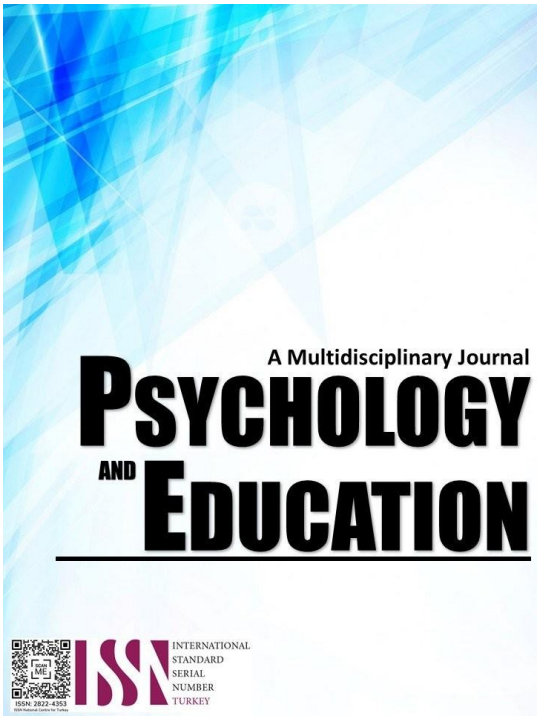
IMPACTS OF COOPERATIVE LEARNING TO THE ACADEMIC PERFORMANCE OF SELECTED HIGH SCHOOL STUDENTS IN A SECONDARY SCHOOL IN BUENAVISTA, QUEZON



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Research Article

Impacts of Cooperative Learning to the Academic Performance of Selected High School Students in a Secondary School in Buenavista, Quezon

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Abstract

The purpose of this study was to examine how cooperative learning affected the academic performance of chosen high school students in Buenavista, Quezon. The respondents' profiles were examined, as well as the influence of cooperative learning on their academic performance. To reach the researcher's purpose, the researcher employed a questionnaire to establish the respondents' profiles and administered the questionnaire to assess the influence of cooperative learning on academic achievement. This included 80 pupils from a high school in Buenavista, Quezon. The descriptive design focuses on the primary source of data and information. The results indicated that the majority of the respondents are 12-14 years old, predominantly female. According to the result of Kruskal Wallis, the null hypothesis was accepted, which suggests that there is no. There is a significant difference in the effects of cooperative learning on academic performance on interdependence, collaborative skills, and class engagement when respondents are grouped by age and gender, whereas there is a significant difference when respondents are grouped by grade level. Based on the findings of the study, the following suggestions are made. Parents may advise and support cooperative tasks at home. Teachers may employ a range of school tasks to improve cooperative abilities. Learners may continue to engage in cooperative learning style to build self confidence and trust among others. Future researchers may do a similar study to elaborate more the essence of cooperative learning to the pedagogical aspect.

Keywords: *academic performance, class engagement,cooperative, collaborative skills, interdependence*

Introduction

Each generation displays distinctive beliefs and perceptions that promoting cooperative learning in the school through emphatic generational bonding may increase collaboration, lower attrition rates and support individual, professional, and organizational learning right from the start. Cooperative learning has established itself as a respected pedagogy in countries around the world, with the potential to improve student achievement, motivation for learning, inter-group relations, critical and creative thinking and problem-solving, and a variety of other well-researched outcomes.

Cooperative learning has been a valuable educational approach for quite some time, but its significance has grown even more during the pandemic. With reduced face-to-face interactions and collaboration during remote learning, students have increasingly relied on digital platforms. Now, as we transition back to in-person classes, cooperative learning can play a crucial role in shaping students' cognitive processes and enhancing their social and emotional awareness. Cooperative learning is a common teaching strategy in many schools. It has been widely utilized in K-12 education to encourage student participation and cooperation (Huang & Hong, 2023).

The researcher came across several issues concerning common student fears including making embarrassing mistakes in front of the entire class, being called upon when unsure of the answer, language barriers, and concerns about social acceptance. Cooperative learning mitigates these fears by creating a supportive environment within smaller groups. Students can collaborate, learn from one another, and feel less isolated.

With this, the researcher will look into the impacts of cooperative learning on the academic performance of high school students in Buenavista, Quezon.

Research Questions

This study determined the impacts of cooperative learning to the academic performance of selected high school students in a secondary school in Buenavista, Quezon, SY 2023-2024. Specifically, this study sought to answer the following questions:

1. What is the profile of respondents in terms of:
    1.1. age;
    1.2. sex; and
    1.3. grade level?
2. What are the impacts of cooperative learning on academic performance of the respondents in terms of:
    2.1. interdependence;
    2.2. collaborative skills; and,
    2.3. class engagement?
3. Is there a significant difference on the perceived impacts of cooperative learning to the academic performance of respondents when the respondents are grouped according to profile?

Literature Review

Cooperative Learning and Academic Performance

Yang (2023) stated in his work that cooperative way of learning was developed originally for educating people of different ages, experience, and levels of mastery of the craft of interdependence. So, teachers devising methods in each case tended to make different assumptions about the nature of knowledge and the authority of knowledge. This type of learning devised by the teacher strongly develops social skills too.

Schaen,etal.(2016),discussed a project they conducted that allowed third grade leaders and first graders to work together and create an app that will allow kindergarteners to practice math strategies. This week long project allowed students to use technology, collaborate, and teach. Schaen, et al. study discussed the process that the students went through and the outcomes of the project. “The project gave young students a real-world purpose for planning and creating collaboratively”.

Rosario (2022) mentioned in his paper that the contemporary pedagogical community considers collaborative learning as one of the key elements in the process of successful acquisition and learning of knowledge and practical experiences. It emerged as an alternative to the traditional teacher-centered or lecture-centered educational system. Collaborative learning refers to students’ mutual learning, which encourages them to work collectively in developing novel scholastic attainments rather than merely absorbing the information given by tutors.

Robles and Torres. (2020) sighted that cooperative learning refers to students ‘mutual learning, which encourages them to work together to develop cutting-edge academic achievements rather than absorbing the information presented by their tutors. Collaborative learning is considered a core element in the acquisition of successful knowledge and practical experience. It originated as an alternate form to the customary teacher-centered or lecture-centered educational system. This educational practice puts together three main ideas in a unified process of learning in teams, peer assessment, and working in small groups.

Those young learners who are constantly engaged in cooperative and collaborative activities develop critical thinking over time, and when they reach adulthood, they intend to initiate peer collaboration. The study of creative thinking in childhood and adolescence has been linked to a variety of factors that influence development. As a result, creative thinking is viewed as a construct that does not grow independently and requires environmental support. This is from the statement of Marcos et al. (2023).

Tackled by Gillies (2016), learners at different age levels utilize cooperative learning for different functions, those who belong to younger groups of learners cooperate with peers mostly to develop their social skills and make sure that they are included in the group but in terms of those older learners specifically those who are academically active in secondary or in tertiary they cooperate actively because they have proven that in this way they can achieve better academically with the help of their peers whom they exchange ideas with.

In the discussion, Leman (2014), pointed out the way youngsters think and interact with their peers changes dramatically during childhood and adolescence. And, while many research emphasizes the benefits of cooperation, few have investigated age variations in the mechanisms that support collaboration. As a result, the potential remains that, while collaboration works, it does so for different reasons at various ages.

Luo et. al (2023), pointed out that sex is a distinct and stable trait that has been proven to influence academic achievement and social interaction patterns. Individually, male and female students may act differently in same-gender or mixed-gender groups. Female students engage in greater affiliative conversations in all-female groups than in mixed groups.

Curşeu et al (2017), specified that gender disparities in participation and satisfaction with educational activities have also been reported in the literature. Females plan and organize their learning activities better, ask for more teacher support, and are more satisfied with educational activities than males. Furthermore, the emergence of collective intelligence reports a positive association between the percentage of women in the group and the group's performance in a variety of cognitive tasks. In collaborative learning settings, female-only and balanced gender groups outperformed male-only and male-dominant groups.

It was an argument of Zhan et al (2015), that mixed-gender and female-only groups reported higher levels of satisfaction and participation than male-only ones. Participants in male-only groups were also reported to be much more uncomfortable and upset than male participants in mixed-gender groups. Female participants, on the other hand, felt more at ease in groups with only other women. Outperformed male-only and male-dominated groups in terms of academic attainment.

A grade level is used as a significant variable to determine if the benefits of cooperative learning are most obvious among first-grade learners, who are just beginning a new educational cycle, or whether they are equally noticeable among all high school students, regardless of grade. The grade level is the group where people love working together to achieve mutual goals. Students gain interpersonal skills required for good team functioning such as listening carefully, asking for clarification, accepting others' points of view, and making constructive comments. This statement is from the work of Bećirović et al.(2022)

Based on the study conducted by Zhang et al (2017), those who are in higher grades have a higher expectation to perform well in

learning. However, compared with first-year students they are lacking of the motivation of action. First-year students are the main beneficiaries of the study they have made relating to cooperative learning. Their integrated skills improved a lot during this process they became more willing to utilize the skills they learned through collaboration activities.

Despite the benefits of cooperative learning, many instructors still use traditional methods to teach a topic to students at various grade levels in high school. The research was undertaken to assess the efficacy of cooperative learning with grade 12 students, which resulted in beneficial additions to known studies, demonstrating that there is a variation in how students respond to cooperative learning

Synthesis

Cooperative learning plays a significant role in influencing academic achievement and social interaction among students. Research indicates that male and female students exhibit different behaviors in same-gender and mixed-gender groups. Females are more inclined towards affiliative interactions and derive greater satisfaction from educational activities. Moreover, cooperative learning benefits students across all age groups, with younger students developing social skills and older students actively collaborating to achieve academic success. Additionally, the practice aids in the development of interpersonal skills such as listening, seeking explanations, and providing constructive feedback, benefiting students of all grade levels.

Interdependence

Butera and Buchs (2019), stated that social interdependence is the process by which the activities of other members of a group influence the results of individuals inside it. Positive social interdependence refers to a system of rules, conventions, or practices that require all group members to contribute to a shared purpose in order to achieve individual objectives. There are such things as member duty and accountability, interactions aimed at promoting the partners, the application of social skills, and critical evaluation of group activities. Keep in mind that others rely on one another to complete tasks or make goals more meaningful while attaining them interdependently.

According to the interdependence theory, elaborated by Premo (2018) understanding social dynamics requires considering more than just the person and the total social context. In particular, one must account for how interactions differ depending on how well individuals' needs and motives align because one person's actions can influence another's outcomes. It is also stated that individuals are more likely to invest time and resources in those around them when doing so encourages them to achieve their own goals.

Scager Scager et al. (2017) sighted that collaboration is strengthened when group members have a good dependency. This is accomplished when students believe that each individual's participation is critical to the group's success in completing the prescribed activity. Positive interdependence interaction can be induced by incentive or task-based methods. incentive-based interdependence arranges the incentive such that students' grades are determined by the team's overall performance. The rationale is that they will work individually to have an overall impact.

Collaborative Skills

Andreev (2022) Argued that there are advantages to having collaborative skills. It transforms learning into an active activity. The student must organize their thoughts, provide a cohesive argument to prove their position, defend that point in front of their peers, and persuade others that their argument is accurate. This active participation implies that a person learns and retains more knowledge. Promotes learning from others' perspectives. According to studies, people learn better when they are exposed to other points of view, particularly those from different origins. teaches you to think critically and rapidly. The student must swiftly synthesize replies and, if their argument is weak, alter their thoughts on the spot. Individuals learn how to think critically and fast while taking in new information and altering their own opinions.

Sulaiman and Shahrill (2015), articulated that traditional teaching methods that use confined activities to stress rote memorization or application of simple procedures will not assist pupils develop critical thinking skills or participate effectively in the learning process. Now that we are in the twenty-first century, learning modes are changing and becoming more social and cooperative. Developing collaborative skills in this new generation will engage a learner not only in his environment and peers but also within the environment. Collaborative skills include trusting others, communicating effectively, and becoming a leader or a good member of a group.

Hesse et al. (2014) claimed in their study that collaboration and the skills we developed over time have a profound impact on our daily lives. Whether at school or in our time, we are continuously immersed in circumstances that need us to use our social skills to coordinate with others. Given the prevalence of cooperation in everyday life, it is rather surprising that the development of social and collaborative abilities is widely assumed to occur spontaneously and without any help. People differ in their ability to effectively collaborate with others. As a result, there is a growing recognition that collaborative skills demand specific educational efforts.

Class Engagement

Sadeghi and Ganji (2020) pointed out that using cooperative learning in classes or lessons proved to be useful. Several methods. It makes the lesson simpler to absorb, learning is becoming more efficient and effective, it leads to active class engagement in which learners can confidently join the debate and express themselves with the ideas they generate, and it enhances higher-order thinking abilities. It may even foster lower-order cognitive skills, such as interpreting and analyzing concepts or circumstances, and helps children assimilate fresh knowledge.

Student involvement in class, or in the learning process, is an important characteristic that relates to how much time students dedicate to learning in the educational environment. The more they appreciate the classroom atmosphere, the more they are likely to participate in all activities assigned to them. Even if a teacher is task-oriented and covers as much information as possible, pupils may get disinterested. This indicates they are not actively thinking about, working with, or applying what is provided. Such disengagements impede learning in the classroom. Cooperative learning is one method of engaging students in the learning process, since it encourages all learners to actively engage in the lesson. This idea was derived from the published book of Celik and Suleyman (2016).

Geletu (2022) affirmed that effective use of cooperative learning methods in classrooms is critical to accommodating the variability of students from various sociocultural backgrounds and assuring their learning and class participation. Meanwhile, instructors are supposed to be guides and models rather than textbook experts. Assisting teachers in developing and updating their professional and pedagogical competencies and skills are positive possibilities for improving the quality of instructional practices in classrooms, as well as student learning engagement and results. Constant participation in class causes students to adopt constructivist attitudes by building positive interdependence, self-confidence, communication, information processing abilities, and critical thinking as a result of higher-order thinking and learning processes.

Synthesis

Social interdependence refers to the impact of collective actions on individual outcomes. Positive social interdependence involves norms, customs, and practices that necessitate all group members to contribute to a common goal, holding them responsible and accountable. Understanding social dynamics requires considering individual needs and motivations as actions can influence results. Active learning requires collaborative skills, promoting critical thinking and engagement. In the 21st century, learning methods emphasize social and cooperative learning, requiring the development of collaborative abilities. Cooperative learning fosters student engagement, boosts cognitive capabilities, and encourages active participation, benefitting students from diverse backgrounds and promoting constructivist attitudes, self-confidence, communication, information processing, and critical thinking.

Methodology

Research Design

This study used a descriptive survey method to collect data the measure the impacts of Cooperative Learning on the academic performance of selected high school students of Buenavista National High School in Buenavista, Quezon. The researcher used a survey questionnaire as an instrument. Based on the survey's result the researcher was able to determine the details of the study.

According to Shona Mc Combes, the descriptive survey approach seeks to correctly and systematically describe a population, situation, or phenomenon. It can answer what, where, when, and how inquiries but not why ones.

Respondents

The researcher proportionately selected 80 students who are enrolled in Buenavista National High School in the SY 2023-2024 and the Impacts Cooperative Learning on their academic performance. The respondents were composed of 27 males and 53 females with a total of 80 student respondents.

Instrument

The researcher prepared a researcher-made questionnaire which was validated by two experts. Part I of the questionnaire included the profile of the respondent. Part II of the questionnaire consisted of the impacts of Cooperative learning using the liker scale of; 5 strongly agree (SA), 4- agree (A), 3- fairly agree (FA), 2- disagree (D), 1- strongly disagree (SD) as perceived by selected high school learners in local secondary school in Bueanavista, Quezon.

To test the internal consistency of the questionnaire using Cronbach's Alpha, a pilot testing was conducted at San Pedro National High School Buenavista Quezon, with 12 respondents.

After the computation the result was 0.88 which is interpreted as Good. This means that there is an internal consistency in the prepared research instrument.

Procedure

Prior to the conduct of the study, the researcher sent a letter to the school principal and adviser. Upon approval, the researcher administered the instrument to the target respondents.

In administering the questionnaire, the researcher used the time allotted for vacant time to avoid distraction of class discussion. The student respondents was given enough time to answer the questions. After data gathering, the researcher collected them for tallying the scores and applied the statistical treatment used in the study.

The descriptive research method using likert scale was used in order to rate the impacts of cooperative learning to the academic performance of respondents. Data were gathered through "proportionate sampling" both male and female students of Buenavista

National High School in Buenavista, Quezon was selected to fill the questionnaire. Data was gathered through face-to-face survey following the safety health protocols preventing the spread of the virus.

Data Analysis

In this study, the researcher used statistical measures to treat the collected data. All the data was carefully read and examined for analysis. They were be tallied and entered a master list of the data collection sheet. Percentage and Frequency were used to interpret the profile of the respondents. To test the significant difference of three or more means, the researcher used the Kruskal-Wallis for non -parametric test.

Results and Discussion

This section deals with the presentation, analysis, and interpretation of the data. All the data gathered were presented here in tabulated form with corresponding interpretation. The first part described the profile of the respondents in terms of age, sex, grade level. The second part is the impacts of cooperative learning to the academic performance of selected high school students in Buenavista National High School in Buenavista, Quezon.

Table 1. *Frequency and Percentage Distribution of the Respondents According to Age*

Age	*Frequency*	*Percentage (%)*	*Rank*
12-14years old	56	70	1
15-17 years old	24	30	2
Total	80	100	

Table 1 displays the frequency and percentage distribution of respondents by age, revealing that the bulk of participants (70%) are between the ages of 12 -14. Meanwhile, 30% are 15 to 17, indicating that there are fewer responses in the later age group.

A study by Morales et al. (2019) discovered that the age distribution of high school students differed based on the type of school they attended. According to Pascual et al. (2017), the majority of high school students in the Philippines were between the ages of 12 and 15 years old, which is consistent with the results shown in Table 1, which show that the majority of respondents are between the ages of 12 and 14 years old.

The data implies that within the locale of the research conducted majority of high school students are below 15 years old.

Table 2. *Frequency and Percentage Distribution of the Respondents According to Sex*

Sex	*Frequency*	*Percentage (%)*	*Rank*
Male	27	34	2
Female	53	66	1
Total	80	100	

Table 2 presents the frequency and percentage distribution of respondents based on their sex, revealing that the majority of high school participants are female, accounting for 66% of the total population. Meanwhile, 34% are male, indicating that there are fewer male respondents compared to female respondents.

The 2020 Global Gender Gap Report of the World Economic Forum (WEF) reported that 71.3 percent of women are enrolled in secondary school and 40.4 percent in college, compared to only 60.2 percent and 40.4 percent, respectively, for males.

In a study by Johnson and Brown (2020) in different regions or locations of schools the number of male and female learners is significantly unequal, female enrollment numbers usually dominated the male enrollment record. Here in the Philippines the number of female students continuously expanding, PSA conducted a survey and it revealed that by region, the proportion of the population who completed education is higher among females compared to their male counterparts.

The data indicates that female students are dominant in schools. Within the research locale of this study more than half of the whole population are females.

Table 3. *Frequency and Percentage Distribution of the Respondents According to Grade Level*

Grade Level	*Frequency*	*Percentage (%)*	*Rank*
Grade 7	20	25	2
Grade 8	25	31	1
Grade 9	18	23	3
Grade 10	17	21	4
Total	80	100	

Table 3 illustrates the frequency and percentage distribution of respondents based on their grade level, indicating that the majority of high school participants belong to Grade 8, accounting for 31%. next is 25% or 20 grade 8 respondents Meanwhile, 23% belong to

Grade 9 with 18 respondents, and the least is Grade 10 with 17 respondents equivalent to 21%.

This finding did not tie with the findings of De La Fuente(2020)Enrollment in Junior High School (Grades 7–10) has continued to rise, indicating the system's ability in retaining students and re-engaging dropouts and early school leavers. When SHS was implemented in 2017, there was a considerable rise in total enrollments, particularly in metropolitan areas. We can see that in the data the population in each grade level decreases when entering a higher level.

The number of students in grade 8 is higher than the number of students in grade 7, The explanation was according to the school principal there are transfers students from a private school within the municipality.

Table 4. *Respondents Assessment on the Impacts of Cooperative Learning to the Academic Performance of Selected High School Students in terms of Interdependence*

A. Interdependence			
Indicators	*Mean*	*Verbal Interpretation*	*Rank*
1. I can work well with others.	4.18	Agree	4
2. I can share what I know to my group.	4.20	Agree	3
3. I can rely on others to boost my skills.	4.21	Strongly Agree	2
4. I can accomplish tasks on time.	4.28	Strongly Agree	1
5. I become respectful about differences of individuals.	4.11	Agree	5
Grand Mean	4.20	Agree	

Legend: Strongly Disagree (1.00-1.80), Disagree (1.81-2.60), Fairly Agree (2.61-3.40), Agree (3.41-4.20), Strongly Agree (4.21-5.00)

Table 4 shows the impact of cooperative learning in terms of Interdependence, the highest gain of the mean is indicator number 4, "I can accomplish tasks on time", with an average of 4.28 with the verbal interpretation of Strongly Agree. The lowest mean is indicator number 5, " I become respectful about differences of individuals". with the mean of 4.11 with the verbal interpretation of Agree.

Under the study of Willis (2021), Learners are likely to accomplish tasks with the help of others because they can finish them in a short period compared to those who work alone in their pursuit. This ties in with the result of the finding the highest gained mean is indicator five saying that learners can accomplish tasks on time as a result of interdependence.

Table 5. *Respondents Assessment on the Impacts of Cooperative Learning to the Academic Performance of Selected High School Students in terms of Collaborative Skills*

B. Collaborative Skills			
Indicators	*Mean*	*Verbal Interpretation*	*Rank*
1. I developed leadership skills.	4.18	Agree	2
2. I learned to trust the capabilities of others .	4.06	Agree	5
3. I am encouraged to communicate well with others.	4.11	Agree	4
4. I can participate in solving teamwork problems.	4.14	Agree	3
5. I became eager to properly handle each task delegated to me.	4.59	Strongly Agree	1
Grand Mean	4.22	Strongly Agree	

Legend: Strongly Disagree (1.00-1.80), Disagree (1.81-2.60), Fairly Agree (2.61-3.40), Agree (3.41-4.20), Strongly Agree (4.21-5.00)

Table 5 shows the impact of cooperative learning in terms of collaborative skills, the high gain of mean is indicator number 5, I became eager to properly handle each task delegated to me with an average of 4.59 with the verbal interpretation of Strongly Agree. The lowest mean is indicator number 2, "I learned to trust the capabilities of others with" an average of 4.06 Agree.

It conforms with the idea of Amato (2023), that proper delegation of tasks and taking responsibility for it is a good product of collaborative skills when you are part of a team your role is going to impact the whole group. Indicator 5 is about being eager to handle the task given with responsibility and effort to make an excellent outcome.

Table 6. *Respondents Assessment on the Impacts of Cooperative Learning to the Academic Performance of Selected High School Students in terms of Class Engagement*

C. Class Engagement			
Indicators	*Mean*	*Verbal Interpretation*	*Rank*
1. I become active in class discussion.	4.12	Agree	4
2. I can share ideas in front of the class.	4.20	Agree	2.5
3. I can brainstorm about a topic with peers.	4.08	Agree	5
4. I can confidently perform physical activities and presentation.	4.20	Agree	2.5
5. I can participate in creating quality outputs or group projects.	4.21	Strongly Agree	1
Grand Mean	4.16	Agree	

Legend: Strongly Disagree (1.00-1.80), Disagree (1.81-2.60), Fairly Agree (2.61-3.40), Agree (3.41-4.20), Strongly Agree (4.21-5.00)

Table 6 shows the impact of cooperative learning in terms of class engagement, the high gain of mean is indicator number 5, I can participate in creating quality outputs or group projects. with an average of 4.21 Agree. The lowest mean of 4.08 is indicator number 3, "I can brainstorm about a topic with peers", with the average mean of 4.16 Agree. The result is synonymous with the the idea of Baloche and Brody (2017), that there is a huge impact on creativity and innovation when a learner is exposed to engaging class

activities, their interest to make quality outputs is caused by the motivation that occurs during the engagement.

Table 7. *Significant difference on the perceived impacts of cooperative learning when grouped according to respondents' age*

Groups	*N*	*Median*	*df*	*P - value*	*Significant Level*	*Decision*
12-14y/o	56	4.13	1	0.273	0.05	Accept Ho
15-17 y/o	24	4.37				

Table 7 displays that the calculated P-value is 0.273 At a significance level of 0.05 and 1 degree of freedom, the critical value is 3.841. As the calculated H-value is lower than the critical value, the null hypothesis is accepted. Therefore, there is no noteworthy difference in the responses of students when classified according to age. This suggests that students aged 12-14 and 15-17 years old have a similar perception of the impact of cooperative learning on academic performance despite having different medians. However, this is insufficient evidence to reject the null hypothesis.

A study was conducted by Jabonete (2023) with the same result: age is not a good basis for comparing ideas; they do belong to the same generation, and the gap is not as large as it appears; for cooperative skills and interdependence advantages, learners from different age groups anticipate that without interaction, learning can be considered a crucial part of their school life. There is no substantial variation in respondents' perceptions when grouped by age, and while they vary in weighted mean, this does not alter the overall view of respondents.

The respondents perception did not have any difference when they are grouped according to two different age bracket. The impact of cooperative learning to them did not show any difference.

Table 8. *Significant difference on the perceived impacts of cooperative learning when grouped according to respondents' sex*

Groups	*N*	*Median*	*df*	*P - value*	*Significant Level*	*Decision*
Male	27	4.13	1	0.368	0.05	Accept Ho
Female	53	4.27				

According to Table 8, the determination of whether there is a significant difference in the perceived impacts of cooperative learning on academic performance based on the respondents' gender shows that the P-value is 0.368. This value is less than the critical value of 3.841 at a significance level of 0.05 and with 1 degree of freedom. Therefore, the null hypothesis is accepted, when a P- value of 0.368 indicates that there is no significant difference between the responses of male and high school students.

Janero's (2015) findings agreed with the result, gender or sex will not show different perspectives in a manner of cooperative attributes because they both see the contribution of performing tasks with a companion or working in groups not only in learning but in various life situations such as in the workplace and business matters. Male and female respondents do not share the same frequency in the data but the hypothesis was not rejected because their perception towards cooperative learning and its contribution to the benefit of the group does not share different points of view. Both males and females viewed cooperative learning as something that contributes to their overall transition as innovative learners.

The result of the data implied that when the students are grouped according to their sex, their insights about the impacts of cooperative learning will show variation. Indicating that female and male groups can see different scenarios with regards to how cooperative learning influences their performance specifically in terms of academic.

Table 9. *Significant difference on the perceived impacts of cooperative learning when grouped according to respondents' grade level*

Groups	*N*	*Median*	*df*	*P - value*	*Significant Level*	*Decision*
Grade 7	20	3.96	3	0.031	0.05	Reject Ho
Grade 8	25	4.27				
Grade 9	18	4.40				
Grade 10	17	4.40				

Table 9 presents the outcome of the significant difference in the perceived impact of cooperative learning on academic performance when the respondents are classified based on their grade level. The computed P-value is 0.031, the critical value is 7.815 with 3 degrees of freedom, it is also less than a significance level of 0.05. As a result, the null hypothesis is rejected, when a P-value of 0.031 suggests that there is a significant difference between the responses of Grade 7, Grade 8, Grade 9, and Grade 10 students regarding the perceived impacts of cooperative learning.

A study by Gellies (2016) saw the impact of cooperative learning, the result found that while students who are from different groups or grade levels in school will likely portray different points of view towards cooperative learning it depends upon the exposure and the influences around them a teacher to be exact.

The result indicates that the methods of instruction vary according to which class or level they belong to. This is consistent with the

finding in Table 9 that there is a significant difference in the perceived impact of cooperative learning when respondents are classified based on their grade level.

Conclusions

Based on the findings, the following conclusions are derived:

Most of the respondents are female, which ties in with the higher enrollment population of female high school students compared to male students within the research locale.

The researcher concluded that the respondent's point of view about cooperative learning varies by sorting them into their grade level, highlighting that they are exposed to different cooperative learning tasks, making not similar impacts on them.

The respondents developed collaborative skills and they are more motivated to engage themselves in accomplishing school activities with proper attributes as shown in the average mean under collaborative skills.

The respondent's profile in terms of sex and age does not affect how they interpret the impacts of cooperative learning on their academic journey and achievements.

To the School Administrators, they may provide different intervention strategies to make cooperative learning effective ,that will result to excellent performance of learners as well as the school.

To the Parents, they may continue to guide their children on how to engage in cooperative task at home , exposing them more possibilities of developing collaborative skills.

To the Teachers, they may utilize techniques on how to make lesson as engaging and allowing learners to build trust among peers and learn to respect the diversity in the classroom through creative, fun and collaborative activities.

To the Learners, they may continue to see the potential of working with others to help themselves improve and build the confidence that will make all their goals attainable.

To the Future Researchers, they may conduct a similar study and improve some flaws regarding cooperative leaning and it's impacts to the academic performance.

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