmán et al., (2021) the results show that students from rural areas have a higher potential to drop out of school compared to those from urban areas. This finding aligns with the situation in Malaka Regency, where the school dropout rate remains high, and most of the students who drop out come from rural communities. One of the factors that influence this condition is the family environment in rural areas, which tends to have limitations in providing educational support, both economically, parental education, as

well as in terms of supervision and motivation for children's learning (Hernawati et al., 2025).

Overall, this study show that the family environment has a significant influence on school dropout behavior. Emotional support, parental involvement, and the family's socioeconomic condition are key factors affecting students' decisions to leave formal education. These findings highlight that the family environment is a critical determinant that should be considered in developing context-based strategies to prevent school dropout.

The Influence of Peer on School Dropout

The results of this study show that the peer variable has a statistically significant effect on school dropout behavior. This is evidenced by a significance value of 0.000, which is below the significance threshold of 0.05 (0.000 < 0.05), indicating a statistically significant relationship. The t-statistic of 3.993 exceeds the critical t-table value of 1.653, further confirming the reliability of this effect. The regression coefficient for the peer variable is -0.828 with a constant value of 93.111, suggesting that peer influence has a negative impact on students' continuity in formal education.

This study supports the results of research (Tefa, 2023; Hilal et al., 2024; Zengin, 2021; Back et al., 2022) show that peer influence has a negative impact on school dropout, as interactions with peers who engage in deviant behaviors can decrease students learning motivation and encourage them to follow the same path in dropping school. In regions such as Malaka, which is located in the border area between Indonesia and Timor-Leste, access to education remains limited, and awareness of its importance is still uneven. In such a setting, when students observe their peers dropping out of school, they are likely to perceive this behavior as normal and socially acceptable, which in turn increases the likelihood of them following the same path.

Overall, this study shows that it can be concluded that peer influence has a significant effect on school dropout behavior. Negative peer environments can increase the risk of students leaving school, making peer groups an important factor to consider in efforts to prevent dropout.

Learning Motivation Moderating Influence, the Relationship between the Family Environment and School Dropout

The study shows that learning motivation moderating influence the effect of family environment on school dropout. This is supported by the moderated regression analysis, with a significance value of 0.002 (< 0.05) and a t-value of 1.813 (> t-table 1.653), indicating a statistically significant effect**.**

This study support the research Luo, (2024) by building strong learning motivation within students, they will have the internal drive to continue their education despite facing various challenges from their family. Students with high motivation to learn tend to continue their education despite coming from less supportive families (Kurniawan et al., 2023). Learning motivation acts as a moderating variable that influences how strongly the family environment affects students' decisions to drop out. In contexts like Malaka Regency, where many families face economic hardship and low educational awareness, not all students drop out. Those with high learning motivation show greater resilience and continue their education despite challenges. Conversely, students with low motivation are more likely to leave school when facing an unsupportive family environment.

Overall, this study show that learning motivation influences the relationship between family environment and school dropout, where high motivation can reduce the negative impact of a poor family environment on dropout risk.

Learning Motivation Moderating Influence, the Relationship between the Peer And School Dropout

The study shows that learning motivation moderating influence the relationship between peer influence and school dropout. The Moderated Regression Analysis (MRA) reveals a p-value of 0.046 (< 0.05) and a t-value of 2.022 (> 1.653), confirming the statistical significance effect. This study support the research Buizza et al., (2024) show that learning motivation functions not only as an internal driver, but also as a protector that keeps students on an educational path, despite being in an unfavorable social environment. This finding is consistent with Fan & Wolters, (2019) students with high learning motivation tend to have a lower risk of dropping out, even when exposed to negative peer influences. This suggests that learning motivation serves as an effective moderating variable in reducing the adverse impact of the social environment on students' educational decisions. In Malaka Regency, unsupportive peer influence often contributes to school dropout, such as encouraging absenteeism or lacking academic motivation within peer groups. However, students with high learning motivation tend to stay focused on their education and are less affected by negative peer pressure, thereby reducing the risk of dropping out. Overall, this study shows that learning motivation moderating influence the relationship between peer and school dropout, high levels of motivation can mitigate the negative effects of unsupportive peer environments on the likelihood of dropping out.

CONCLUSION

The findings of this study indicate that the family environment has a significant negative effect on student dropout behavior. This means that the better the condition of the family environment, the lower the likelihood of students dropping out of school. Similarly, peer influence also shows a significant negative relationship with dropout behavior, indicating that supportive peer relationships can reduce the risk of students leaving school. Furthermore, the study reveals that learning motivation successfully moderates the relationship between the family environment and dropout behavior. In other words, the negative effect of a poor family environment on dropout tendencies becomes weaker when students have high levels of learning motivation. The same applies to peer influence; learning motivation moderates the relationship between peer influence and dropout. Overall, these findings highlight that learning motivation is a crucial internal factor that can either strengthen or weaken the impact of external factors such as the family environment and peer influence in shaping students' decisions to stay in school or drop out.

The findings of this study are crucial for addressing school dropout in border regions. Despite economic limitations, families play a key role by offering emotional support, engaging in learning, and maintaining communication to reduce dropout risk. For teachers and schools, enhancing learning motivation through appropriate teaching methods and a safe, inclusive environment is essential. Positive peer interactions also support school persistence. For policymakers, efforts must go beyond infrastructure by strengthening students' psychosocial well-being. Programs that promote parental

involvement, boost motivation, and build a positive school climate are vital for effectively and sustainably reducing dropout rates in border areas.

Future research is recommended to examine resilience as a moderating variable in the relationship between social factors and school dropout behavior. Using a longitudinal approach would allow researchers to observe how resilience develops over time and influences students' decisions to stay in school, especially in less supportive environments.

REFERENCES

Alivernini, F., & Lucidi, F. (2011). Relationship between Social Context, Self-Efficacy, Motivation, Academic Achievement, and Intention to Drop Out of High School: A Longitudinal Study. *Journal of Educational Research, 104*(4), 241–252. https://doi.org/10.1080/00220671003728062

Arsita, E., Syafruddin, S., & Ilyas, M. (2022). Anak Putus Sekolah (Studi di Masyarakat Desa Seteluk Kabupaten Sumbawa Barat). *Jurnal Pendidikan Sosial Keberagaman, 9*(1), 43–48. https://doi.org/10.29303/juridiksiam.v9i1.182

Back, J., Johnson, U., Svedberg, P., McCall, A., & Ivarsson, A. (2022). Drop-out from Team Sport among Adolescents: A Systematic Review and Meta-Analysis of Prospective Studies. *Psychology of Sport and Exercise*, *61*, Article 102205. https://doi.org/10.1016/j.psychsport.2022.102205

Biasi, V., De Vincenzo, C., & Patrizi, N. (2018). Cognitive Strategies, Motivation to Learning, Levels of Wellbeing and Risk of Drop-Out: An Empirical Longitudinal Study for Qualifying Ongoing University Guidance Services. *Journal of Educational and Social Research, 8*(2), 79–91. https://doi.org/10.2478/jesr-2018-0019

Buizza, C., Cela, H., Sbravati, G., Bornatici, S., Rainieri, G., & Ghilardi, A. (2024). The Role of Self-Efficacy, Motivation, and Connectedness in Dropout Intention in a Sample of Italian College Students. *Education Sciences*, *14*(1). https://doi.org/10.3390/educsci14010067

Chenge, R. P., Chenge, E., & Maunganidze, L. (2017). Family Factors that Contribute to School Dropout in Rushinga District in Zimbabwe. *International Journal of Law, 1*(4), 105. www.ijlhss.com

Desmita, D. (2010). *Psikologi Perkembangan*. Bandung: PT. Remaja Rosdakarya.

Fan, W., & Wolters, C. A. (2019). School Motivation and High School Dropout: The Mediating Role of Educational Expectation. *British Journal of Educational Psychology, 84*(1), 22–39. https://doi.org/10.1111/bjep.12002

Guzmán, A., Barragán, S., & Cala Vitery, F. (2021). Dropout in Rural Higher Education: A Systematic Review. *Frontiers in Education*, *6*, 1–14. https://doi.org/10.3389/feduc.2021.727833

Hernawati, R., Butar-butar, A., Purba, S. E. E., & Nes, A. C. (2025). Edukasi Pentingnya Melanjutkan Pendidikan Tinggi: Program Peningkatan Kesadaran Studi Sarjana bagi Siswa Sekolah Menengah di Perbatasan Indonesia-Timor Leste. *Diakoneo: Jurnal Pengabdian Kepada Masyarakat, 1*(2), 124–134.

Kholidah, K., & Widjayatri, D. (2025). Identifikasi Penyebab Anak Putus Sekolah: Studi Literatur. *Jurnal Jendela Cakrawala*, *1*(1), 8-16.

Kurniawan, F., Erita, Y., Syahrir, D., Utami, V, Q. N. (2023). The Influence of Students' Environment on Students' Learning Motivation. *Journal of Digital Learning and Distance Education*, *1*(8), 297–305. https://doi.org/10.56778/jdlde.v1i8.58

Lanz, M., & Maino, E. (2014). *Family Environment Scale*. In A. C. Michalos (Ed.), Encyclopedia of Quality of Life and Well-Being Research (pp. 2170–2173). Dordrecht, Netherlands: Springer.

Liubana, A., Kurjono, K., Ahman, E., & Kurniawati, S. (2025). Analysis of Social Support on the Decision to Continue Higher Education: A Literature Review. *Lectura: Jurnal Pendidikan, 16*(1), 119-131. https://doi.org/10.31849/lectura.v16i1.24065

Luo, B. (2024). How Family Environment Affects Students' Academic Performance. *Lecture Notes in Education Psychology and Public Media*, *49*(1), 89–94. https://doi.org/10.54254/2753-7048/49/20231802

Marlina, S., Rahmawati, A., & Ismiati, I. (2018). The Effect of Teacher's Competency, Physical Environment of Classroom and Family Environment Towards Students' Learning Motivation. *KnE Social Sciences*, *3*(10), 224–237. https://doi.org/10.18502/kss.v3i10.3131

Neupane, B. (2024). Causes of Dropout in Higher Education: An Analysis of Student Dropouts in Bachelor of Education from Marsyangdi Multiple Campus. *Marsyangdi Journal*, *4*(1), 1–14. https://doi.org/10.3126/mj.v4i1.67750

Ning, H. K., & Downing, K. (2012). Influence of Student Learning Experience on Academic Performance: The Mediator and Moderator Effects of Self-Regulation and Motivation. *British Educational Research Journal*, *38*(2), 219–237. https://doi.org/10.1080/01411926.2010.538468

Nurmalitasari, N., Long, Z. A., & Noor, F. M. (2023). Factors Influencing Dropout Students in Higher Education. *Education Research International*, *2*, 1-13. https://doi.org/10.1155/2023/7704142

Passeggia, R., Testa, I., Esposito, G., Picione, R. D. L., Ragozini, G., & Freda, M. F. (2023). Examining the Relation Between First-year University Students' Intention to Drop-out and Academic Engagement: The Role of Motivation, Subjective Well-being and Retrospective Judgements of School Experience. *Innovative Higher Education*, *48*(5), 837–859. https://doi.org/10.1007/s10755-023-09674-5

Pedditzi, M. L. (2024). School Satisfaction and Self-Efficacy in Adolescents and Intention to Drop Out of School. *International Journal of Environmental Research and Public Health*, *21*(1). https://doi.org/10.3390/ijerph21010111

Putrik, P., Kant, I. J., Hoofs, H., Reijs, R., & Jansen, M. J. (2024). Prediction of School Dropout Outside School Setting: Potential for Early Risk Stratification by Youth Health Care Services in the Netherlands. Results from a Retrospective Cohort Study. *Child and Youth Care Forum*, *53*(2), 349–365. https://doi.org/10.1007/s10566-023-09757-6

Rosada, R. S., & Lestari, S. (2023). Psychological Conditions and Social Relations of School Dropouts. *Indigenous: Jurnal Ilmiah Psikologi*, *7*(3), 288–307. https://doi.org/10.23917/indigenous.v7i3.19573

Ryan, R. M. (2019). *The Oxford Handbook of Human Motivation*. Oxford: Oxford University Press.

Sauri, M. S., Purnomo, Y. W., & Mustadi, A. (2022). Analysis of Student Learning Motivation using Project-Based Learning Method. *Al-Ishlah: Jurnal Pendidikan*, *14*(3), 3405–3412. https://doi.org/10.35445/alishlah.v14i3.665

Sivakumar, S., Venkataraman, S., & Selvaraj, R. (2016). Predictive Modeling of Student Dropout Indicators in Educational Data Mining Using Improved Decision Tree. *Indian Journal of Science and Technology*, *9*(4), 1–5. https://doi.org/10.17485/ijst/2016/v9i4/87032

Sorensen, L. C. (2019). "Big Data" in Educational Administration: An Application for Predicting School Dropout Risk. *Educational Administration Quarterly*, *55*(3), 404–446. https://doi.org/10.1177/0013161X18799439

Tefa, A. P. (2023). Analisis Faktor Penyebab Anak Putus Sekolah di Desa Oinlasi Kecamatan Mollo Selatan Kabupaten Timor Tengah Selatan. *Pensos : Jurnal Penelitian dan Pengabdian Pendidikan Sosiologi*, *1*(1), 47–56. https://doi.org/10.59098/pensos.v1i1.937

Tirado, J. L. A., Martin, F. D. F., Torres, M. H., Gregorva, Al., Heinzova, Z., & Singh, S. S. (2025). Secondary school dropout prevention through service-learning: A pilot study. *International Journal of Educational Research*, *133*, 1-12. https://doi.org/10.1016/j.ijer.2025.102704

Weridity, M. I. G., & Manuputty, F. (2024). Preventing School Dropout In Maluku: Synergy Between Family, School, And Customary Values. *Baileo: Jurnal Sosial Humaniora*, *2*(1), 86–96. https://doi.org/10.30598/baileofisipvol2iss1pp86-96

Zengin, M. (2021). Investigation of High School Students' Dropout Risk Level. *Shanlax International Journal of Education*, *9*(1), 59–68. https://doi.org/10.34293/education.v9is1-may.4000