Assessing the Potential Influence of Social Media and Peer Pressure on the Academic Performance of Grade 10 Students in Mathematics

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Abstract— *This study examines the influence of social media exposure and peer pressure on Grade 10 students' mathematics performance in three high schools in the Visayas and Mindanao regions of the Philippines. The study involved 285 respondents who answered a questionnaire and provided their math grades. The findings reveal that social media exposure and peer pressure do not significantly affect the student's academic performance in mathematics. However, the study identified concerns about excessive social media use and the need for students to be cautious about the potential negative impacts of social media and peer pressure. The study concludes with a call for the adoption of proposed math learning enhancement plans to address these concerns and enhance the math learning experiences of students.*

Keywords— *Social Media Exposure, Peer Pressure, Academic Performance, Mathematics, Secondary Education.*

I. Introduction

Mathematics is a fundamental subject that is vital in various fields and disciplines. It is an essential tool for problem-solving and critical thinking, and its applications are found in science, engineering, economics, and many other areas. However, despite its importance, studies have shown that students often find mathematics challenging (Quintillan-Bugas, R. 2010). This perception of mathematics as difficult can lead to decreased motivation, lack of engagement, and ultimately, lower academic performance (Quintillan-Bugas, R. 2010).

In recent years, there has been growing concern about the impact of social media and peer influence on students' academic performance. Social media platforms have become ubiquitous, and students spend significant time browsing, interacting, and consuming content. While social media can have positive effects, such as facilitating communication and access to information, excessive use can also lead to distractions, decreased attention spans, and sleep deprivation, negatively impacting students' learning and academic performance (Kuss & Griff, 2011).

Peer influence is another factor that can significantly affect students' academic performance. Adolescents are particularly susceptible to peer pressure, and the desire to fit in or gain social acceptance can lead to conformity, even when it may be detrimental to their academic well-being. Negative peer pressure can manifest in various ways, such as encouraging truancy, discouraging engagement in studies, or promoting risky behaviors that can interfere with students' academic pursuits (Fadare et al., 2021).

Given the increasing prevalence of social media and the ever-present influence of peers, it is essential to investigate how these factors impact students' academic performance, particularly in mathematics. This study addresses this gap by examining the relationship between social media exposure, peer pressure, and the mathematics performance of Grade 10 students in selected public high schools in the Visayas and Mindanao regions of the Philippines. The findings of this study will provide valuable insights into the factors that influence students' academic performance and inform the development of interventions and strategies to enhance their learning experiences.

II. Methodology

This study employed a quantitative, non-experimental design using a descriptive method. This research design is appropriate for investigating the current status of a study's subjects. It is particularly relevant in this study to describe the influence of social media and peer pressure on Grade 10 students' mathematics performance. The descriptive method provides a comprehensive understanding of the relationship between these variables and provides a basis for developing an action plan or intervention program to address the identified issues.

The study was conducted in three high schools in the Visayas and Mindanao regions of the Philippines: Kinatarcan National High School, University of Cebu Banilad Campus, and San Vicente National High School. The study's respondents were Grade 10 students from these schools, with 285 participants.

A survey questionnaire was used as the instrument for data collection. The questionnaire consisted of three sets of adopted questionnaires designed to measure the following variables:
- Level of Mathematics academic performance of the respondents
- Level of peer pressure experienced by the respondents
- Level of social media exposure of the respondents

A Likert scale was used to measure the responses for each indicator in the questionnaire. To test the hypotheses, the data were analyzed using statistical methods, including frequency

count, percentage, weighted mean, and Pearson's r. The scoring procedure involved assigning numerical values to the Likert scale responses and interpreting the results based on the aggregate weighted means.

III. RESULTS AND DISCUSSIONS

This study investigated the influence of social media exposure and peer pressure on the academic performance of Grade 10 students in mathematics at selected public high schools in the Visayas and Mindanao regions of the Philippines. Data was presented in tables derived from various sources to analyze the results accurately. This allowed for a comprehensive evaluation of the influence of social media and peer pressure and an assessment of the respondents based on their identified profiles.

Data Gathered from Kinatarcan National High School

The data presented here provides an overview of the survey respondents' answers concerning the influence of social media and peer pressure on Grade 10 students' mathematics performance at Kinatarcan National High School.

Profile of the Respondents

The demographic information of the participants, such as their age, sex, parents' highest level of education, and total family monthly income, is presented below.

Age and Gender

Age and gender are essential variables that could help explain the study's results. The data gathered are presented in Table below.

Age (in years)	Female		Male		Total
	f	%	f	%	
17 and above	2	2.00			7
16	20	20.00			32
15	17	17.00			22
Total	39	39.00			61

Most respondents are 16 years old (52%), followed by 15 (39%), and 9% are 17 years and above. The majority of the respondents are male (61%). This composition suggests a potential for better performance in mathematics, as some studies indicate that boys tend to outperform girls in the subject (Eriksson et al., 2020). However, other research suggests no significant gender difference.

Most respondents are at the expected age for their grade level, indicating they began schooling at the typical age and have not experienced interruptions in their education. However, a small number of older students were included in the study. Students who progress through school without delays tend to perform better academically than those who experience grade repetition (Leaver et al., 2021).

Parents' Highest Educational Attainment

Parental education level is an important variable that could influence the study's results. The data is presented in the Table below.

Educational Attainment	Mother	Father
	f	
	%	f
Master's Degree	2	2.00
With Master's Units	1	1.00
College Graduate	3	3.00
College Level	1	1.00
High School Graduate	24	24.00
High School Level	14	14.00
Elementary Graduate	17	17.00
Elementary Level	35	35.00
No Formal Schooling	1	1.00
No Response	2	2.00
Total	100	100.00

The majority of both mothers (35%) and fathers (34%) have attained only an elementary-level education. This is followed by 24% of mothers and 17% of fathers who are high school graduates.

Very few parents pursued higher education. This suggests a potential limitation in parents' ability to assist their children with schoolwork due to their limited educational background. Parental educational attainment is crucial in their capacity to guide their children academically (Muhdi et al., 2020). Parents with limited knowledge in specific subject areas might be unable to support their children adequately.

Combined Family Monthly Income

Combined family monthly income is an important variable that could impact students' access to resources and support for their education. The data is presented in the Table below.

Monthly Income (in pesos)	f	%
Above 30,000	5	5.00
25,001-30,000	4	4.00
20,001-25,000	2	2.00
15,001-20,000	5	5.00
10,001-15,000	9	9.00
10,000 and below	75	75.00
Total	100	100.00

Most (75%) respondents have a combined family monthly income of P 10,000 or below. This indicates that most respondents come from low-income families who may face financial struggles. Financial constraints can affect a family's ability to provide necessary educational resources and support, potentially hindering students' academic progress (Hartarto et al., 2021).

Extent of the Respondents' Social Media Exposure

This section examines the extent of respondents' exposure to social media, a potential factor affecting their academic performance.

The table below presents the data on social media exposure, with an aggregate mean of 3.32, indicating that respondents are moderately exposed to social media. While social media can enrich vocabulary and facilitate communication with classmates, excessive exposure can lead to missed assignments and a decline in academic performance.

S/N	Indicators	WM	Verbal Description
1	Addiction to online social networks is a problem issue that affects my academic life.	3.11	Moderate
2	Online Social Network destructs me from my studies.	3.50	High
3	I find it flexible to focus on work by logging into Facebook, as it helps me to remain in contact with classmates.	3.63	High
4	The time for studying my lesson is lessened due to the excessive usage of social media	3.61	High
5	My vision blurs due to radiation, which affects my reading capability.	3.19	Moderate
6	It reduces my concentration span during classroom discussions due to lack of sleep	3.31	Moderate
7	My study habits have changed due to lack of sleep	3.35	Moderate
8	Instead of attending minor subjects, I spend my time using SNS	2.34	Low
9	During class recitation, I suffer from a loss of memory	3.25	Moderate
10	The comments and suggestions of my friends online motivate me to study well.	3.22	Moderate
11	It is easy to obtain information when I cannot understand our topic	3.53	High
12	I spend more than three hours using/accessing my social media account.	3.62	High
13	Social media is a distraction to release boredom	3.52	High
14	I use social media because it allows me to reinvent myself	2.93	Moderate
15	Social media is a venue for interactive discussion	3.07	Moderate
16	Social media enriches my vocabulary.	3.85	High
17	I see my social media account as a venue for releasing my school pressure and stress.	3.50	High
18	Social media affects my spelling proficiency.	2.92	Moderate
19	Because of social media, I sometimes forget/miss making assignments and other school tasks	3.76	High
20	I stay awake late at night, updating, watching videos, and responding to my account's newsfeeds.	3.38	Moderate
21	I see social media as the reason for the increase or decrease in my grades in school.	3.14	Moderate
Aggregate Weighted Mean		3.32	Moderate

Legend: 4.21-5.00-Very High; 3.41-4.20-High, 2.61-3.40-Moderate; 1.81-2.60-Low; 1.00-1.80-Very Low

Social media exposure appears to positively and negatively affect the respondents. Students must be aware of both the advantages and disadvantages of social networking sites to maintain a balanced approach to social media use (Abbas et al., 2019).

Level of Peer Pressure Experienced by the Respondents

S/N	Indicators	WM	Verbal Description
1	Sometimes I miss classes because my friends urge me to do so.	2.49	Low
2	I cannot resist going to a late-night party with friends.	2.41	Low
3	I go on a date with my friend despite parental warnings.	2.44	Low
4	Sometimes I do things because my friends want me to do so.	2.70	Moderate
5	I feel pressure to chat for long hours on the internet.	3.30	Moderate
6	Sometimes, I do something wrong just to be good in my friends' view.	2.48	Low
7	I cannot say 'NO' to my friends even if my parents do not agree.	2.45	Low
8	There is always a peer pressure for dating.	2.45	Low
9	At times I feel peer pressure to smoke.	1.68	Very Low
10	Sometimes, I do violent acts to keep up with my peers.	1.95	Low
11	In close relationships, we have to approve pressures of peers.	2.55	Low
12	I know my limits when with friends.	3.90	High
13	I find it difficult to escape from peer pressure.	2.63	Moderate
14	Sometimes I have to undergo peer pressure to be liked in a group.	2.64	Moderate
15	Many times, I put off my homework and other important assignments for friends' parties.	2.29	Low
16	Sometimes I have to appease my peers by doing things that I don't want to do.	2.28	Low
17	To maintain a status in a peer group, sometimes I pressure my parents to buy an expensive item.	1.92	Low
18	I do not take advice from my parents about peer group activities.	2.01	Low
19	It is difficult to think about the negative consequences of what we do with peers.	2.69	Moderate
20	There is no harm in doing one wrong with friends when we do several good things with them.	2.65	Moderate
21	It is tough for me to deny a friend's request to drink at a party or on other occasions.	1.97	Low
22	Sometimes, I do risky and harmful acts to get acceptance in the peer group.	1.99	Low
23	When I feel uncomfortable in a group, I do not know how to say NO.	2.55	Low
24	I usually compromise with peers' requests for a movie, party, etc.	2.45	Low
25	At times, I feel peer pressure to watch pornography.	1.87	Low
Aggregate Weighted Mean		2.43	Low

Legend: 4.21-5.00 - Very High; 3.41-4.20 - High, 2.61-3.40 - Moderate; 1.81-2.60 - Low; 1.00-1.80 - Very Low

The level of peer pressure experienced by the respondents is presented in Table 6. The aggregate weighted mean of 2.43

indicates that the respondents experienced low peer pressure. However, they moderately experience pressure to spend long hours on the internet due to chatting with friends (weighted mean of 3.30). The respondents also reported moderate pressure to do things their friends ask them to do (weighted mean of 2.70) and to disregard the consequences of their actions with peers.

Peer pressure has two facets: positive and negative. Positive peer pressure can involve influencing classmates to follow school rules and complete tasks. Negative peer pressure can lead to engagement in inappropriate behaviors. Students should be able to differentiate between these two types of peer pressure and avoid the latter, as it can negatively affect their academic performance.

Level of Academic Performance of the Respondents in Mathematics

Level	Numerical Range	f	%
Advanced	90-100	37	37.00
Proficient	85-89	25	25.00
Advancing Proficiency	80-84	34	34.00
Developing	75-79	4	4.00
Beginning	74 and below	0	0.00
Total		**100**	**100.00**
Mean		**88.06**	
St. Dev.		**5.93**	

The table above presents the respondents' academic performance in Mathematics. 37% of the respondents have "advanced performance" with grades ranging from 90 to 100, followed by 34% with "advancing proficiency performance" (grades 80-84), and 25% with "proficient performance" (grades 85-89). Only 4% have "developing performance" (grades 75-79).

Despite the generally commendable performance with a mean of 88.06% and a standard deviation of 5.93, some respondents still need improvement. Maintaining high performance and addressing lower performance is crucial for continued academic success. Teachers should monitor and support students in maintaining their high grades and encourage those with lower performance to improve. Sometimes, high-performing students may relax their efforts, assuming the lessons are always manageable, while in reality, they need to maintain consistent effort (Dignath & Veenman, 2021).

Test of Significant Relationship between Social Media Exposure and Academic Performance of the Respondents

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Social Media Exposure and Academic Performance	-0.233*	Negligible Negative	0.020	Reject Ho	Significant
*significant at p<0.05 (two-tailed)					

The table above presents the test results of the relationship between social media exposure and respondents' mathematics performance using Pearson's *r* at a 0.05 significance level. The *r*-value of -0.233 indicates a negligible negative correlation between the two variables, suggesting that increased social media exposure may lead to decreased academic performance. The computed *p*-value of 0.020, less than 0.05, confirms a significant relationship between these variables.

This result aligns with past research indicating the adverse effects of social media exposure on academic performance (Raganta et al., 2021; Shi et al., 2020). Excessive social media use can distract students from fulfilling school requirements and attending to their studies, putting their academic performance at risk.

Test of Significant Relationship between Peer Pressure and Academic Performance of the Respondents

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Peer Pressure and Academic Performance	-0.484*	Weak Negative	0.000	Reject Ho	Significant
*Significant at p<0.05 (two-tailed)					

The test of the relationship between peer pressure and academic performance is presented in the above table. The computed Pearson's r of -0.484 suggests a weak negative correlation between peer pressure and respondents' academic performance in mathematics. This indicates that increased peer pressure may lead to a decline in academic performance. The p-value of 0.000, less than 0.05, confirms a significant relationship between these variables.

These results imply that peer pressure can negatively affect academic performance in mathematics. Previous research has reported similar findings (Filade et al., 2019). It is recommended that teachers monitor student peer groups to identify potential negative influences and intervene when necessary while encouraging positive peer interactions. This approach can help students become more aware of their social environment's impact on academic performance.

Results of the Data Gathered from the University of Cebu Banilad Campus

This section presents the results from the University of Cebu-Banilad High School, including respondent profiles (age, gender, parents' highest educational attainment, and combined family monthly income), the extent of social media exposure, the level of peer pressure experienced, and academic performance in mathematics.

Profile of the Respondents

Age and Gender

Age (in years)	Female (f)	Female (%)	Male (f)	Male (%)	Total (f)	Total (%)
17 and above	6	6.32	9	9.47	15	15.79
16	14	14.74	27	28.42	41	43.16
15	12	12.63	24	25.26	36	37.89
14	0	0.00	3	3.16	3	3.16
Total	**32**	**33.68**	**63**	**66.32**	**95**	**100.00**

As shown in the table above, 43.16% of respondents are 16, 37.89% are 15, 15.79% are 17 years and above, and 3.16% are 14 years old. The majority of respondents are male (66.32%). Most respondents are at the expected age for Grade 10. This data suggests that these students started school at the right age and have not had interruptions in their education. Students who attend classes with classmates of the same age may be less likely to experience bullying or have difficulty keeping up with lessons (Burger et al., 2022).

Parents' Highest Educational Attainment

Educational Attainment	Mother (f)	Mother (%)	Father (f)	Father (%)
Master's Degree	13	13.68	12	12.63
With Master's Units	6	6.32	6	6.32
College Graduate	60	63.16	57	60.00
College Level	9	9.47	8	8.42
High School Graduate	4	4.21	9	9.47
High School Level	3	3.16	3	3.16
Total	95	100.00	95	100.00

The table above shows that most parents are college graduates (63.16% for mothers and 60.00% for fathers), while those with only a high school education comprise the smallest percentage. Notably, 13.68% of mothers and 12.63% of fathers have a master's degree. Higher parental educational attainment can be associated with a more remarkable ability to support their children's academic success. A lack of educational background may limit parents' capacity to assist their children with school tasks and assignments (Davis-Kean et al., 2021).

Combined Family Monthly Income

Monthly Income (in pesos)	f	%
Above 30,000	53	55.79
25,001-30,000	6	6.32
20,001-25,000	9	9.47
15,001-20,000	9	9.47
10,001-15,000	6	6.32
10,000 and below	12	12.63
Total	95	100.00

The table above presents data on the combined family's monthly income. 55.79% of respondents report a combined family monthly income above P30,000, while 12.63% report a combined monthly income of P10,000 and below. This distribution highlights a disparity in the financial capacity of respondents to support their education. Families with higher incomes generally have a more remarkable ability to invest in their children's education, including higher education, compared to those with lower incomes. Research has shown that family income significantly influences children's educational levels (Lin and Lv, 2017).

Extent of the Respondents' Social Media Exposure

S/N	Indicators	WM	Verbal Description
1	Addiction to online social networks is problem issue that affects my academic life.	3.58	High
2	Online Social Network destructs me from my studies.	3.74	High
3	I find it flexible to focus on work by logging into Facebook as it helps me to remain in contact with classmates.	3.31	Moderate
4	The time for studying my lesson is lessen due to the excessive usage of social media	3.91	High
5	My vision blurs due to radiation which affects my reading capability.	3.03	Moderate
6	It reduces my concentration span during classroom discussion due to lack of sleep	3.49	High
7	My study habits have changed due to lack of sleep	3.64	High
8	Instead of attending minor subjects, I spend my time on using SNS	2.19	Low
9	During class recitation, I suffer from loss of memory	2.66	Moderate
10	The comments and suggestions of my friends online motivate me to study well.	3.64	High
11	It easy to obtain information when I cannot understand our topic	2.73	Moderate
12	I spend more than three hours using/accessing my social media account.	3.92	High
13	Social media is a distraction to release boredom	4.18	High
14	I use social media because it allows me to reinvent myself	3.65	High
15	Social media is a venue for interactive discussion	4.27	Very High
16	Social media enriches my vocabulary.	4.44	Very High
17	I see my social media account as a venue for releasing my school pressure and stress.	4.11	High
18	Social media affects my spelling proficiency.	4.27	Very High
19	Because of social medias I sometimes forgot/missed making assignments and other school tasks	3.79	High
20	I stay awake late at night updating, watching videos, and responding to the newsfeeds of my account.	3.35	Moderate
21	I see social media as the reason for the increase or decrease in my grades in school.	3.08	Moderate
Aggregate Weighted Mean	3.57	High	
Legend:	4.21-5.00-Very High; 3.41-4.20-High, 2.61-3.40-Moderate; 1.81-2.60-Low; 1.00-1.80-Very Low		

The table above presents data on the extent of social media exposure among respondents. The aggregate weighted mean of 3.57 indicates high social media exposure. The statements receiving the highest ratings (weighted means 4.27 to 4.44) relate to social media enriching vocabulary, influencing spelling proficiency, and serving as a venue for social interaction. Social media is also reported to be a source of stress release and a means of connecting with classmates for academic

support. However, some respondents acknowledge that social media can negatively affect their academic performance, particularly by contributing to missed assignments and projects. Studies have shown that excessive internet use can reduce study time and negatively impact study habits (Mathur et al., 2019).

Level of Peer Pressure Experienced by the Respondents

S/N	Indicators	WM	Verbal Description
1	Sometimes I miss classes because my friends urge me to do so.	1.49	Very Low
2	I cannot resist going to a late-night party with friends.	2.28	Low
3	I go on a date with my friend despite parental warnings.	2.09	Low
4	Sometimes I do things because my friends want me to do so	2.29	Low
5	I feel pressure to chat for long hours on the internet.	2.91	Moderate
6	Sometimes, I do something wrong just to be good in my friends' view.	2.33	Low
7	I cannot say 'NO' to my friends even if my parents do not agree.	2.18	Low
8	There is always a peer pressure for dating.	3.16	Moderate
9	At times I feel peer pressure to smoke.	2.54	Low
10	Sometimes I do violent acts to keep up with peers.	2.03	Low
11	In close relationships, we have to approve pressures of peers	3.56	High
12	I know my limits when with friends.	4.35	Very High
13	I find it difficult to escape from peer pressure.	2.81	Moderate
14	Sometimes I have to undergo peer pressure to be liked in a group.	2.94	Moderate
15	Many times, I put off my homework and other important assignments for friends' party.	2.43	Low
16	Sometimes I have to appease my peers by doing things that I don't want to do.	2.83	Moderate
17	To maintain a status in a peer group, sometimes I pressurize my parents to buy an expensive item.	2.12	Low
18	I do not take advice from my parents about peer group activities.	2.49	Low
19	It is difficult to think about the negative consequences of what we do with peers.	3.08	Moderate
20	There is no harm in doing one wrong with friends when we do a number of good things with them	2.40	Low
21	It is very difficult for me to deny friend's request to drink in a party or on other occasions.	1.65	Very Low
22	Sometimes I do risky and harmful acts to get acceptance in the peer group.	2.28	Low
23	When I feel uncomfortable in a group, I do not know how to say NO.	2.71	Moderate
24	I usually compromise with peers' request for a movie, party, etc	3.25	Moderate
25	At times I feel peer pressure to watch pornography.	2.01	Low
Aggregate Weighted Mean	**2.57**	**Low**	

Table above presents data on the level of peer pressure experienced by respondents. The aggregate mean of 2.57 indicates a low level of peer pressure. However, moderate pressure is reported in areas such as considering the negative consequences of actions taken with peers, feeling uncomfortable saying no to peers, compromising with peers' requests, and appeasing peers by doing things they do not want to do.

Students must recognize and respond appropriately to peer pressure situations to avoid negative consequences. Excessive peer influence can lead to dependence on peers' decisions and negatively impact academic performance (Heiman & Olenik-Shemesh, 2019; Lévesque et al., 2020). Parents and educators should guide students in navigating peer pressure and making independent decisions.

Level of Academic Performance of the Respondents in Mathematics

Level	Numerical Range	f	%
Advanced	90-100	93	97.89
Proficient	85-89	2	2.11
Advancing Proficiency	80-84	0	0.00
Developing	75-79	0	0.00
Beginning	74 and below	0	0.00
Total		**95**	**100.00**
Mean		**95.22**	
St. Dev.		**2.59**	

The table above shows the level of academic performance in mathematics among respondents. 97.89% have "advanced performance" (grades 90-100), while only 2.11% have "proficient performance" (grades 85-89). This indicates exemplary performance in mathematics for the vast majority of respondents. While a few students need to improve their performance, the overall high achievement suggests that they effectively manage their academic responsibilities despite potential distractions. However, continuous monitoring and support from teachers are essential to maintain this high level of performance (Teng et al., 2022).

Test of Significant Relationship between Social Media Exposure and Academic Performance of the Respondents

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Social Media Exposure and Academic Performance	0.313*	Weak Positive	0.002	Reject Ho	Significant
*significant at p<0.05 (two-tailed)					

The table above presents the test results of the relationship between social media exposure and academic performance in mathematics using Pearson's *r* at a 0.05 significance level. The computed Pearson's *r*-value of 0.313 suggests a weak positive correlation between the two variables. This means increased social media exposure may be associated with a slight increase in mathematics performance. The p-value of 0.002, less than 0.05, indicates a significant relationship between social media exposure and academic performance.

These findings are supported by studies showing a link between social media use and academic performance (Kolhar et al., 2021). When used responsibly and with guidance from teachers and parents, social media can be a valuable tool for learning and collaboration. Integrating technology into instruction in a teacher-guided manner can positively impact student performance (Wu et al., 2019).

Test of Significant Relationship between Peer Pressure and Academic Performance of the Respondents

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Peer Pressure and Academic Performance	0.093	Negligible Positive	0.368	Do not reject Ho	Not Significant
*significant at p<0.05 (two-tailed)					

The table above presents the test results of the relationship between peer pressure and academic performance in mathematics using Pearson's *r* at a 0.05 significance level. The computed Pearson's *r*-value of 0.093 suggests a negligible positive correlation between peer pressure and academic performance. This means that an increase in peer pressure experienced by the respondents may result in a negligible increase in their mathematics performance. However, the p-value of 0.368, more significant than 0.05, indicates that the null hypothesis is not rejected, implying no significant relationship between peer pressure and academic performance.

These results suggest that peer pressure does not significantly affect respondents' academic performance. This finding aligns with Fadare et al. (2021), which found no association between peer group pressure and the academic performance of adolescents in Nigeria. This could indicate that students who are not overly dependent on peer influence in their studies may not experience a significant impact on their academic performance from peer pressure. Teachers can help by evaluating classroom groupings and monitoring student activities to correct inappropriate behaviors and foster a positive learning environment (Chou & Zou, 2020).

Results of the Data Gathered from San Vicente National High School

This section presents an overview of the responses from San Vicente National High School, focusing on the influence of social media and peer pressure on Grade 10 students' mathematics performance.

Profile of the Respondents

Age and Gender

Age (in years)	Female (f)	Female (%)	Male (f)	Male (%)	Total (f)	Total (%)
17 and above	4	4.44	5	5.56	9	10.00
16	20	22.22	25	27.78	45	50.00
15	24	26.67	10	11.11	34	37.78
No Response	2	2.22	0	0.00	2	2.22
Total	50	55.56	40	44.44	90	100.00

According to the table above, 50.00% of the respondents are 16 years old, followed by 37.78% who are 15. There were only 10.00% from the age of 17 and above, and 2.22% had no response. On the other hand, 55.56% of the respondents are female, and 44.44% are male respondents. The respondents' composition displays that most of them are at their expected age in school, although a few can be noted as older than their expected age.

Besides, the group has more female respondents, which can be associated with being more demanding of their learning goals. Girls are often more focused on their studies than boys (Tossavainen et al., 2020). However, boys are usually more analytical compared to girls. Hence, no definite results regarding who performs better in math (Gray et al., 2019).

Parents' Highest Educational Attainment

Educational Attainment	Mother (f)	Mother (%)	Father (f)	Father (%)
Master's Degree	3	3.33	3	3.33
With Master's Units	0	0.00	0	0.00
College Graduate	10	11.11	6	6.67
College Level	15	16.67	4	4.44
High School Graduate	28	31.11	24	26.67
High School Level	20	22.22	24	26.67
Elementary Graduate	6	6.67	8	8.89
Elementary Level	8	8.89	15	16.67
No Formal Schooling	0	0.00	3	3.33
No Response	0	0.00	3	3.33
Total	90	100.00	90	100.00

The table above shows that 31.11% of the mothers had finished high school, followed by 22.22% at the high school level. In addition, 16.67% of the mothers were college-level, and 11.11% were college graduates. On the other hand, 26.67% of the fathers had finished high school and were of high school level, followed by 16.67% at the elementary level. The parents' highest educational attainment can be the basis for assessing their skills in assisting their children in their school tasks and assignments.

Parents with higher educational attainment are expected to provide more assistance than those without education. Studies have shown that parents' educational attainment can significantly affect their children's school performance. Mathematics is one of the subjects that students need assistance with, so when they are at home, family members, including the parents, can help them with their math-related tasks (Qureshi & Qureshi, 2021).

Combined Family Monthly Income

The respondents' combined family monthly income indicates their ability to sustain their financial needs in school. Thus, it is essential to gather such information from the respondents. The above table shows the results of the data gathered based on the respondents' profiles.

Monthly Income (in pesos)	f	%
Above 30,000	7	7.78
25,001-30,000	14	15.56
20,001-25,000	6	6.67
15,001-20,000	14	15.56
10,001-15,000	6	6.67
10,000 and below	40	44.44
No Response	3	3.33
Total	**90**	**100.00**

The table shows that 44.44% of the respondents have a combined family monthly income of P10,000 or below. This is followed by 15.56% of the respondents with family income from P15,001 to P20,000 or P25,001 to P30,000. It is also interesting that 7.78% have monthly incomes above P30,000. The data illustrates that most respondents belong to a family in the poverty line.

Hence, a family below the poverty line cannot address its children's financial needs. Students of low-income families often encounter financial-related problems in school, which could hinder their learning opportunities. Low-income students are often associated with low school performance because they cannot meet school requirements and focus on their studies (Bryan et al., 2020).

Extent of the Respondents' Social Media Exposure

This section presents the extent of the respondents' social media exposure, which is assumed to be a factor affecting their performance in mathematics.

S/N	Indicators	WM	Verbal Description
1	Addiction to online social networks is a problem issue that affects my academic life.	3.33	Moderate
2	Online Social Network destructs me from my studies.	3.38	Moderate
3	I find it flexible to focus on work by logging into Facebook, as it helps me to remain in contact with classmates.	3.76	High
4	The time for studying my lesson is lessened due to the excessive usage of social media	3.42	High
5	My vision blurs due to radiation, which affects my reading capability.	3.26	Moderate
6	It reduces my concentration span during classroom discussions due to lack of sleep	3.36	Moderate
7	My study habits have changed due to lack of sleep	3.47	High
8	Instead of attending minor subjects, I spend my time using SNS	2.97	Moderate
9	During class recitation, I suffer from a loss of memory	3.61	High
10	The comments and suggestions of my friends online motivate me to study well.	3.81	High
11	It is easy to obtain information when I cannot understand our topic	3.64	High
12	I spend more than three hours using/accessing my social media account.	3.48	High
13	Social media is a distraction to release boredom	3.51	High
14	I use social media because it allows me to reinvent myself	3.28	
15	Social media is a venue for interactive discussion	3.52	High
16	Social media enriches my vocabulary.	3.57	High
17	I see my social media account as a venue for releasing my school pressure and stress.	3.59	High
18	Social media affects my spelling proficiency.	3.22	Moderate
19	Because of social media, I sometimes forget/missed making assignments and other school tasks	3.74	High
20	I stay awake late at night updating, watching videos, and responding to the newsfeeds of my account.	3.61	High
21	I see social media as the reason for the increase or decrease in my grades in school.	3.21	Moderate
Aggregate Weighted Mean	**3.46**	**High**	

As seen in the table, the extent of the respondents' social media exposure has an aggregate weighted mean of 3.46, which means that the respondents have high social media exposure. This exposure is described by their ability to remain in contact with their classmates and receive support from their friends, which motivates them to study well and obtain information when they cannot understand things in school. However, social media exposure has also caused them to not comply with their assignments and other school tasks, as well as memory loss and lack of sleep because they spend extended time watching videos and responding to newsfeed comments.

The respondents' experiences with social media have both positive and negative effects. It is, therefore, vital that they can control the adverse effects that social media has brought to them so that they do not affect their studies (Whelan et al., 2020). On the other hand, they have to validate their claim on the positive effects that social media has brought to them.

Level of Peer Pressure Experienced by the Respondents

This section presents the level of peer pressure experienced by the respondents, which is also considered in this study and could affect their mathematics performance.

S/N	Indicators	WM	Verbal Description
1	Sometimes, I miss classes because my friends urge me to do so.	2.58	Low
2	I cannot resist going to a late-night party with friends.	2.59	Low
3	I go on a date with my friend despite parental	2.21	Low

	warnings.		
4	Sometimes, I do things because my friends want me to do so	2.71	Moderate
5	I feel pressure to chat for long hours on the internet.	3.17	Moderate
6	Sometimes, I do something wrong just to be good in my friends' view.	2.66	Moderate
7	I cannot say 'NO' to my friends even if my parents disagree.	2.44	Low
8	There is always peer pressure when dating.	2.63	Moderate
9	At times, I feel peer pressure to smoke.	2.19	Low
10	Sometimes, I do violent acts to keep up with my peers.	2.13	Low
11	In close relationships, we have to approve of the pressures of peers	3.08	Moderate
12	I know my limits when with friends.	4.02	High
13	I find it difficult to escape from peer pressure.	3.21	Moderate
14	Sometimes, I have to undergo peer pressure to be liked in a group.	2.84	Moderate
15	I often put off my homework and other important assignments for friends' parties.	2.19	Low
16	Sometimes, I have to appease my peers by doing things I don't want.	2.60	Low
17	To maintain a status in a peer group, sometimes I pressure my parents to buy an expensive item.	2.24	Low
18	I do not take advice from my parents about peer group activities.	2.56	Low
19	It is difficult to think about the negative consequences of what we do with peers.	2.98	Moderate
20	There is no harm in doing one wrong with friends when we do a number of good things with them	3.19	Moderate
21	It is very difficult for me to deny friend's request to drink in a party or on other occasions.	2.41	Low
22	Sometimes I do risky and harmful acts to get acceptance in the peer group.	2.34	Low
23	When I feel uncomfortable in a group, I do not know how to say NO.	2.98	Moderate
24	I usually compromise with peers' request for a movie, party, etc	2.87	Moderate
25	At times I feel peer pressure to watch pornography.	2.08	Low
Aggregate Weighted Mean	**2.68**	**Moderate**	

It can be seen in the table above that the aggregate weighted mean of the level of peer pressure experienced by the respondents is 2.68, which means that they have moderate experiences of peer pressure. However, the statement that they know their limits with their friends got the highest weighted mean of 4.02, which means the respondents know their limits when they feel peer pressure. Students must know their boundaries regarding the extent to which their friends can influence their decision-making because too much influence from friends will no longer benefit them. The students must evaluate peer pressure and its effects on their performance, which can be done by self-assessment.

On the other hand, the respondents also experience pressure having to chat with friends for long hours, difficulty escaping from peer pressure, the feeling of having to undergo peer pressure to be liked by the group, and the need to approve peer pressure. These situations can put the students at risk when they are in a group that has a bad influence on them (Abbas et al., 2019). Thus, monitoring students' activities regularly is needed to avoid situations affecting their studies.

Level of Academic Performance of the Respondents in Mathematics

This section presents the respondents' level of academic performance in mathematics.

Level	Numerical Range	f	%
Advanced	90-100	23	25.56
Proficient	85-89	48	53.33
Advancing Proficiency	80-84	19	21.11
Developing	75-79	0	0.00
Beginning	74 and below	0	0.00
Total		**90**	**100.00**
Mean		**87.67**	
St. Dev.		**3.77**	

It can be seen in the table that the respondents have a mean performance of 87.67 and a 3.77 standard deviation. 53.33% of the respondents have proficient performance, which means they attain grades from 85 to 89, followed by 25.56% who have advanced performance, indicating that they have grades from 90 to 100. Lastly, 21.11% had advancing proficiency performance, meaning they attained grades from 80 to 84.

The data suggest that most of the respondents are performing well in mathematics. However, the students need to maintain this performance. Students' performance can either improve or decline in the next quarter, depending on the lessons at the given period of the year. In most cases, the complexity of the lessons differs in every quarter of the year. Thus, students must monitor their progress to perform well (Stehle & Peters-Burton, 2019).

Test of Significant Relationship between Social Media Exposure and Academic Performance of the Respondents

This section discusses the test of the hypothesis on the relationship between social media exposure and the respondents' academic performance.

The below table shows the test of the hypothesis using Pearson's r at 0.05 level of significance. It was hypothesized that there is a significant relationship between social media exposure and the respondents' academic performance in math.

343

The computed value of r is 0.166, and the p-value is 0.188, which is more significant than the significance level of 0.05 (p>0.05). The p-value suggests that the null hypothesis should not be rejected. This means that the data showed no significant relationship between social media exposure and the respondents' performance in math.

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Social Media Exposure and Academic Performance	0.166	Negligible Positive	0.118	Do not reject Ho	Not Significant
*significant at p<0.05 (two-tailed)					

The results of the hypothesis mean that social media exposure does not influence the students' math performance. This is contrary to the findings of Al-dheleai et al. (2020), which found a significant relationship between social presence on social networking sites and students' academic achievement. They found that online social presence contributes to better learning and academic performance. In their study, social media was used for teachers' instructional delivery. Thus, it can be noted that social media can effectively reinforce instruction when utilized appropriately.

Test of Significant Relationship between Peer Pressure and Academic Performance of the Respondents

This section discusses the test of the hypothesis on the relationship between peer pressure and the respondents' performance in math.

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Peer Pressure and Academic Performance	0.032	Negligible Positive	0.762	Do not reject Ho	Not Significant
*significant at p<0.05 (two-tailed)					

In the above table, the hypothesis test of peer pressure and the respondents' math performance used Pearson's *r* at the 0.05 significance level. The computed value of r is 0.032, and the p-value is 0.762. The p-value is more significant than the 0.05 level of significance (p>0.05), which means that the null hypothesis must not be rejected. The results mean that no significant relationship exists between peer pressure and the respondents' math performance.

The study's findings imply that peer pressure cannot affect the respondents' math performance. This finding is contradicted by Bakar et al. (2021), which found a negative influence of peers on the students' mathematics achievement.

Results of the Data Gathered from the Three Identified Schools

This section provides an overview of the responses from the three identified schools, focusing on the influence of social media and peer pressure on Grade 10 students' mathematics performance.

Profile of the Respondents

This section presents the profile of the respondents in terms of their age, gender, parents' highest educational attainment, and combined family monthly income. The results are based on the data gathered from the three schools.

Age and Gender

This portion presents the respondents' data about their profiles, such as age and gender.

Age (in years)	Female (f)	Female (%)	Male (f)	Male (%)	Total (f)	Total (%)
17 and above	12	4.21	21	7.37	33	11.58
16	54	18.95	84	29.47	138	48.42
15	53	18.60	56	19.65	109	38.25
14	0	0.00	3	1.05	3	1.05
No Response	2	0.70	0	0.00	2	0.70
Total	121	42.46	164	57.54	285	100.00

As seen in the Table above, 48.42% of the respondents were 16 years old, followed by 38.25% of the respondents who were 15 years old. Moreover, 11.58% of them were 17 years old and above. Regarding gender, most respondents were males, 57.54%, compared to 42.46% of the female respondents.

It can be observed in the data that most respondents belong to the right age, being Grade 10 students. In addition, most of the respondents are males, who are expected to excel in mathematics. Research has shown that boys outperform girls in mathematics performance (Agnoli et al., 2021; Danan & Ashkenazi, 2022; Johnson et al., 2022).

Parents' Highest Educational Attainment

The Table below presents the distribution of the highest educational attainment of the respondents' parents.

Educational Attainment	Mother (f)	Mother (%)	Father (f)	Father (%)
Master's Degree	18	6.32	16	5.61
With Master's Units	7	2.46	8	2.81
College Graduate	73	25.61	67	23.51
College Level	25	8.77	15	5.26
High School Graduate	56	19.65	50	17.54
High School Level	37	12.98	36	12.63
Elementary Graduate	23	8.07	31	10.88
Elementary Level	43	15.09	49	17.19
No Formal Schooling	1	0.35	4	1.40
No Response	2	0.70	9	3.16
Total	285	100.00	285	100.00

Most of the respondents' mothers were college graduates, comprising 25.61% of the total respondents, followed by 19.65% who were high school graduates. Notably, 6.32% and 2.46% of the mothers had finished their master's degree and had master's units, respectively. Regarding the respondents' fathers, 23.51% are college graduates, composing most of them. This is followed by 17.54% of high school graduates and 17.19% who had reached elementary. On the other hand, only 5.61% and 2.81% had finished their master's degree and with master's units, respectively.

Many studies have claimed that parents are significant in their children's academic success. Parents can act as teachers at home to their children, but with limited knowledge, they cannot deliver significant ideas to help their children understand the lessons. Thus, parents' higher educational attainment can provide their children with better assistance and educational opportunities (Li & Qiu, 2018).

Combined Family Monthly Income

The respondents' combined family monthly income can provide essential data about their financial status. This is an indicator of the family's ability to sustain the financial needs of the students. The data on this variable are presented in Table below.

Monthly Income (in pesos)	f	%
Above 30,000	65	22.81
25,001-30,000	24	8.42
20,001-25,000	17	5.96
15,001-20,000	28	9.82
10,001-15,000	21	7.37
10,000 and below	127	44.56
No Response	3	1.05
Total	**285**	**100.00**

The above table presents the data on the combined family monthly income of the respondents, which shows that most of the respondents have a family whose monthly income is P10,000 and below, composed 44.56% of the respondents. However, this is followed by 22.81% of their family monthly income above P30,000 and 9.82% from P15,001 to P20,000. The data suggest that most respondents belong to a family below the poverty line in the Philippines.

This means that the respondents' families have challenges meeting their daily needs and sending their children to school. Students who belong to the poverty line frequently experience hardships sustaining school expenses, which could result in poor performance, absences, or even stoppage from attending school (Jabar, 2021).

Extent of the Respondents' Social Media Exposure

This section discusses the extent of the respondents' social media exposure.

S/N	Indicators	WM	Verbal Description
1	Addiction to online social networks is a problem issue that affects my academic life.	3.34	Moderate
2	Online Social Network destructs me from my studies.	3.54	High
3	I find it flexible to focus on work by logging into Facebook as it helps me to remain in contact with classmates.	3.56	High
4	The time for studying my lesson is lessened due to the excessive usage of social media	3.65	High
5	My vision blurs due to radiation which affects my reading capability.	3.16	Moderate
6	It reduces my concentration span during classroom discussions due to lack of sleep	3.39	Moderate
7	My study habits have changed due to lack of sleep	3.48	High
8	Instead of attending minor subjects, I spend my time using SNS	2.49	Low
9	During class recitation, I suffer from a loss of memory	3.17	Moderate
10	The comments and suggestions of my friends online motivate me to study well.	3.55	High
11	It is easy to obtain information when I cannot understand our topic	3.30	Moderate
12	I spend more than three hours using/accessing my social media account.	3.67	High
13	Social media is a distraction to release boredom	3.74	High
14	I use social media because it allows me to reinvent myself	3.28	Moderate
15	Social media is a venue for interactive discussion	3.61	High
16	Social media enriches my vocabulary.	3.96	High
17	I see my social media account as a venue for releasing my school pressure and stress.	3.73	High
18	Social media affects my spelling proficiency.	3.47	High
19	Because of social media I sometimes forgot/miss making assignments and other school tasks	3.76	High
20	I stay awake late at night updating, watching videos, and responding to the newsfeeds of my account.	3.44	High
21	I see social media as the reason for the increase or decrease in my grades in school.	3.14	Moderate
Aggregate Weighted Mean	**3.45**	**High**	

The table above shows that the extent of the respondents' social media exposure has an aggregate weighted mean of 3.45, which means that the respondents have high exposure to social media. Statement 16 has the highest weighted mean of 3.96, indicating that the respondents claimed that social media enriches their vocabulary. This is followed by statement 19, which states that social media has been the reason for their missed assignment and school tasks, with a weighted mean of 3.76, which means high respondents' exposure. They also claimed that social media has been the venue for releasing their school pressure and stress, which is why they have limited study time.

When overexposed to social media, students can forget their more important responsibilities, like school tasks and assignments. Students need to address the issue of too much exposure to social media that compromises their studies because this will negatively affect their school performance (Dennen et al., 2020). Although students claim that social media has been an avenue to relax and release their stress, they still need to assess if this has positively affected them, particularly their performance in school.

Level of Peer Pressure Experienced by the Respondents

This section presents the level of peer pressure experienced by the respondents.

S/N	Indicators	WM	Verbal Description
1	Sometimes I miss classes because my friends urge me to do so.	2.19	Low
2	I cannot resist going to a late-night party with friends.	2.42	Low
3	I go on a date with my friend despite parental warnings.	2.25	Low
4	Sometimes I do things because my friends want me to do so	2.57	Low
5	I feel pressure to chat for long hours on the internet.	3.13	Moderate
6	Sometimes, I do something wrong just to be good in my friends' view.	2.48	Low
7	I cannot say 'NO' to my friends even if my parents do not agree.	2.36	Low
8	There is always peer pressure when dating.	2.74	Moderate
9	At times I feel peer pressure to smoke.	2.13	Low
10	Sometimes, I do violent acts to keep up with my peers.	2.04	Low
11	In close relationships, we have to approve of the pressures of peers	3.05	Moderate
12	I know my limits when with friends.	4.09	High
13	I find it difficult to escape from peer pressure.	2.87	Moderate
14	Sometimes I have to undergo peer pressure to be liked in a group.	2.80	Moderate
15	Many times, I put off my homework and other important assignments for friends' parties.	2.31	Low
16	Sometimes I have to appease my peers by doing things I don't want.	2.56	Low
17	To maintain a status in a peer group, sometimes I pressure my parents to buy an expensive item.	2.09	Low
18	I do not take advice from my parents about peer group activities.	2.34	Low
19	It is difficult to think about the negative consequences of what we do with peers.	2.91	Moderate
20	There is no harm in doing one wrong with friends when we do a number of good things with them	2.74	Moderate
21	It is very difficult for me to deny a friend's request to drink at a party or on other occasions.	2.00	Low
22	Sometimes I do risky and harmful acts to get acceptance in the peer group.	2.20	Low
23	When I feel uncomfortable in a group, I do not know how to say NO.	2.74	Moderate
24	I usually compromise with peers' request for a movie, party, etc.	2.85	Moderate
25	At times I feel peer pressure to watch pornography.	1.98	Low
Aggregate Weighted Mean	2.55	Low	

It is reflected in the Table above that the aggregate weighted mean of the level of peer pressure experienced by the respondents is 2.55, which means that they have low experience with peer pressure. This means that the respondents generally experienced less pressure from their peers. However, in some situations, they moderately experienced peer pressure, for instance, the feeling that they have to undergo peer pressure to

be liked by their peers, the difficulty in escaping from the peer pressure, spending more time chatting with friends on the internet, the understanding that in order to build close relationships, they have to approve the pressure coming from their peers, and disregarding the negative consequences of the things they are doing. These instances need to be minimized because they will disturb the students' focus on their studies when these influences are given more importance by the students instead of their own decisions in life (Laursen & Veenstra, 2021).

Level of Academic Performance of the Respondents in Mathematics

This section presents the level of academic performance of the respondents in math.

Level	Numerical Range	f	%
Advanced	90-100	153	53.68
Proficient	85-89	75	26.32
Advancing Proficiency	80-84	53	18.60
Developing	75-79	4	1.40
Beginning	74 and below	0	0.00
Total		285	100.00
Mean		90.32	
St. Dev.		5.57	

It can be seen in the table that the respondents have a mean performance of 90.32 with a 5.57 standard deviation. This means the respondents' performance falls on the advanced level, which is a good sign that they are doing well in school. The performances are broken down to the majority of the respondents having advanced performance, composing 53.68% of the respondents. This is followed by 26.32% with proficient performance and 18.60% with advancing proficiency performance. There were 1.40% who were in the developing stage.

Most of the respondents have outstanding performance in school. This means that these students perform their responsibilities in school very well. Although factors could affect their performance, they seem to manage well despite the distractions around them. However, there is still a need for teachers to monitor the activities of the students in school, such as their activities on social media and with peers. These factors can positively and negatively affect students engaging in activities that compromise their studies (Kross et al., 2021).

Test of Significant Relationship between Social Media Exposure and Academic Performance of the Respondents

This section tests the relationship between social media exposure and the respondents' performance. Table 32 presents the results of the hypothesis test for the variables.

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Social Media Exposure and Academic Performance	0.114	Negligible Positive	0.056	Do not reject Ho	Not Significant
*significant at p<0.05 (two-tailed)					

As the table reflects, Pearson's *r* was utilized to test the hypothesis, observing the 0.05 significance level. The test resulted in the computed value of r 0.114 and p-value of 0.056. The p-value is more significant than 0.05, meaning the null hypothesis must not be rejected. Since the null hypothesis is not rejected, there is no significant relationship between social media exposure and the respondents' academic performance in math. This indicates that social media exposure does not contribute to the respondents' performance or is not affected by the respondents' exposure to social media in any way.

These findings contradict Senthil's study (2018), which found that heavy social media use correlates with students' poor academic performance. Moreover, Ansari and Khan (2020) found that social media significantly impacts students' academic performance. It was revealed that online social media used for collaborative learning significantly impacted interactivity with peers, teachers, and students' engagement.

Test of Significant Relationship between Peer Pressure and Academic Performance of the Respondents

This part examines the correlation between peer influence and the performance of the respondents. The table below presents the results of the hypothesis test for the variables.

Variables	r-value	Strength of Correlation	p-value	Decision	Result
Peer Pressure and Academic Performance	-0.114	Negligible Negative	0.055	Do not reject Ho	Not Significant
*significant at p<0.05 (two-tailed)					

The hypothesis test for the relationship between peer pressure and the respondents' academic performance utilized Pearson's *r* using a 0.05 significance level. With this, the computed r-value is -0.114, and the p-value is 0.055. The null hypothesis must not be rejected since the p-value is more significant than the 0.05 significance level. Therefore, there is no significant relationship between peer pressure and the respondents' academic performance. The non-significant relationship means that peer pressure is not a factor affecting the respondents' performance in math.

Contrary to these findings, research has shown a positive and significant association between peer pressure and students' academic achievement. This indicates that positive peer pressure results in improved academic performance, while bad peer pressure results in students' poor performance (Gebresilase & Zhao, 2023). In addition, Deepika and Prema (2017) found a negative correlation between peer pressure and students' academic achievement.

IV. CONCLUSION AND RECOMMENDATIONS

This study aimed to assess the influence of social media exposure and peer pressure on the academic performance of Grade 10 students in mathematics. Based on data gathered from three high schools in the Visayas and Mindanao regions of the Philippines, several key conclusions can be drawn.

Firstly, the study found no significant relationship between social media exposure and academic performance in mathematics. This suggests that, contrary to some concerns, students' engagement with social media platforms does not directly translate to lower grades in mathematics. Similarly, no significant relationship was found between peer pressure and academic performance in mathematics, indicating that students' susceptibility to peer influence does not appear to impact their math grades directly.

However, the study did reveal that students generally have high exposure to social media and experience low levels of peer pressure. While not directly affecting math performance in this study, these findings raise concerns about potential negative impacts. Excessive social media use can lead to distractions, sleep deprivation, and reduced study time, which may indirectly affect academic performance in the long run. Similarly, while peer pressure was generally low, some students reported feeling pressured to engage in activities that could hinder their academic progress.

Despite these concerns, the study found that most students demonstrated commendable performance in mathematics. This suggests that these students effectively manage their academic responsibilities despite the potential distractions and pressures associated with social media and peer influence. However, continuous monitoring and support from teachers and parents are crucial to maintain this high level of performance.

In light of these findings, the following recommendations are made:

- *Implement Math Learning Enhancement Plans:* Schools should adopt and implement the proposed math learning enhancement plans to address social media use and peer pressure concerns and further enhance students' mathematics learning experiences.
- *Educate on Responsible Social Media Use:* Students need guidance on responsible social media use, including strategies for managing their time and engagement with these platforms. This can include incorporating digital literacy and media awareness programs into the curriculum.
- *Foster Positive Peer Relationships:* Schools and parents should work together to promote positive peer relationships and provide students with the skills to navigate peer pressure and make independent decisions. Peer support programs and open discussions about peer influence can be beneficial.
- *Prioritize Academic Responsibilities:* Students should be encouraged to prioritize their academic responsibilities and develop healthy study habits. This can include setting goals, managing time effectively, and seeking help when needed.
- *Monitor Student Progress and Provide Support:* Teachers should continuously monitor student progress and support high-achieving students and those needing improvement in mathematics. This can involve differentiated instruction, personalized feedback, and access to additional resources.
- *Create a Supportive Learning Environment:* A positive and supportive learning environment can encourage student engagement and academic success. This includes fostering a classroom culture of respect, collaboration, and open communication.

- *Conduct Further Research:* More research is needed to explore the complex interplay of social media, peer influence, and academic performance in greater depth. Future studies could examine specific types of social media use, different forms of peer pressure, and the long-term impacts of these factors on academic achievement.

By addressing the concerns raised in this study and implementing the recommended strategies, schools and parents can collaborate to create a learning environment that supports students in developing healthy habits, navigating social pressures, and achieving academic success in mathematics and beyond.

Output of the Study

This section presents the proposed Math Learning Enhancement Plans designed to improve the math learning experiences of students at the identified high schools.

Math Learning Enhancement Plans
Rationale

Mathematics, a core subject in secondary education, has been the focus of numerous studies aiming to improve student performance. While various factors have been identified as influencing math performance, no single factor has been found to have a significant impact. This study investigated the influence of social media exposure and peer pressure on Grade 10 students' math performance in three high schools in Cebu and Agusan del Norte. The results indicated no meaningful connection between these elements and math performance. However, certain issues and concerns were identified regarding students' social media use, peer pressure experiences, and overall math performance. To address these concerns, Math Learning Enhancement Plans were developed.

Objectives

The implementation of these plans aims to achieve the following objectives:

- Minimize students' exposure to social media
- Regulate the peer pressure experienced by students
- Enhance the academic performance of students in mathematics

Scheme of Implementation

Upon approval, the enhancement plans will be presented to the school principal, who will be briefed on the study's findings, identified issues, and proposed solutions. Following the principal's approval, the researchers will conduct an orientation for the concerned teachers, explaining the learning enhancements' implementation procedures. The researchers will ensure that teachers fully understand the process before implementation. Quarterly evaluations will be conducted to assess the plan's effectiveness.

Math Learning Enhancement Plan (Kinatarcan National High School)

Math Learning Enhancement Plan (University Of Cebu Banilad Campus)

Math Learning Enhancement Plan (San Vicente National High School)

These Math Learning Enhancement Plans offer a comprehensive approach to addressing potential challenges and improving students' math learning experiences. By focusing on responsible social media use, positive peer interactions, and effective teaching strategies, these plans aim to create a supportive and engaging learning environment for all students. Regular evaluation will be crucial to assess the plans' effectiveness and make any necessary adjustments.

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