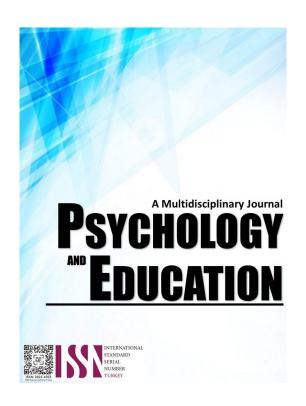
THE DETERMINANT FACTORS INFLUENCING ACADEMIC PERFORMANCE AND THE COHORT SURVIVAL RATES OF GRADE 10 STUDENTS IN SALUMPING NATIONAL HIGH SCHOOL



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The Determinant Factors Influencing Academic Performance and the Cohort Survival Rates of Grade 10 Students in Salumping National High School

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Abstract

The study about the determinant factors influencing academic performance and cohort survival rates of Grade 10 students at Salumping National High School aimed to quantify the respondents' responses the factors that influence academic performance and cohort survival rates. By employing a quantitative methods approach, the research identifies key variables that contribute to student cohort survival rates, focusing on the three dimensions such as; individual, social and institutional aspects. The study was conducted at Salumping National High school, salumping Esperanza Sultan Kudarat with 35 students' respondents from grade 10 and 18 teachers' respondents including the school head using purposive sampling for students and total enumeration for teachers. Data was collected through surveys and academic records to assess academic achievements, retention rates and dropout rates. The findings reveal significant correlations between identified factors influencing academic performance and cohort survival rates. And based on the results and analysis, the study highlighted all the targeted interventions or recommendation to provide sustainable solutions for improvement of the educational system of the school and enhance the academic performance of the students.

Keywords: determinant factors, cohort survival rates, academic performance

Introduction

Most high school education turns out to be a stepping stone for the subsequent academic and career aspirations of the students. Dropout rates and declining cohort survival rates have become persistent stumbling blocks in many educational systems around the world. At Salumping National High School, a steady decline in cohort survival rate has been observed over the years and thus calls for a study on the determinants of academic achievement and retention of students. These factors in-depth knowledge forms the necessity to improve the educational experience and outcome of students.

Academic performance and cohort survival rates are influenced by various factors, which include individual, social, and institutional dimensions. High dropout rates are often the result of a complex interplay of internal and external challenges. The ability to develop targeted interventions that mitigate academic struggles and ensure students successfully progress through their education depends on addressing these issues. Failure to investigate these factors could result in significant losses for students and the educational system.

Previous studies emphasize the need to know the factors that influence academic performance and retention. Aguilar and Rodriguez (2019) emphasized academic preparedness and motivation, while Williams (2016) stressed parental involvement, quality teachers, and availability of resources as the most significant determinants. Sirin (2015) further extended the study to socio-economic status, noting how lack of access to educational resources limits the academic performance of students from low socio-economic backgrounds. This evidence brings out the complex nature of the problem and the need for holistic strategies.

Socio-economic factors, according to Ansaloni and Rodrigo (2020), have a strong impact on the outcomes of students. Parental education and income are the most influential factors. According to Hattie (2019), teacher effectiveness is also a critical factor in academic success. Classroom management, instructional quality, and access to learning materials can either promote or hinder student achievement. Moreover, peer relationships and social support in schools, as observed by Wentzel (1998), are important for the persistence and success of students in academics.

This study targets Grade 10 students, a critical stage marking the midpoint of secondary education and a turning point in their academic journey. Understanding the determinants of cohort survival through an individual, social, and institutional lens at this stage is relevant to the effective crafting of interventions that would improve student retention for better academic success in this phase.

By assessing these factors quantitatively, the study seeks to enhance cohort survival rates and inform policies that promote student retention and graduation. The findings aim to benefit not only Salumping National High School but also the broader educational community. Ultimately, the research aspires to contribute to educational equity and excellence by providing sustainable solutions that improve persistence, graduation rates, and overall academic achievement.

Research Questions

The study examined the determinant factors influencing academic performance and cohort survival rate of Grade 10 students Salumping National High School. Specifically, the researcher sought to answer the following questions:

1. What is the demographic profile of the grade10 students in terms of the following characteristics;

1.1. age;



- 1.2. gender;
- 1.3. ethnicity;
- 1.4. socio-economic status;
- 1.5. parent educational attainment;
- 1.6. housing situations; and
- 1.7. transportation means?
- 2. What is the academic performance and cohort survival rate of Grade 10 students Salumping National High School for the School Year 2023-2024?
- 3. To what extent do the determinant factors influence academic performance and cohort survival rates of Grade 10 students in the following dimensions, as perceived by both students and teachers/administrators? Is there a difference between their perspectives?
 - 3.1. individual dimensions:
 - 3.2. social dimensions; and
 - 3.3. institutional dimensions?
- 4. Is there a significant relationship between the determinant factors and the Cohort Survival Rates of Grade -10 students in these following dimensions;
 - 4.1. individual dimension (academic preparedness, attitudes, motivation, socio-emotional);
 - 4.2. social dimension (peers influence, family dynamics, community factors); and
 - 4.3. institutional dimension (teacher quality, instructional effectiveness, availability of academic support services, and school climate)?

Literature Review

Cohort Survival Rates

The concept of cohort survival rates refers to the percentage of students who continue their education from one grade level to the next. Recent research indicates that cohort survival rates are heavily influenced by both academic performance and social factors such as teacher support, parental involvement, and peer networks. According to Borman and Dowling (2022), schools that implement comprehensive support systems, such as tutoring, counseling, and parent engagement programs, can significantly reduce dropout rates and improve retention. Rumberger (2022) also highlights that cohort survival rates are closely tied to academic engagement and socioeconomic factors. Students who face academic difficulties or come from disadvantaged backgrounds are at a higher risk of dropping out unless provided with adequate support. Focusing on factors like attitudes, teacher support, and peer relationships and some others factors could improve students' chances of progressing to the next grade level and ultimately graduating on time.

Individual Dimension

Bandura's Social Cognitive Theory (1986) provides a foundation for understanding how individual factors such as academic preparedness, motivation, and socio-emotional well-being influence students' ability to persist and succeed academically. Similarly, Deci and Ryan's Self-Determination Theory (2000) sheds light on the importance of intrinsic motivation and autonomy in driving student engagement and academic achievement.

About the Academic Preparedness" a study of Smith et al. (2018), examines the long-term effects of early childhood education programs on academic readiness for school. It suggests that participation in quality early education programs positively influences children's academic preparedness, leading to better outcomes in later years. While Johnson and Jackson (2017) research investigates the role of parental involvement in enhancing academic preparedness among high school students. Findings suggest that parents who are actively engaged in their children's education contribute significantly to their academic readiness. In addition to,Garcia and Fernandez (2019) study, explores how socioeconomic status affects academic preparedness among students. It indicates that students from higher socioeconomic backgrounds tend to have better access to resources and opportunities, leading to higher levels of academic preparedness.

For the attitudes of the learners, Dweck et al. (2016) study, examines how adopting a growth mindset, believing that intelligence and abilities can be developed through dedication and effort, influences academic attitudes. It suggests that students with a growth mindset are more likely to have positive attitudes towards learning and challenges. Hughes and Green (2018) research, investigates the role of teacher-student relationships in shaping students' attitudes towards school. It suggests that positive relationships with teachers contribute to more favorable attitudes, leading to increased engagement and achievement. Chen et al. (2020). This study explores how peer influence affects attitudes towards academic achievement. It indicates that peers play a significant role in shaping students' attitudes, with positive peer relationships correlating with more positive attitudes towards academic success.

Motivation as factors of Cohort survival rates is supported by the study of Ryan and Deci (2017), in which it compares the effects of intrinsic and extrinsic motivation on academic performance and engagement. It suggests that fostering intrinsic motivation, driven by internal factors like interest and enjoyment, leads to more sustainable and meaningful learning outcomes. Locke and Latham (2019) research, examines the impact of goal setting on academic motivation. Findings suggest that setting specific and challenging goals



enhances motivation and performance by providing clear direction and purpose. Phan et al. (2021) study, explores how cultural factors influence academic motivation. It suggests that cultural values and beliefs shape students' motivation towards academic achievement, with differences observed across cultures in terms of motivation styles and goals.

For socio-emotional support, Wang and Eccles (2018) study, examines the impact of peer support on socio-emotional well-being among adolescents. It suggests that positive peer relationships provide emotional support and encouragement, contributing to better mental health outcomes. Jennings and Greenberg (2019) research, evaluates the effectiveness of school-based counseling programs in providing socio-emotional support to students. Findings indicate that such interventions improve students' socio-emotional skills, resilience, and overall well-being. Jones and Smith (2020) study, explores the influence of parental involvement on children's socio-emotional development. It suggests that supportive and involved parenting practices foster emotional regulation, empathy, and social skills in children, leading to positive socio-emotional outcomes.

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Social Dimension

Bronfenbrenner's Ecological Systems Theory and Weissberg et al.'s (1979) research on social and emotional learning highlight the interconnectedness between individual, social, and institutional factors in shaping students' academic experiences and outcomes. This perspective emphasizes the role of peer relationships, family dynamics, teacher collaboration, and school climate in fostering student success. Studies of Aguilar & Rodriguez, Williams, and Murphy & Meyers (2019) provide empirical evidence on the positive effects of teacher collaboration on student achievement and instructional effectiveness. These findings underscore the importance of collaborative teaching approaches in enhancing cohort survival rates and promoting a supportive learning environment.

Allen & Burges (2017), Their survey of peer effects in education sheds light on how students' interactions with their peers can impact their academic outcomes. Understanding these peer effects can help identify social dynamics within cohorts that may influence survival rates, such as peer support networks or peer pressure. This comprehensive review examines the effectiveness of peer tutoring in middle schools, highlighting peer-assisted learning strategies that can enhance student learning and academic achievement. Peer tutoring programs can provide additional academic support and foster positive peer relationships, potentially contributing to improved cohort survival rate (Almerico & Goodman 2014).

In peer influence factors, study of Prinstein, M. et al. (2020), explored the multifaceted nature of peer influence on adolescent behavior in their study "Peer Influence Processes: New Insights from Integrative Approaches". They emphasized the importance of understanding not only direct peer pressure but also the subtle social dynamics and norms that shape individual choices within peer groups. Their findings highlighted the significance of peer relationships in shaping behaviors such as substance use, academic performance, and mental health outcomes. In the study of Stormshak, E. et al. (2019), focused on how different coping strategies are adopted by adolescents based on the influence of their peers. They argued that understanding these dynamics is crucial for developing effective interventions to promote adaptive coping skills and resilience among youth facing various challenges. In addition to in Lively, K. et al. (2022) study explored the role of peer influence in shaping attitudes and behaviors related to environmental conservation in their study titled "Peer Influence on Pro-Environmental Behavior: A Social Network Analysis". Their research utilized social network analysis to examine how peer networks influence individuals' engagement in pro-environmental actions. They found that peers play a significant role in promoting sustainable behaviors through social reinforcement and the diffusion of environmental values within social groups.

For the family dynamics, Schoppe-Sullivan, S. et al. (2021) investigated the impact of parental involvement in childcare on children's socioemotional development in their study "Parenting in Context: The Role of Family Dynamics in Child Outcomes". They emphasized the importance of considering family dynamics, such as co-parenting quality and division of childcare responsibilities, in understanding how parental behaviors influence child outcomes. Their findings underscored the need for interventions that support positive family dynamics to promote children's well-being. Crouter, A. et al. (2023) explored the interplay between family dynamics and adolescent risk behaviors in their study "Family Processes and Adolescent Risk Behaviors: A Longitudinal Examination". Their research highlighted the complex ways in which family relationships, parental monitoring, and communication patterns influence adolescents' engagement in risky behaviors such as substance use and delinquency. They advocated for family-based interventions that strengthen communication and support parental monitoring to mitigate risk behaviors among adolescents. According to, Killoren, S. et al. (2024). investigated the role of family dynamics in shaping adolescents' academic motivation and achievement in their study "Family Dynamics and Academic Outcomes: Exploring Pathways to Success". Their research revealed the importance of family support, parental expectations, and the quality of parent-child relationships in fostering academic resilience and achievement among adolescents. They suggested that interventions aimed at improving family dynamics could enhance educational outcomes for youth.



In the community factors, according to Sampson, R. et al. (2022), conducted a study titled "Neighborhoods and Communities: The Social Ecology of Crime and Victimization" where they explored the impact of community factors on crime and victimization rates. Their research emphasized the role of neighborhood social cohesion, collective efficacy, and structural disadvantage in shaping patterns of crime and victimization. They argued for community-based interventions that strengthen social ties and address structural inequalities to reduce crime rates and enhance community well-being. Jones, A. et al. (2023) study, investigated the influence of neighborhood characteristics on health disparities in their study "Beyond Individual Risk Factors: Neighborhood Effects on Health Disparities". Their research highlighted the importance of neighborhood resources, such as access to healthcare facilities, green spaces, and healthy food options, in shaping health outcomes among residents. They advocated for policies and interventions that address neighborhood-level determinants of health to reduce disparities and promote health equity. Krysan, M. et al. (2024) study, explored the role of neighborhood racial composition in shaping residents' perceptions of safety and belonging in their study "Race, Neighborhood Context, and Social Cohesion: A Multilevel Analysis". Their research revealed how racial segregation and the concentration of disadvantage in certain neighborhoods contribute to feelings of social isolation and mistrust among residents. They called for efforts to promote inclusive communities and address systemic barriers to social cohesion based on race and ethnicity.

Pianta & Hamre's(2009), work on classroom processes and Tschannen-Moran & Hoy's (2011) research on teacher efficacy offer insights into the institutional dimensions of the study, emphasizing the critical role of effective teaching practices, instructional management, and school leadership in facilitating student success. Furthermore, meta-analyses by Durlak et al. (2011) and Hattie provide comprehensive reviews of evidence-based interventions and factors influencing student outcomes, offering practical guidance for the development and implementation of actionable solutions for improvement. Study of Wang and Eccles, (2011), examines the longitudinal effects of social support on school engagement, which is closely related to cohort survival rates. It explores how different dimensions of social support (e.g., family, peers, teachers) influence students' academic persistence and success over time. Duckworth and Yeager, (2015), focuses on the importance of assessing non-cognitive factors, such as grit, self-control, and mindset, for educational purposes. Understanding these personal qualities can provide insights into students' ability to persevere and overcome obstacles, thus influencing cohort survival rates.

Institutional Dimension

Understanding the impact of collaborative teaching approaches can inform interventions aimed at enhancing instructional effectiveness, which, in turn, may positively influence cohort survival rates by improving students' academic outcomes. According to, Garcia & Weiss (2019), the relationship between socioemotional skills, academic achievement, and long-term success using data from the Programme for International Student Assessment (PISA). Understanding how socioemotional skills contribute to academic achievement and long-term outcomes can inform interventions aimed at promoting socioemotional development, which may in turn enhance students' academic persistence and success, thereby positively impacting cohort survival rates. Similarly, study that explores teacher efficacy, which refers to teachers' belief in their ability to positively impact student outcomes. High teacher efficacy is associated with effective teaching practices, student engagement, and academic achievement, all of which can contribute to higher cohort survival rate. (Tschannen- Moran & Hoy, 2011).

The teachers' Quality as supported by Darling-Hammond, L. (2017) study emphasizes the importance of comprehensive teacher education programs in enhancing teacher quality. She argues that effective teacher preparation should include rigorous course work, practical classroom experience, and ongoing professional development. According to her findings, countries with well-developed teacher education systems tend to have higher-performing teachers who are better equipped to meet the diverse needs of students. Additional idea in the study of Goldhaber, D., & Anthony, E. (2017), investigate the effectiveness of National Board Certification (NBC) as an indicator of teacher quality. Their study suggests that teachers who have achieved NBC demonstrate greater effectiveness in the classroom compared to their non-certified counterparts. They argue that NBC serves as a valuable signal of teacher quality, as it requires candidates to meet rigorous standards of practice and undergo extensive evaluation of their teaching abilities.

For Instructional effectiveness factors according to, Hattie, J. (2012), explores various factors influencing instructional effectiveness. He identifies key strategies such as providing effective feedback, setting challenging learning goals, and promoting student engagement as critical drivers of student achievement. According to his research, teachers who employ these evidence-based practices have a significant impact on student learning outcomes. Marzano, R. J. (2017), delves into the art and science of teaching, emphasizing the importance of employing research-based instructional strategies to enhance student learning. He identifies nine high-impact instructional strategies, including identifying similarities and differences, providing nonlinguistic representations, and setting objectives and providing feedback. Marzano argues that implementing these strategies effectively can lead to substantial gains in student achievement.

In Availability of academic support services, study of Dynarski, M., & Hemelt, S. W. (2015). investigate the impact of financial aid programs, such as Pell Grants, on college persistence and graduation rates. Their study finds that students who receive financial assistance are more likely to persist in their studies and complete their degrees. They suggest that increasing access to financial aid can improve the availability of academic support services, such as tutoring and counseling, thereby facilitating student success. Pascarella, E. T., & Terenzini, P. T. (2016), provide a comprehensive analysis of the factors influencing student success in higher education. They highlight the importance of academic support services, such as advising, tutoring, and academic enrichment programs, in promoting



student engagement and retention. Their research underscores the need for colleges and universities to invest in robust support services to enhance student learning and achievement.

Study of Smerillo & Mc Whirter (2018), highlights the importance of socio-emotional learning (SEL) in promoting students' social and emotional well-being. SEL programs and practices can enhance students' ability to cope with challenges, build positive relationships, and effectively navigate their educational journey, potentially leading to higher cohort survival rates. Moreover study of William (2016) investigates the effects of teacher collaboration on student achievement, highlighting the importance of collaborative teaching practices in improving academic outcomes. Enhanced teacher collaboration can lead to more effective instruction, increased student engagement, and ultimately higher cohort survival rates. According to, Durlak et al. (2011) meta-analysis of school-based interventions targeting social and emotional learning highlights the effectiveness of such interventions in improving various outcomes, including academic achievement. Implementing social and emotional learning programs could potentially contribute to creating a more supportive and conducive learning environment, thereby positively impacting cohort survival rate. Lastly the factors school climate, according to Cohen, J. (2019), explores the concept of school climate and its impact on student outcomes. He argues that a positive school climate characterized by supportive relationships, clear expectations, and a sense of belonging fosters student engagement and academic success. Cohen highlights the role of educators in cultivating a positive climate and advocates for policies and practices that promote a safe and inclusive learning environment. Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). conduct a comprehensive review of school climate research, synthesizing findings from various studies to elucidate the factors contributing to a positive school climate. They identify key dimensions of school climate, including safety, relationships, teaching and learning environment, and institutional environment. The authors emphasize the importance of fostering a supportive and inclusive climate to promote student well-being and academic achievement.

Hamre and Pianta, (2005) examines the impact of instructional and emotional support in the classroom on children at risk of school failure. It highlights the importance of a supportive classroom environment in promoting academic engagement and achievement, which are critical factors for cohort survival. Pellegrino and Hilton (2013) explores the knowledge and skills essential for success in the 21st century, including critical thinking, communication, collaboration, and problem-solving. Developing these transferable skills can enhance students' adaptability and resilience, contributing to their ability to navigate the educational system and persist to graduation.

Overall, the cited literature and studies contribute to a robust theoretical framework and empirical evidence base that informs the study's investigation into influencing factors on cohort survival rates and the development of targeted interventions for enhancing student success at Salumping National High School.

Methodology

Research Design

The descriptive-correlation method was employed in this study to investigate the different factors affecting cohort survival rates among Grade 10 students at Salumping National High School. This design was simply used to characterize the features of individual variables in their natural situation (Gravetter et al., 2009).

Respondents

The respondents of the study comprised of 35 Grade 10 students of the batch 2023-2024, 18 teachers, and 1 school administrator of Salumping National High School.

Instrument

The data gathering instruments used by the researcher in this study for collecting data on student enrolment and cohort survival rates were the LIS files for the academic years 2020-2021 to 2023-2024, that aimed at monitoring the number of students in Grade 10 at the start of the school year and how many continue through to the end of the year. Another one is the school administrative records were used to obtain data on the number of students who dropped out, transferred, and successfully graduated. To collect information from both students and teachers/administrators regarding the three dimensions: Individual, Social, and Institutional responses, a modified survey questionnaire utilizing a 5-point Likert scale was administered to evaluate the responses of the participants.

Procedure

The researcher was able to prepare the required materials, questionnaires, consent forms, and request letters for data gathering. Permission for conducting the study was sought and secured from the school principal and authorities at Salumping National High School in Esperanza, Sultan Kudarat. The researcher was able to coordinate a time with the school administration. Informed consent was obtained from students, teachers, and school officials to understand the objectives of the study, their roles, and any possible risks or benefits. The total enumeration approach involved administering surveys for the collection of quantitative data. Numerical data was analyzed through statistical methods, while qualitative data was analyzed through thematic analysis. The findings were interpreted in the light of the research objectives, conclusions were drawn, and recommendations for practice or further study were offered. Results were systematically presented in a research report that met academic standards and dissemination guidelines.



Ethical Considerations

This study followed ethical requirements. Respondents participated freely. Care was taken to assure their safety and well-being: being, and that they had no physical, mental, social, or emotional impairment. There was always respect for the school head. Participants include stakeholders. The privacy of the information obtained.

Results and Discussion

Result of Grade 10 Students of Salumping National High School Demographic Profile

Table 1 shows a breakdown of the result of demographic profile and socio-economic factors of Grade 10 students, which are important in understanding the cohort survival rates or academic success of these Grade 10 students at Salumping National High School.

Table 1. The Result of Grade 10 Students of Salumping National High School Demographic Profile

Category/Profile	Details
Gender	Male (18) - 15, Female (17) - 21
Age	15 years old - 13,16years old - 21, 17-18-year-old - 1
Ethnicity	Teduray - 20, Manobo - 7, Ilonggo - 8, Cebuano – 0
Socio-Economic	Low - 13, Middle - 22, High – 0
Parent achievement	Less Than High School - 8, High School Grad - 18, College Level - 4, College Grad - 3,
	Master's degree - 2, Doctor's degree - 0
Housing Situation	Living with Both Parents - 21, Living with One Parent - 9, Living with Relatives - 5, Living
G	Independently -0
Transportation	Motor - 7, Walking – 28

Female students are more numerous, and most students are of the age typical for Grade 10, which may not create major age-related challenges for academic performance. Teduray students represent the majority, suggesting a possible need for ethnically relevant support. A large portion of students comes from low to middle-income families, which could point to the need for additional academic support and community engagement. A significant portion of parents have high school education or less, which impact the level of academic support students receive at home. Most students live with both parents, though a significant portion lives with one parent or relatives, which could affect their emotional and academic needs. The majority of students walk, and this could influence school attendance, punctuality, and overall academic engagement.

This are the breakdown of result in terms of gender, the data indicates a higher number of female students (21) than male students (15), which may indicate differences in academic success or retention based on gender. Regarding age, the majority of students are 16 years old (21), with a small contingent being 15 years old (13) or 17/18 years old (1), reflecting the typical age range for Grade 10 students, while also including a few older individuals. The students come from diverse ethnic backgrounds, with the largest group identifying as Teduray (20), followed by Ilonggo (8) and Manobo (7). When it comes to socio-economic status, most students are from middleincome families (22), with a smaller number from low-income households (13). There are no students hailing from high-income backgrounds, which might indicate the presence of socio-economic disparities impacting student success. Parent education levels demonstrate considerable variation, as most students have parents who completed high school (18), a few with parents who attended college (4) or achieved a Master's degree (2). A small number of students have parents with less than a high school education (8) or no parents with doctoral degrees (0), which may affect the academic expectations and support they receive at home. The majority of students reside with both parents (21), while 9 live with a single parent and 5 stay with relatives. No students indicated living independently, which could have implications for their academic performance and overall well-being, depending on the stability of their home environments. Transportation options vary; most students walk to school (28), which might relate to the school's location or the availability of public transportation. Only a few students utilize motor transport (7), potentially indicating limited access to private vehicles. This information sheds light on various elements that could impact student success and retention. Recognizing these factors is essential for tackling obstacles and creating interventions that aim to enhance student outcomes.

There are many related studies supported this result, according to (UNESCO, 2021) gender disparities can influence cohort survival rates because according to it female students often exhibit higher persistence rate due to better engagement and self- regulation skills compared to males. More male students are more likely to drop out due to external pressures like family income need or expectations. They also concluded that students came from indigenous community oftentimes faces barriers like language differences, cultural mismatches and lack of representation that could influence persistence in schooling. Furthermore, according to (UNESCO, 2021), the high number of students walking to school suggests potential challenges with accessibility. Long travel times can lead to fatigue, absenteeism, and dropping out that could lower the cohort survival rate. On another hand, about the age matter, older student may face challenges such as stigma, decreased motivation or competing responsibilities which can lower cohort survival rates, Alharaf & Alasfour, (2021). A study of Sirin, (2005) stated that students from low socio-economic background often encounter challenges that lead to higher absenteeism which commonly negatively affect the cohort survival rates. Regarding parental education levels, parents with higher education correlate positively with students' persistence in school, as educated parents are more likely t provide academic support and guidance (Ahmad Fauzi et al.,2020) while students living with both parents generally have higher cohort survival rates due



to stability and support according to Tabaosares & Castillo, (2024).

By analyzing the demographic profiles of students, we take a meaningful step in exploring the factors that impact cohort survival rates at Salumping National High School. This research concentrates on Grade 10 students at Salumping National High School, with the goal of identifying essential elements that influence their advancement within the educational system. Through an examination of the demographic traits of these students, including age, gender, socioeconomic status, and family background, we can obtain valuable insights into the fundamental issues affecting their educational experiences.

The Cohort Survival Rate of Grade 10 Student's Enrollees of Salumping National High School for the School Year 2023-2024

The information illustrated in table 2, monitors the enrollment, retention, dropout, and cohort survival rates of Grade 10 students at Salumping National High School from School Year (S.Y.) 2020-2021 to S.Y. 2023-2024. In S.Y. 2020-2021, 56 students were registered in Grade 7, with 50 students (89.29%) advancing and continuing onto the next academic year, while 6 students (10.71%) either dropped out or transferred. Moving to S.Y. 2021-2022, the cohort was reduced to 50 students, where 45 (80.36%) completed the academic year and stayed in school, while 5 (8.93%) left due to dropout or transfer. In S.Y. 2022-2023 45, the number of remaining students was recorded, but the cohort further declined to 41 students (73.21%), with 4 students (7.14%) leaving the institution.

By S.Y. 2023-2024, there were 41 students enrolled, and only 35 from the original 56 completed their Junior High School studies, resulting in 6 students (10.71%) dropping out or transferring. The overall cohort survival rate has shown a continuous decrease over the four-year period, declining from 89.29% in S.Y. 2021-2022 to 62.5% in S.Y. 2023-2024. This indicates that by the conclusion of Grade 10, 21 students (37.5%) from the initial cohort of 56 had either left the school or transferred, highlighting a worrying trend regarding student retention. Despite consistent dropout rates of approximately 10% each year, the overall drop in survival rates emphasizes the necessity for the school to explore the reasons behind student departure and to consider methods for enhancing retention.

Data from the Philippines Statistics Authority (PSA), (2013), indicates that cohort survival rates have been concern nationwide. The school of Salumping National High School was not exempted about this issue since it's not only the school encountered like these scenarios. It was reported also in Eastern Visayas in 2017, that there was a study noted that the cohort survival rate of the high school students declined from 76.8 % in 2017 to 74.7 % in 2020, even the government agencies investigated such contributing factors of their high drop out rates.

To track the cohort survival rates of the Grade 10 students of Salumping National High School from School Year 2020-2021 to S.Y. 2023 -2024 the result is presented in the Table 2.

Table 2. The Cohort Survival Rate of Grade 10 Student's Enrollees of Salumping National High School Who Initially Enrolled from School Year 2020-2021 to S.Y. 2023-2024

Tigh School who initially Enrolled from School Tear 2020-2021 to S.1. 2023-2024										
School Year	No. of Enrollees	Retention Drop-out/transferred-out		Cohort						
		Rates	Rates	Survival R						
S.Y.2020-2021	56	50 or 89.29%	6 or 10.71%							
S.Y.2021-2022	50	45 or 80.36%	5 or 8.93%							
S.Y.2022-2023	45	41 or 73.21% 4 or 7.14%								
S.Y. 2023-2024	41	35 or 62.5%	6 or 10.71%							
Total		35 or 62.5%	21 or 37.5%	56-21 = 35						
				62.5 %						

Percentage of the Academic Performance of the Grade 10 Students at Salumping National High School for the School Year 2023-2024

Table 3 shows the Percentage of the Academic Performance of the of the Grade 10 students. The data on scholastic grades provides valuable insights into the academic performance of Grade 10 students at Salumping National High School and directly relates to the research on the determinant factors influencing academic performance and cohort survival rates. Among the students, 28.57% earned grades in the 90-100 range, indicating that they exceed high expectations and are performing at an outstanding level. This group is likely to have a higher chance of cohort survival as their academic achievements reflect strong motivation, good study habits, and academic preparedness. Another 17.14% of students scored between 85-89, categorized as very satisfactory, meaning they are performing above average and still meeting the school's expectations. These students, are doing well enough to continue progressing in their studies and are generally at a low risk of dropout.

The largest group, 37.14%, scored between 80-84, which falls into the satisfactory range. These students meet average academic expectations, but their performance indicates that they might require additional support to maintain their academic standing and ensure cohort survival. This group could benefit from academic interventions to improve their outcomes, especially in terms of motivation or academic preparedness. Meanwhile, 17.57% of students scored between 75-79, categorized as fairly satisfactory, indicating below-average performance. These students may be facing academic challenges, possibly due to issues like lack of motivation, socio-economic factors, or limited support at home, and they may be at greater risk of falling behind or dropping out if not addressed by additional



resources or support systems.

Interestingly, no students scored below 75, meaning none were categorized as needing significant improvement. This suggests that the cohort is performing relatively well, with no extreme academic struggles. However, the students in the 75-79 range may require targeted support to help them improve their academic standing. The data highlights the need for tailored interventions, such as tutoring or mentorship, to support students who are performing in the satisfactory and fairly satisfactory ranges.

According to the study of Balingit and his co-researchers as they explored the effect of academic performance to the cohort survival rates in the Philippines, they come up to the idea that the school support like remedial programs, mentoring, and guidance counseling, can foster resilience among student to perform better in academic and remain in their school, Balingit et al., (2022). Furthermore, they added that when the students achieve satisfactory academic performance, they are more likely to stay in school, which impacts the cohort survival rate positively. With the insights of this author, it was evidently shown that strengthening academic support systems can enhances both academic performance and cohort survival rates.

Table 3. Percentage of the Academic Performance of the of the Grade 10 Students

Scholastic Grades	No. of Students	Percentage	Verbal Equivalent	Interpretation
90-100	10	28.57%	Outstanding	Exceed high expectation
85-89	6	17.14%	very satisfactory	exceed above average
80-84	13	37.14%	satisfactory	meet average expectation
75-79	6	17.57%	fairly satisfactory	below average
Below 75	0	0	need improvement	did not meet expectation
Total	35	100%		_

Extent of the Determinant Factors Influencing Academic Performance and Cohort Survival of Grade 10 Students in Salumping National High School as Perceived by the Students

The information outlined in table 4 illustrates the perceived impact of various factors on the cohort survival rates of Grade 10 students enrolled at Salumping National High School which divided into three primary dimensions: Individual, Social, and Institutional. These dimensions cover aspects from personal readiness and motivation to family dynamics, teacher effectiveness, and the general school climate. Each factor's mean score is paired with a verbal interpretation, reflecting how frequently students view these elements as influential in their academic continuity.

Within the Individual Dimension, academic preparedness, attitudes, motivation, and socio-emotional well-being are all regarded as "Oftentimes or highly influential," with mean scores between 3.7 and 4.06. Specifically, academic preparedness (mean = 3.7), Students' attitudes (mean = 4.0) and motivation (mean = 3.93) are recognized as highly influential, signifying that students' mindset and determination to excel significantly affect their retention. The socio-emotional variable (mean = 4.06) also carries considerable importance, highlighting the role of emotional health and the capacity to handle stress and relationships in fostering academic persistence. The section means of 3.90 reinforces the idea that individual factors are often important but not the most dominant.

In the Social Dimension, peer influence (mean = 3.81), family dynamics (mean = 4.03), and community factors (mean = 3.92) are all regarded as "Oftentimes highly influential." Among these, family dynamics stands out as the most significant factor (mean = 4.03), indicating that family support, engagement, and the home environment are crucial to students' ability to remain in school. Peer influence and community factors also significantly contribute, though to a lesser degree. The section means for the Social Dimension (3.92) demonstrates that social factors—especially those related to family—are consistently vital in shaping students' academic achievement and persistence.

The Institutional Dimension consists of teacher quality, instructional effectiveness, academic support services, and school climate. Teacher quality (mean = 4.08) is highlighted as the "Always perceived or most influential" factor, emphasizing its essential role in student retention and achievement. Instructional effectiveness (mean = 4.05) and the presence of academic support services (mean = 3.90) are also viewed as highly influential, showing that teaching methods and additional academic assistance are significant in maintaining student engagement and persistence. School climate (mean = 4.02) encompasses the overall school atmosphere, which includes elements such as safety, inclusivity, and teacher-student relationships. The section means of 4.01 indicates that institutional factors, particularly those concerning teaching quality and the overall school environment, are the most consistently influential in fostering student success.

To sum up, the Grand Mean of 3.94 reveals that, in general, the elements impacting student cohort survival are typically perceived as "Oftentimes perceived by the students or highly influential in the survival of the students." This emphasizes the notion that a combination of individual, social, and institutional factors contributes to student retention and success, with institutional elements (notably teacher quality and school climate) being recognized as the most consistently significant.

There are many studies and related literatures that supported these findings about individual, social and institutional dimensions that influence academic performance and cohort survival rate of the students. One research study was the research study of Suleiman et al., (2024), according to them the educational performance, socio-economic and individual characteristics of the study has significant impact on the academic performance and cohort survival. In addition to, a study published in the International Journal for



Multidisciplinary Research (2024), identified factors triggering student's dropout and emphasized the importance of institutional interventions to enhance graduation rates and retention rates. The findings of this research emphasize that any school programs with lower dropout rates reflected an effective support mechanism to their student that contribute to have a higher cohort survival rate. In the research of Le et al., (2023), addressing both academic factors and non- academic factors can improve the cohort survival rate.

Table 4. The Extent of the Determinant Factors Influencing Academic Performance and Cohort Survival of Grade 10 Students in Salumping National High School as Perceived by the Students

Dimensions	Mean	Verbal	Interpretation
A. Individual Dimension			
Academic preparedness	3.7	Oftentimes	highly influential
2. Attitudes	4.0	Oftentimes	highly influential
3. Motivation	3.93	Oftentimes	highly influential
4. Socio-emotional	4.06	Oftentimes	highly influential
Section Mean	3.90	Oftentimes	highly influential
B. Social Dimension			
1. Peer influence	3.81	Oftentimes	highly influential
2. Family Dynamics	4.03	Oftentimes	highly influential
3. Community Factors	3.92	Oftentimes	highly influential
Section Mean	3.92	Oftentimes	highly influential
C. Institutional Dimension			
1. Teacher Quality	4.08	Oftentimes	highly influential
2. Instructional effectiveness	4.05	Oftentimes	highly influential
3. Availability of academic support services	3.90	Oftentimes	highly influential
4. School Climate	4.02	Oftentimes	highly influential
Section Mean	4.01	Oftentimes	highly influential
Grand Mean	3.94	Oftentimes	highly influential

Extent of the determinant factors Influencing academic performance and Cohort Survival rates of Grade 10 Students in Salumping National High School as Perceived by the Teachers and administrator

The information in Table 5 illustrates the perceived degree to which different factors affect the survival of Grade 10 students at Salumping National High School, as assessed by teachers and administrators. These factors are categorized into three primary dimensions: Individual, Social, and Institutional. The table displays the average scores for each dimension, accompanied by a verbal interpretation that reflects how frequently each factor is viewed as having an influence.

The Individual Dimension covers factors related to the students themselves, including their academic readiness, personal drive, attitudes, and socio-emotional wellness. The Section Mean for the Individual Dimension is 3.76, placing it in the category of "Often viewed as or highly impactful factors for cohort survival." This indicates that, according to teachers and administrators, personal traits of students, such as their readiness for academic challenges and emotional health, are generally considered vital for their persistence in school. While these traits are seen as important, they are not perceived as the most dominant influences.

The Social Dimension encompasses elements like peer pressure, family relationships, and community engagement, all of which can affect a student's academic success and retention. The Section Mean for the Social Dimension stands at 3.78, which is also interpreted as "Often perceived as or highly influential." This suggests that social aspects, particularly the support and involvement from family and peers, significantly impact students' academic performance and retention rates. The prevailing view is that the social context at home and among peers has a considerable, though not always overwhelming, influence on students' continuation of their education.

The Institutional Dimension pertains to the significance of the school environment, which includes aspects such as the quality of teaching, effectiveness of instruction, availability of academic support services, and the overall school atmosphere. The Section Mean for the Institutional Dimension is 3.95, interpreted as "Often perceived as or highly influential." Although this score is slightly higher than those for the Individual and Social Dimensions, it still implies that the school environment—such as teaching quality and available support services—is regarded as highly influential in shaping student retention and success. Teachers and administrators acknowledge that institutional factors like effective teaching and a positive school climate have a strong and consistent effect on student outcomes.

The Grand Mean is 3.83, interpreted as "Often perceived as or highly influential." This overall average score indicates that, as reported by teachers and administrators, the interplay of individual, social, and institutional factors generally exerts a significant effect on the cohort survival rates of Grade 10 students. Each of the three dimensions is viewed as consistently important in influencing student achievement, but none are seen as overwhelmingly more influential compared to the others. From the perspective of the educators and administrators at Salumping National High School, the Individual Dimension (student attributes), Social Dimension (influences from family, peers, and the community), and Institutional Dimension (school factors such as instructional quality and climate) are all regarded as "Often perceived as or highly influential in retention rates" in aiding student persistence. The Institutional Dimension has a slight edge over the others, but all dimensions are considered essential contributors to ensuring that Grade 10 students remain in school and successfully complete their education. The data highlights the necessity for a comprehensive approach to enhancing student



retention that addresses not only individual factors but also the wider social and institutional influences affecting student success.

Table 5. The Extent of the determinant factors Influencing academic performance and Cohort Survival rates of Grade 10 Students in Salumping National High

School as Perceived by the Teachers and administrator

Dimensions	Mean	Verbal	Interpretation
A. Individual Dimension	3.76	O6 +:	1:11:01 .:1
Section mean B. Social Dimension		Oftentimes	highly influential
Section Mean	3.78	Oftentimes	highly influential
C. Institutional Dimension			
Section Mean	3.95	Oftentimes	highly influential
Grand Mean	3.83	Oftentimes	highly influential

The Perspectives of the students and teachers towards the determinant factors Influencing academic performance and Cohort Survival rates of Grade 10 Students in Salumping National High School

The information in the table 6 compares the perception scores of two different groups: students and teachers. An independent samples t-test was performed to assess whether there is a notable difference in perceptions between these two groups; students comprised 35 respondents, while teachers had 18 respondents. The average perception score for students was 3.94, with a standard deviation of 0.20, whereas the average score for teachers was 3.83, with a standard deviation of 0.15. The computed t-value was 2.32, reflecting the extent of difference between the means of the two groups, considering their respective sample sizes and variances.

Table 6. The Result in Correlation Matrix

Variable	Acade mic	Attitudes	Motivation	Socio emotional	Peer influenc e	Family Dynamics	Community Factors	Teacher Quality	Instructio nal Effective ness	Academic Availabilty	School Climate	Cohort
Academic preparedness	1	0.68	0.65	0.52	0.62	0.54	0.57	0.58	0.6	0.62	0.63	0.15
Attitudes	0.68	1	0.75	0.68	0.74	0.63	0.72	0.68	0.72	0.74	0.75	0.14
Motivation	0.65	0.75	1	0.64	0.69	0.68	0.69	0.69	0.7	0.68	0.66	0.12
Socio Emotional	0.52	0.68	0.64	1	0.7	0.63	0.74	0.72	0.74	0.73	0.69	0.18
Peer Influence	0.62	0.74	0.69	0.7	1	0.77	0.78	0.75	0.76	0.74	0.73	0.21
Family Dynamics	0.54	0.63	0.68	0.63	0.77	1	0.72	0.74	0.74	0.7	0.69	0.16
Community F actors	0.57	0.72	0.69	0.74	0.78	0.72	1	0.76	0.78	0.72	0.75	0.22
Teacher Quality	0.58	0.68	0.69	0.72	0.75	0.74	0.76	1	0.83	0.8	0.77	0.2
Instructional Effectiveness	0.6	0.72	0.7	0.74	0.76	0.74	0.78	0.83	1	0.82	0.8	0.19
Academic Availability	0.62	0.74	0.68	0.73	0.74	0.7	0.72	0.8	0.82	1	0.77	0.14
School Climate	0.63	0.75	0.66	0.69	0.73	0.69	0.75	0.77	0.8	0.77	1	0.17
Cohort	0.15	0.14	0.12	0.18	0.21	0.16	0.22	0.2	0.19	0.14	0.17	1

Based on the correlation matrix result, the strongest predictors are identified by the highest correlation values between the factors and Cohort Survival Rates. Here are the factors that considered a strongest predictor; firstly, teachers' quality and instructional effectiveness with 0.83 correlation, which indicates that effective teaching strongly depends on the quality of teachers. Secondly, instructional effectiveness and academic preparedness with 0.76 correlation which implies that instructional method significant impact students' readiness for academic task and third is the family dynamics and community factors with 0.78 correlation showing that family environment s and the surrounding community play interconnected roles in their academic experiences. And the rest are having moderate impact to students' performance and cohort survival.

Conclusions

Several studies consider self-related perceptions, such as self-concept, self-esteem, and self-efficacy, as significant determinants of the students' academic performance. Indicators such as leaned beliefs, a person's evaluation of his worth, and the belief to perform a given task effectively categorize the self-related perceptions.

Self-related perceptions of the self should be enhanced through the school's environment and learning activities. Despite that, it can be assumed that higher self-concept will not predict academic performance; either way, students' academic performance does not reflect on their self-concept. Likewise, it should be noted that the respondents were still in the process of searching for their unique identities. Further, students need extensive educational learning experience from the school and their environment to harness their skills and develop their self-efficacy.



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