

The Influence of Attitude towards Cooperative Learning and Students' Satisfaction to the Academic Performance of Senior High School Students

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ABSTRACT

This study delved into investigating the profound impact of attitude towards cooperative learning and students' satisfaction on the academic performance of senior high school students at Lorenzo S. Sarmiento Sr. National High School. The principal objective was to assess the levels of attitude towards cooperative learning, students' satisfaction, and academic performance, focusing on their respective indicators. Additionally, the study aimed to establish the significant relationships between attitude towards cooperative learning and academic performance, as well as students' satisfaction and academic performance. Moreover, it sought to identify specific domains within attitude towards cooperative learning and students' satisfaction that significantly influenced academic performance. Employing a quantitative-correlational design, the study gathered responses from 274 senior high school students at Lorenzo S. Sarmiento Sr. National High School, utilizing statistical tools such as average weighted mean, Pearson R, and multiple regression analysis. Results revealed a notably high level of attitude towards cooperative learning among senior high school students, particularly in positive interdependence, individual and group accountability, and face-to-face promotive interaction. Similarly, students displayed a high level of satisfaction in teaching, assessment, generic skills, and learning experiences.

Keywords: GAS, Attitude towards Cooperative Learning, Students' Satisfaction, Academic Performance, Philippines

INTRODUCTION

In Indonesia it was found out that poor academic performance is the main concerns of teachers, syllabus designers, curriculum developers and the whole educational body (Alami, 2018). Moreover, in India, it was also discovered that poor academic performance of students is a problem impeding the smooth actualization of the educational purpose, which is to prepare an individual for mentally serving both himself and society (Mauliya, 2020). A study conducted by Binong (2020) posited that poor academic performance of students in Sri Lanka is not the only concern for parents and teachers, but also a concern for the country as a whole.

In the Philippines, particularly in Manila, having positive attitude towards cooperative learning helps students develop skills and facilitate positive teamwork experience among their peers (Cruz, 2018). There are numerous benefits that can be attributed to the attitude of students towards cooperative learning such as

an enhancement in class participation as well as improvements in students' academic performance (Alipio, 2019). Further to that, attitude towards cooperative learning is linked to improved academic performance as it motivates students to set academic objectives that drive their active participation in learning tasks and the acquisition of knowledge and skills (Mendo-Lázaro et al., 2022).

On the other hand, a study conducted by Montebon (2018) in Cebu City stated that understanding students' satisfaction can be useful for higher education institutions in identifying their strengths, and, as well as areas that could be improved. Additionally, students' satisfaction is considered as an important factor in measuring the quality of learning approach and a key factor in the success of learning programs (Jala, 2018). Also, Ko (2018) discovered that the satisfaction of students has an influence on the academic performances of students. Saxon (2019) added that students who had lower satisfaction had lower academic performances.

In Region XI, particularly in Davao City, there has been a trend of poor academic performance in secondary schools (Adu, 2018). Additionally, it was determined by Elesio (2023) the difficulties reporting poor academic performance in Davao del Norte. Furthermore, in Lorenzo S. Sarmiento Sr. National High, it has been observed that some of the students are finding it difficult to maintain a good grade and better academic performance. Consequently, the researchers were able to find out that the attitude towards cooperative learning and students' satisfaction could influence students' academic performance.

Exceedingly, there were no previous studies discovered on the cooperative learning and student satisfaction to the academic performance within the school setting. Moreover, this was the first research investigating the relationship between the attitude towards cooperative learning and student satisfaction to the academic performance. The students in senior high school level were found having difficulties in maintaining a positive outlook towards cooperative learning and their lack of satisfaction towards their learning that could affect their level of academic performance. The researchers determined the factors that were considered in order to enhance the influence between the cooperative learning and students' satisfaction of the academic performance in Lorenzo S. Sarmiento Senior National High School that will help develop strategies and improve the skills and knowledge of the Senior High School Students, thus the need to conduct this study.

Research Objectives

This quantitative study was conducted to determine the influence of attitude towards cooperative learning and students' satisfaction on academic performance of senior high school students. Specifically, the study sought answers to the following objectives:

1. To assess the level of students cooperative learning among the senior high school students in terms of:
 - 1.1 Students Interdependence;
 - 1.2 The Individual and group accountability; and
 - 1.3 Face to face promotive interaction.
2. To assess the level of students satisfaction among senior high school students in terms of:
 - 2.1 teaching;
 - 2.2 assessment; and
 - 2.3 genetic skills and learning experiences.
3. To find out the level of academic performance among the senior high school students in terms of:
 - 3.1 student related factors;

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- 3.2 school related factors; and
 - 3.3 home related factors.

4. To determine the significant relationship between students attitudes towards cooperative learning and academic performance among senior high school students. 5. To determine the significant relationship between students satisfaction and academic performance among senior high school students.

6. To determine which of the domains in students attitude towards cooperative learning influences academic performance of senior high school students.

7. To determine which of the domains in students satisfaction influences academic performance of senior high school students.

METHODOLOGY

This study used a quantitative, non-experimental research design utilizing a correlational technique. This method was used when the objective was to describe the status of the situation as it exists at the same time of the study in order to explore the causes of a particular phenomenon. In correlational research, it involved collecting data in order to determine whether the degree of a relationship exists between two or more quantifiable variables (Gay, 2006).

Population and Sample

Simple random sampling was used in the selection of respondents. The subjects of this study were the 274 Senior High School Students of Lorenzo S. Sarmiento Sr. National High School in the year 2023. They were the ideal respondents for this research as they are at a stage where they are developing these skills by working collaboratively, teamwork, providing valuable insights into their experiences and learning for the study.

Statistical Tool

The following statistical tools were utilized for the data analysis and interpretation.

Mean. This statistical tool was used to determine the level of attitudes towards cooperative learning and level of students' satisfaction to the level of academic performance among Senior High School Students.

Pearson (r). This statistical tool was employed to determine the significance on the relationship between attitudes towards cooperative learning, and academic performance, and the relationship between students' satisfaction and academic performance among Senior High School Students.

Multiple Regression Analysis. This statistical tool were used to determine the influence of attitude towards cooperative learning and students' satisfaction to the academic performance among Senior High School Students.

RESULTS

Level of Attitude towards Cooperative Learning

Shown in Table 1 are the mean scores for the indicators of attitude towards cooperative learning among Senior High School Students in Lorenzo S. Sarmiento Sr. National High School, Davao de Oro with an overall mean of 4.14 and described as high with a standard deviation of 0.61. The high level could be

attributed to the high rating given by the respondents in all indicators. This entails that the respondent's responses to the level of attitude towards cooperative learning are oftentimes manifested in terms of positive interdependence, the individual and group accountability, and face to face promotive interaction.

Moreover, the cited overall mean score was the results obtained from the following computed mean scores from highest to lowest: 4.15 or high for positive interdependence with standard deviation of 0.58; 4.15 or high for the individual and group with standard deviation of 0.58; and 4.13 or high for face to face promotive interaction with standard deviation of 0.66.

Table 1. Level of Attitude towards Cooperative Learning

| Indicators | Mean | SD | Descriptive Level |
|------------------------------------|------|------|-------------------|
| Positive Interdependence | 4.15 | 0.58 | High |
| The individual and group | 4.15 | 0.58 | High |
| Face to face promotive interaction | 4.13 | 0.66 | High |
| Overall | 4.14 | 0.61 | High |

Level of Students' Satisfaction

Table 2 presents the level of students' satisfaction as perceived by the students in terms of teaching, assessment, and generic skills and learning experiences. The overall mean is 4.06 with a verbal equivalent of high and a standard deviation of 0.56. This indicates that students' satisfaction is oftentimes manifested among the students.

Among the three indicators, teaching got the highest mean of 4.13 and is described as high with a standard deviation of 0.55. This is followed by generic skills and learning experiences with a mean of 4.04 with an equivalent description of high and a standard deviation of 0.54. Lastly, assessment got the lowest mean of 4.02 and still described as high with a standard deviation of 0.60.

Table 2. Level of Students' Satisfaction

| Indicators | Mean | SD | Descriptive Level |
|--|------|------|-------------------|
| Teaching | 4.13 | 0.55 | High |
| Assessment | 4.02 | 0.54 | High |
| Generic Skills and Learning Experience | 4.04 | 0.60 | High |
| Overall | 4.06 | 0.56 | High |

Level of Academic Performance

Presented in Table 3 is the level of Academic Performance as experienced by the students in terms of student related factors, school related factors, and home related factors. The overall mean is 3.89 described as high with a standard deviation of 0.65. This indicates that academic performance are oftentimes manifested among the students.

Among all the indicators, student related factors got the highest mean of 4.15 and a verbal description of high with a standard deviation of 0.58, followed by school related factors with a mean of 3.81 and a

description of high with a standard deviation of 0.68. Lastly, home related factors got the lowest mean score of 3.71 with the equivalent description of high with a standard deviation of 0.70.

Table 3. Level of Academic Performance

| Indicators | Mean | SD | Descriptive Level |
|--------------------------|------|------|-------------------|
| Students Related Factors | 4.15 | 0.58 | High |
| School related factors | 3.81 | 0.68 | High |
| Home Related Factors | 3.71 | 0.70 | High |
| Overall | 3.89 | 0.65 | High |

Significance on the Relationships Between Attitude towards Cooperative Learning and Academic Performance

The results revealed that attitude towards cooperative learning and academic performance have a significant relationship. This result is due to p-value of $<.001$, which is less than the 0.05 p-value. Hence, this leads to the decision that the null hypothesis which stated that there is no significant relationship between attitude towards cooperative learning and academic performance among senior high school students in Lorenzo S. Sarmiento Sr. National High School is rejected. Moreover, Pearson's R value which is 0.512 further means that there is a moderate correlation between attitude towards cooperative learning and academic performance.

Significance on the Relationship between Students' Satisfaction and Academic Performance

The results revealed that students' satisfaction and academic performance have a significant relationship. This result is due to a p-value of $<.001$, which is less than the 0.05 p-value. Hence, this leads to the decision that the null hypothesis which stated that there is no significant relationship between students' satisfaction and academic performance among Senior High School Students in Lorenzo S. Sarmiento Sr. National High School is rejected. Moreover, Pearson's R value which is 0.622 further means that there is a moderate correlation between students' satisfaction and academic performance.

Multiple Regression Analysis of the Influence of Attitude towards cooperative learning on Academic Performance

Using the Multiple Regression Analysis, the data revealed that the influence of attitude towards cooperative learning and academic performance has f-value of 33.654 and corresponding significance p-value of $<.001$ which was significant.

Consistently, this means that the usage of attitude towards cooperative learning influences the academic performance of senior high school students since the probability is less than 0.05. The R squared of 0.272 implies that 27.2% of the academic performance of senior high school students in Lorenzo S. Sarmiento Sr. National High School is influenced by the usage of attitude towards cooperative learning, while 72.8% remaining were not covered by the study and is influenced by other factors.

Multiple Regression Analysis of the Influence of Students' Satisfaction on Academic Performance

Using the Multiple Regression Analysis, the data revealed that the influence of students' satisfaction and academic performance has f-value of 58.056 and corresponding significance p-value of <0.001 which was significant.

Consistently, this means that the usage of students' satisfaction influences the academic performance of senior high school students since the probability is less than 0.05. The R squared of 0.392 implies that 39.2% of the academic performance of senior high school students in Lorenzo S. Sarmiento Sr. National High School is influenced by the usage of students' satisfaction, while 60.8% remaining were not covered by the study and is influenced by other factors.

DISCUSSIONS

Level of Attitude towards Cooperative Learning

The respondents' level of attitude towards cooperative learning of senior high school students is high. This means that the attitude towards cooperative learning among Senior High School Students in Lorenzo S. Sarmiento Sr. National High School was oftentimes manifested. This further means that the senior high school students in Lorenzo S. Sarmiento Sr. National High School manifested a positive attitude towards cooperative learning which the senior high school students could freely express their thoughts, acknowledge that their success is intertwined and students are taking responsibility for their tasks while collectively ensuring shared goals are met and share a positive communication and feedback in team settings. This result in relation to the proposition of Sibomana (2021) which stated that attitude towards cooperative learning is advanced instructional approach that uses different motivation procedures to make instruction significant and learners more responsible.

Remarkably, in terms of positive interdependence, the level of attitude towards cooperative learning among senior high school students in Lorenzo S. Sarmiento Senior National High School is high. This means that the positive interdependence was oftentimes manifested. This finding resonates with Maquil et al. (2021) observation that it is one of the key elements of cooperative learning that would be inspired when study members have a quest for the same goals whose relationship with autonomous learning has received more and more attention from research to explore whether the cultivation of positive interdependent can-do benefit to students' learning. This also aligns with Veenstra (2019) study that positive interdependence fosters effective decision-making behaviors only if person conflict interferes with task conflict, but not in cases of one-sided task conflict, one-sided person conflict, or no conflict.

Level of Students' Satisfaction

The respondents' level of students' satisfaction of senior high school students is high. This means that the students' satisfaction among Senior High School Students in Lorenzo S. Sarmiento Sr. National High School was oftentimes manifested. This further means that the senior high school students in Lorenzo S. Sarmiento Sr. National High School manifested a positive students satisfaction which the senior high school students could freely express their thoughts about teaching, which pertains to substantiates the necessity of introducing such technologies towards teaching; assessment wherein senior high school students involves using empirical data on knowledge, skills, attitudes, aptitude, and beliefs; while generic skills and learning experiences encompasses active student-centered teaching methodologies fosters the acquisition of general and specific competences.

Additionally, this outcome correspondence as mentioned by Amidon (2018), he defined teaching as an interactive process, primarily involving classroom talk which takes place between teacher and pupil and occurs during certain definable activities. More to that, this outcome corresponds to McKelvie (2018) proposed teaching research methods is especially challenging because we not only wish to convey formal knowledge and encourage critical thinking, as with any course, but also to enable our students dream up meaningful research projects, translate them into logical steps, professionally conduct the research and analyze the data.

Level of Academic Performance

The respondents' level of academic performance among senior high school students is high. This means that diverse forms of academic performance are evident among senior high school students in Lorenzo S. Sarmiento Sr. National High School, suggesting variations in how they manage and control their learning processes. This also indicates that students perceive themselves as capable of regulating their learning behaviors over an extended period.

This is congruent with the study tested by Konold and Cornell (2018) about student-related factors, stated that the authoritative school climate theory that schools characterized by high structure and student support have greater levels of student engagement and that these factors are associated with higher academic achievement, as indicated by school graduation rates and school performance on state-mandated testing. More to that, this outcome resonates with Dube (2018) findings that the success of any educational institution is measured by its academic performance or how well students meet the standards set out.

Significance on the Relationships Between Attitude towards Cooperative Learning and Academic Performance

This present study reveals a significant relationship between attitude towards cooperative learning and academic performance among Senior High School Students in Lorenzo s. Sarmiento Sr. National High School. This implies that attitude towards cooperative learning influences academic performance among senior high school students, which can be seen in the data. This confirms the main anchored theory of this study Social Constructivism theory of Vygotsky (1978), which claims that attitudes towards cooperative learning has positive and significant relationship with academic performance. More than that Jhonson and Smith (2018) suggest strong correlation between a positive attitude towards cooperative learning and academic performance, their findings emphasize the significance of fostering a cooperative mindset among students to promote active engagement, effective collaboration, and ultimately improve academic performance.

Further, the relationship between overall attitude towards cooperative learning and academic performance is significant among senior high school students in Lorenzo S. Sarmiento Sr. National High School. This implies that attitude towards cooperative learning is dependent on academic performance among senior high school students. These findings affirmed the notion of Blackmore et al. (2021) which states that attitude towards cooperative learning and academic performance are interconnected through cognitive skills like goal setting and self-discipline. This also conforms to the claim of Toharudin et al. (2019) that the higher the academic performance promoting better.

Significance on the Relationship between Students' Satisfaction and Academic Performance

The present study reveals a significant relationship between students Satisfaction and academic performance among Senior High School Students in Lorenzo S. Sarmiento Sr. National High School. This implies that students Satisfaction influences academic performance among senior high school students, which can be seen in the data. This confirms the main anchored theory of this study, the Social Constructivism Theory of Vygotsky (1978) which claims that students' satisfaction has positive and significant relationship with academic performance. This agitates the other gleaned proposition in this study, the proposition of Paul (2017) who expressed that students satisfaction encompasses academic performance as motivated individuals are more likely to effectively control and direct their learning processes.

Moreover, there is significant correlation between the overall students Satisfaction and academic performance among senior high school students in Lorenzo S. Sarmiento Sr. National High School. This

suggests that the students Satisfaction of senior high school students relies on academic performance. The results corroborate Justine (2022) assertion that motivation to learn in students Satisfaction.

Multiple Regression Analysis of the Influence of Attitude towards cooperative learning on Academic Performance

Using the Multiple Regression in JASP Software, the data revealed that the attitude towards cooperative learning and academic performance among senior high school students has a significant influence. The overall results of the attitude towards cooperative learning predict academic performance among senior high school students. Therefore, the significance level of hypothesis of attitude towards cooperative learning and academic performance among senior high school students is rejected.

Correspondingly, this results corroborates the analysis of Nelson (2019) attitude towards cooperative learning and student academic performance is complex and can be influenced by various factors, such as the specific learning context, the type of cooperative learning method used, and the students' individual characteristics. Also, as noted by Gerald (2018) cooperative learning approach increased student's positive attitude towards statistics in the experimental group as compared to the control group. As pointed out by Reda (2018) emphasized that the academic performances (Average mark) of the students were found negative strong relationship with student's attitude towards cooperative learning methods.

Multiple Regression Analysis of the Influence of Students' Satisfaction on Academic Performance

The data revealed that the students' satisfaction and academic performance among senior high school students has a significant influence. The overall results of the students' satisfaction predict academic performance among senior high school students. Therefore, the significance level of hypothesis of students' satisfaction and academic performance among senior high school students is rejected.

Correspondingly, as mentioned by Amidon (2018), he defined teaching as "an interactive process, primarily involving classroom talk which takes place between teacher and pupil and occurs during certain definable activities". Also Rajagopalan (2019) stated that teaching is a scientific process, and its major components are content, communication and feedback. More to that Mark (2019) say that teaching research methods is especially challenging because we not only wish to convey formal knowledge and encourage critical thinking, as with any course, but also to enable our students dream up meaningful research projects, translate them into logical steps, conduct the research in a professional manner, analyze the data, and write up the project in APA style.

CONCLUSION

The findings of the study are used to draw conclusions. The level of attitude towards cooperative learning among senior high school students in Lorenzo S. Sarmiento Sr. National High School is high for positive interdependence, high for the individual and group accountability, and high for face to face promotive interaction. The overall mean is high for the level of attitude towards cooperative learning. Additionally, the level of students' satisfaction among senior high school students in Lorenzo S. Sarmiento Sr. National High School is high for teaching, high for assessment, and high for generic skills and learning experiences, thus the overall mean is high for the level of students' satisfaction. Furthermore, the level of academic performance among senior high school students in Lorenzo S. Sarmiento Sr. National High School is high for student related factors, high for school related factors, and high for home related factors, thus the overall mean is for the level of academic performance. Moreover, the findings opposed the theoretical assumption of no significant relationship between attitude towards cooperative learning and academic performance, and

students' satisfaction and academic performance of senior high school students in Lorenzo S. Sarmiento Sr. National High School.

Contrary to the assumption, the study concludes that attitude towards cooperative learning and academic performance, and students' satisfaction and academic performance were positively correlated. That was, change in the level of attitude towards cooperative learning and students' satisfaction affects the level of academic performance. Further, there are three out of the three domains in attitude towards cooperative learning and students' satisfaction that significantly influence the academic performance of senior high school students.

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