

SCHOOL CLIMATE, WORK MOTIVATION, AND PERFORMANCE OF SELECTED SENIOR HIGH SCHOOL MATHEMATICS TEACHERS

Bonifacio B. Lagura Jr.

University of Perpetual Help System Laguna, PHILIPPINES
Email: bonifacio.lagura@deped.gov.ph

Antonio R. Yango

University of Perpetual Help System Laguna, PHILIPPINES
Email: yango.anotnio@uphsl.edu.ph

ABSTRACT

Quality education specifically in Mathematics is an essential tool needed by the learners to be globally competent in facing real-life situations. But this could be a big challenge specially to public senior high school Mathematics teachers. Their level of work motivation will be measured on the school climate they have including their performance. This study utilized the descriptive-correlational research design to determine the relationship among the school climate along safety, relationship, teaching and learning, and external environment; level of work motivation along intrinsic and extrinsic dimensions; and performance of selected public senior high school Mathematics teachers through their Individual Performance and Review Form (IPCRF) rating. The result of the study showed that the respondents had very good assessment on the school climate along its components. They also had very high level of intrinsic and extrinsic level of work motivation which caused majority of them had very satisfactory (3.500-4.499) performance. Moreover, correlations indicated that the better the respondents' school climate, the higher is their level of work motivation along intrinsic and extrinsic dimensions. On the other hand, the respondents' school climate along its components and the level of work motivation (internal and external) has nothing to do with their IPCRF rating.

Keywords: Senior high school, Mathematics, school climate, work motivation, descriptive-correlation study, Southeast Asia, Philippines.

INTRODUCTION

Quality education is an essential tool needed by the learners to be globally competent in facing real-life situations. This could be made possible by providing them with a quality teacher who accept the challenges of this noble profession notwithstanding the school climate where he is sent to serve; a teacher who is not only intellectually gifted to speak fluently or discuss complicated Mathematical concepts, but who is also intrinsically motivated and passionate in producing mathematically competitive learners. Galaba (2001) as cited in Essay Sauce (2016) says that, the teacher is the heart of classroom while his effectiveness depends on his academic and pedagogic competencies.

Ferguson and Ladd (1996) as further cited in Essay Sauce (2016), research studies have found that teachers need to have strong academic skills to effectively teach and improve student academic achievement. In addition, based on the result of the study conducted by Mtitu (2014) and Gurney (2007) as cited in Kariuki et al. (2019), teacher preparedness is a crucial dimension that could help

improve learner's performance in Mathematics. Recently, a global survey was conducted by CNN Philippines last December 3, 2019, the Philippines ranked lowest in Reading Comprehension, and second lowest in Science and Mathematics out of 79 countries who participated in the Program for International Student Assessment (PISA). An article written by Baclig (2020) in *Inquirer.net* which stated that, based on the international assessment conducted by Trends in International Mathematics and Science Study 2019 (TIMSS), the Philippine Grade 4 pupils ranked lowest in Mathematics and Science around the world among 58 countries who participated in the study last March until June of year 2019.

These could have an impact that may cause problems to Mathematics teachers from higher grade level such as the senior high school because of learners' lack of competencies that requires a strong foundation in the basic skills of Mathematics. On the other hand, teachers' performance could also be affected by several factors like school climate and their level of work motivation. From the study conducted by Mertler (2016) as cited in Sivertson (2018), the K-12 educational setting is facing challenges because school administrators find it difficult when it comes to increase or maintain the motivation of every teachers to become high performing teacher and sustain quality services and be satisfied on their chosen endeavor.

Lack of work motivation may result in a stressful work attitude. Research has consistently shown that stress levels in newer educators is leading many of them to exit the profession within five years (Litvinov et al., 2018). Last May 19, 2020, an article titled "Real Reason Behind the Resignation of One Public School Teacher", Ma'am Catalina Sotto, a former High School teacher, posted an open letter to raise awareness on the real reasons why she resigned from the Department of Education. It earned numerous reactions and opinions that it even went viral on social media. Creation of different programs by the Department of Education (DepEd) focusing on teachers' performance was established.

The Results-Based Performance Management System (RPMS) was introduced. It is a shared undertaking between the superior and the employee that allows an open discussion of job expectations, Key Results Areas, Objectives and how these align to overall departmental goals (Teach Pinas, 2020). Public school teachers' accomplishment and performance for a year were rated using an assessment tool called Individual Performance Commitment and Review Form (IPCRF). Based on these premises, the researcher convinced to study the current school climate, work motivation, and performance of selected senior high school Mathematics teachers for the school year 2019-2020.

Specifically, the study sought to find answers to the following questions: (1) What is the school climate as assessed by the respondents in terms of: (1.1) safety; (1.2) relationship; (1.3) teaching and learning; and (1.4) external environment? (2) What is the respondents' level of work motivation along: (2.1) intrinsic motivation; and (2.2) extrinsic motivation? (3) What is the Individual Performance Commitment and Review Form (IPCRF) rating of Mathematics senior high school teachers? (4) Is there a significant relationship between the school climate as assessed by the respondents and their level of work motivation? (5) Is there a significant relationship between the school climate as assessed by the respondents and their IPCRF rating? (6) Is there a significant relationship between the respondents' level of work motivation and IPCRF rating? (7)

Based on the findings of the study, what action plan can be developed to sustain the school climate, work motivation, and performance of senior high school Mathematics teachers?

METHODS

This study utilized the descriptive-correlational research design as it suited as best method in determining the condition of relationship between the dependent and independent variables (Calderon, 2011). The study employed the descriptive survey method involves the description, recording, analysis, and the interpretation of the present nature, composition, or processes of phenomena. According to McDonald and Headlam (2011), this is used to gather large-scale data such as current conditions to generalize. This study dealt on the school climate, work motivation, and performance of selected public senior high school Mathematics teachers. Using Slovin's formula 5 % margin of error, the 74 samples were obtained from 91 population of public senior high school Mathematics teachers from different Schools Division within five cities of Laguna province, School Year 2019-2020.

Furthermore, to fairly distribute the number of respondents per Schools Division, the researcher applied the stratified random sampling technique. The researcher used a validated self-made survey questionnaire divided into three parts. The first part is based on the school climate assessed by the respondents. The second part focused on measuring the level of work motivation of the respondents in terms of intrinsic and extrinsic motivation. The last part of the questionnaire determined the respondents' performance through their Individual Performance Commitment and Review Form (IPCRF) rating during School Year 2019-2020. To assess the school climate by the respondents, the Likert -Type Scale was used (Strongly Agree/ Very Good-4, Agree/ Good-3, Disagree/ Poor-2, Strongly Disagree/Very Poor-1). Four-point Likert Scale was also used for the respondents' level of work motivation: Strongly Agree/Very High-4, Agree/High-3, Disagree/Low-2, Strongly Disagree/Very Low-1). For the respondents' performance, the following IPCRF adjectival rating equivalences were used: Outstanding (4.500-5.000), Very Satisfactory (3.500-4.499), Satisfactory (2.500-3.499), Unsatisfactory (1.500-2.499), and Poor (below-1.499) as prescribed by the Philippine Department of Education.

The researcher secured first the permission from the Schools Division Superintendent (SDS) of each Schools Division in five cities of Laguna province to conduct the study using the selected senior high school Mathematics teachers as respondents. After the approval of the request, the following steps were followed: a) The researcher informed the public senior high school principals in each Schools Division, asked their permission and assistance to conduct the study; b.) because of strict compliance for health protocol and work from home setting amidst COVID-19 pandemic, link for google forms was sent to the respondents stated the objective of the study and clear instructions for each part of the online research instrument; c) letter of consent were attached on the survey forms before the respondents accomplished the online research instrument; and d) tabulated data for statistical treatment and analysis conforming the Republic Act No. 10173 – Data Privacy Act of 2012.

To make sure that the data gathered were precisely treated, weighted mean and ranking were used to describe the school climate and level of work motivation as assessed by the respondents. Percentage and frequency distribution were used to describe the Individual Performance

Commitment and Review Form (IPCRF) rating of the respondents. Pearson r Moment Correlation Coefficient was utilized to determine the significant relationship between a) the school climate as assessed by the respondents and their level of work motivation b) the school climate as assessed by the respondents and their IPCRF rating and c) the respondents' level of work motivation and their IPCRF rating.

RESULTS AND DISCUSSION

The analyzed and interpreted gathered data were presented in sequential pattern based on the presented statement of the problem using the appropriate statistical treatment and research instrument.

Table 1. Summary Table of the School Climate as Assessed by the Respondent

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Safety	3.50	Very Good	1
2. Relationship	3.42	Very Good	2
3. Teaching and Learning	3.33	Very Good	4
4. External Environment	3.39	Very Good	3
Average	3.41	Very Good	

Legend: Strongly Agree/ Very Good-4, Agree/ Good-3, Disagree/ Poor-2, Strongly Disagree/Very Poor-1.

Table 1 summarize the assessment of the respondents on school climate. It can be noted that their rank from highest to lowest are as follow: rank 1, safety (3.50); rank 2, relationship (3.42); rank 3, external environment (3.39); and rank 4, teaching and learning (3.33). They were all interpreted as very good with an overall weighted mean of 3.41 which was interpreted as very good. The results revealed that the respondents assessed the school climate as very good. Safety ranked first which support the studies being conducted about the school climate. The American Institute for Research says that, a welcoming, supportive school climate contributes to students'—and teachers'—social, emotional, and cognitive development. Efforts to improve school climate and safety can also reduce violent behavior and mitigate teacher burnout.

The findings of the study strengthen the result of the conducted research last 2017 in United State of America. It revealed that, about 90 percent of the students ages 12-18 observed that their school is following at least one of all school safeties protocols (Zhang, Wang, Zhang, Oudekerk, National Center for Education Statistics (ED), US Department of Justice, O. of J. P., & American Institutes for Research (AIR), 2019). It means that, school safety is one of the important things that need to consider in any education institution, public or private schools. That is why, the school may absolutely consider as the second home of the students and have the feeling that they are safe by the guidance of their second parents, their teachers. When it comes to relationship in a school climate whose rank is second, it has an overall weighted mean of 3.42 revealed that the respondents assessed the school climate along relationship as very good. They find their school with positive behavior that resolve or lessen possible conflicts that may occur. They give importance on how to treat one another with respect which shows by the adults or school staffs to the students. However, the concern of the parents on their child performance in school ranked least in all indicators which

quite need some attention. Claudien Nzitabakuze, the head of Teacher Education Management and Professionalization Department at Rwanda Education Board as cited in Times Reporter (2017), says that the absence of the parents is one of the big problem today especially those who lived in the cities because they are multitasking which affect their children's education. On the other hand, the external environment ranked third has an overall weighted mean of 3.39 revealed that the respondents assessed the school climate along external environment as very good. This means that the teachers and students were proud on their school, also because their school administrators were served as a role model on being committed on their work and willing to back up their teachers if needed, although they have noticed an insufficient parental involvement in school.

Finally, the school climate along teaching and learning was ranked last with an overall weighted mean of 3.33 revealed that the respondents assessed the school climate along teaching and learning as very good. This means that the public schools are still a good place to teach and learn because of the technical assistance provided by the school heads/master teachers in improving teachers' performance to provide quality education. But when it comes to students' performance in Mathematics, the respondents of the study find it least at the rank. They saw that there is a quite need on improving students' performance in Mathematics including the mastery of basic skills in Mathematics.

These findings were evident in different studies. Jaudinez (2019) says that low academic performances of senior high school students in Mathematics have been presumed to students' lack of mastery of basic skills, stigma, and language used that possibly aggravated by the erroneous and user-unfriendly textbooks. Dyscalculia is a specific mathematical learning difficulty by few students (Camellor 2004, Westwood 2000) as cited in Lacerna (2018) is another reason why some students have difficulty in understanding mathematical concepts making them low performance in Mathematics. Recently, the Philippines ranked lowest in reading comprehension and second lowest in science and mathematics among 79 countries, a global survey showed (CNN Philippines Staff, 2019).

In addition, based on the conclusion of the study conducted by Oladinan & Uziak as cited in Yango et al. (2019), that using technology as part of teaching strategy can enhance learning and understanding of course materials because learners can receive useful feedback on their assignments which result to proper interaction between learners and their teachers. The teaching and learning in public school may also strengthen the usefulness of technology especially now that distance learning exists.

Table 2: Summary Table of the Respondents' Level of Work Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Intrinsic Motivation	3.52	Very High	1
2. External Motivation	3.26	Very High	2
Average	3.39	Very High	

Legend: Strongly Agree/Very High-4, Agree/High-3, Disagree/Low-2, Strongly Disagree/Very Low-1.

As shown in Table 2, for the summary table of the respondents' level of work motivation, intrinsic motivation obtained a weighted mean of 3.52 was interpreted as very high and rank 1. On the other hand, extrinsic motivation had a weighted mean of 3.26 which interpreted as very high too and second to the rank. In general, the overall weighted mean of 3.39 revealed that the respondents had very high level of work motivation. This means that they were motivated intrinsically or extrinsically in their profession as educator because of having stable job, good relationship with the school head and colleagues, grow professionally by gaining new bodies of knowledge through different trainings and seminars. In addition, the findings contradict to the study of Mertler (2016) as cited in Sivertson (2018), that the K-12 educational setting is facing challenges because school administrators find it difficult when it comes to increase or maintain the motivation of every teachers to become high performing teacher and sustain quality services and be satisfied on their chosen endeavor. On the other hand, based on the study conducted by Ismail and Jarrah (2019) as cited in Yango et al. (2021) about the effect of teaching practice to pre-service teachers and their point of views on pedagogical preferences, pedagogical competence, and motivation for choosing the teaching career, it was revealed that the teaching practice had impact and signifies positive perception by the pre-service teachers to the said variables.

Table 3: Respondents' Individual Performance Commitment and Review Form (IPCRF) Rating

Indicators	Frequency	Percentage
Outstanding	21	28.38
Very Satisfactory	50	67.57
Satisfactory	3	4.05
Total	74	100

Legend: Outstanding (4.500-5.000), Very Satisfactory (3.500-4.499), Satisfactory (2.500-3.499), Unsatisfactory (1.500-2.499), and Poor (below-1.499).

As shown in Table 3, for the respondents' Individual Performance Commitment and Review Form (IPCRF) rating, from the total of 74 respondents 50 or 67.67% had very satisfactory (3.500-4.499) Individual Performance Commitment and Review Form rating. 21 or 28.38% of the respondents had outstanding (4.500-5.000) Individual Performance Commitment and Review Form rating. Lastly, 3 or 4.05% of the respondents had satisfactory (2.500-3.499) Individual Performance Commitment and Review Form rating. Thus, majority of senior high school Mathematics teachers in public schools had very satisfactory rating in their Individual Performance Commitment and

Review Form (IPCRF) rating. The findings of the study support the K to 12 Reform (R.A. 10533) in 2013 in changing the landscape of teacher quality requirements in the Philippines. The reform process warrants an equivalent supportive focus on teacher quality – high quality teachers who are properly equipped and prepared to assume the roles and functions of a K to 12 teachers.

Table 4: Relationship Between the School Climate along Safety as Assessed by the Respondents and their Level of Work Motivation

Safety	Pearson r	p-value	Decision	Interpretation
Intrinsic Motivation	.712**	.000	Null Hypothesis Rejected	Significant
Extrinsic Motivation	.638**	.000	Null Hypothesis Rejected	Significant

**Significant at 0.01

For the relationship between the school climate along safety as assessed by the respondents and their level of work motivation, Pearson r values of .712 (intrinsic) and .638 (extrinsic) were noted, and a probability value of .000 for both types of motivation was obtained. This p-value was lower than the test of significance at 0.01 signifying a significant relationship between the variables correlated, which resulted in the rejection of the null hypothesis. This means that the better is the assessment of the respondents on their school climate in the aspect of safety, the higher is their level of work motivation along intrinsic and extrinsic dimensions. This relationship can be explained by the concept that, when the respondents' school climate along safety is good, their internal and external level of work motivation becomes higher.

They have a peace of mind which makes them focused and motivated to make innovations in their workplace. The feeling of being safe helps them to perform well and can concentrate on what needs to accomplish. They were comfortable and concentrate on what they need to accomplish because of the feeling that they were safety all the time. This helps them to focused and motivated to do their job well done. The findings support the result of the study of Kocabas (2009, p. 724) as cited in Pasathang et al. (2016) which focused on the effect of the factors that motivate the teacher performance. It found that 1 of the 15 different factors involved was related to school safety. These are as follows: 1) feeling of safety from good atmosphere in the workplace, 2) success of learners, 3) job satisfaction of teachers, 4) self-respect of their dignity or pride, 5) recognition by society and by individuals in the same circles, 6) pride in their successes, 7) good relationship between colleagues, 8) sense of self-esteem and self-respect, 9) pride in the institutions, 10) appropriate work schedule, 11) reasonable wage/salary, 12) good management of the institution, 13) fairness and standard in organizational culture, 14) supports from family and colleagues, and 15) good welfare for health, safety, retirement.

Table 5: Relationship Between the School Climate along Relationship as Assessed by the Respondents and their Level of Work Motivation

Relationship	Pearson r	p-value	Decision	Interpretation
Intrinsic Motivation	.690**	.000	Null Hypothesis Rejected	Significant
Extrinsic Motivation	.623**	.000	Null Hypothesis Rejected	Significant

**Significant at 0.01

For the relationship between the school climate along relationship as assessed by the respondents and their level of work motivation, Pearson r values of .690 (intrinsic) and .623 (extrinsic) were noted, and a probability value of .000 for both types of motivation was obtained. This p-value was lower than the test of significance at 0.01 signifying a significant relationship between the variables correlated, which resulted in the rejection of the null hypothesis. This means that the better is the assessment of the respondents on their school climate in the aspect of relationship, the higher is their level of work motivation along intrinsic and extrinsic dimensions. This relationship can be explained by a situation where the teacher has higher level of internal and external level of work motivation when there is a good school climate along relationship exist. It is where we felt motivated when we work as one with common goals and helping one another if needed. Tahadlangit (2019) mentioned that the teacher is the most important factor for a student to become successful but how it happened if lots of teachers are experiencing burn out and leaving the field of teaching profession. He elaborated that the reason behind this, is the lack of “operational” and “interpersonal” skills. According to him, operational skills are the managing, planning, and organization of the classroom and learning environment.

The interpersonal skills include developing authentic relationships with colleagues and other stakeholders, as well as creating a respectful environment were all members of school community take responsibility in the learning process. Hence, he reiterated what Johnson and McElroy (2016) stated, if the live of the students were changed dramatically, it simultaneously changed the role of the teacher.

Table 6: Relationship Between the School Climate along Teaching and Learning as Assessed by the Respondents and their Level of Work Motivation

Teaching and Learning	Pearson r	p-value	Decision	Interpretation
Intrinsic Motivation	.717**	.000	Null Hypothesis Rejected	Significant
Extrinsic Motivation	.731**	.000	Null Hypothesis Rejected	Significant

**Significant at 0.01

For the relationship between the school climate along teaching and learning as assessed by the respondents and their level of work motivation, Pearson r values of .717 (intrinsic) and .731 (extrinsic) were noted, and a probability value of .000 for both types of motivation was obtained. This p -value was lower than the test of significance at 0.01 signifying a significant relationship between the variables correlated, which resulted in the rejection of the null hypothesis. This means that the better is the assessment of the respondents on their school climate in the aspect of teaching and learning, the higher is their level of work motivation along intrinsic and extrinsic dimensions.

This relationship can be explained by the situation where the teacher has a good school climate along teaching and learning where in, he tends to be more intrinsically and extrinsically motivated to work hard because of the feeling that he fulfilled and satisfied on what he is doing. The findings support the results of the study of Uyanne et al. (2020) stating that teachers' motivation to work also rely on conducive teaching and learning environment which help the school to have improved performance of the students academically. Teachers wanted to have a proactive teaching environment where he could spend more time on teaching rather than dealing with students' misbehavior (Tulyakul et al., 2019). But despite of different challenges encountered by teachers, every act of teaching has always particular love and equality (Zamojski, 2019).

In addition, to successfully deliver the complicated Mathematics subject, it requires proper classroom management by the teacher which is essential in effective teaching and learning process. classroom management should be properly implemented by an effective and efficient teacher. If he cannot achieve a good classroom management, the teaching-learning process will no longer be applicable. Fareh (2018) as cited in Akman (2020), argues that effective classroom management creates an environment appropriate for learning and thus plays an indispensable role in encouraging learning. There were studies supporting the idea that learners display disruptive and maladaptive behaviors in circumstances where classroom management is weak (Little E. & Hudson, 1998; Oliver, Wehby et al., 2011) as further cited in Akman (2020).

Table 7: Relationship Between the School Climate along External Environment as Assessed by the Respondents and their Level of Work Motivation

External Environment	Pearson r	p -value	Decision	Interpretation
Intrinsic Motivation	.776**	.000	Null Hypothesis Rejected	Significant
Extrinsic Motivation	.818**	.000	Null Hypothesis Rejected	Significant

**Significant at 0.01

For the relationship between the school climate along external environment as assessed by the respondents and their level of work motivation, Pearson r values of .776 (intrinsic) and .818 (extrinsic) were noted, and a probability value of .000 for both types of motivation was obtained. This p -value was lower than the test of significance at 0.01 signifying a significant relationship between the variables correlated, which resulted in the rejection of the null hypothesis. This means that the better is the assessment of the respondents on their school climate in the aspect of external environment, the higher is their level of work motivation along intrinsic and extrinsic dimensions. This relationship can be explained by having good school climate along external environment

means that the level of internal and external work motivation of the teachers were higher and vice versa. Their level of work motivation was affected on what kind of external environment they have because teachers are still human who have emotion that can also be affected on what is happening beyond their duties and responsibilities inside the classroom.

The findings support the results of the study conducted by the National Center on Safe Supportive Learning Environment. A positive school environment is a school that has good school facilities or physical surroundings including a convenient classroom, availability of school clinic, and with clear and fair disciplinary process. These will help the teachers to deliver and improve their pedagogical skills that will increase the interest of the students through high technological school laboratories and equipment. Moreover, insufficient instructional materials may affect the teaching learning process specially in Technical Vocational Education of senior high school. Study shows that the use of instructional materials has a strong relationship with academic performance of high school students (Dahar, 2011) as cited in Arena (2018).

It would be difficult for senior high school teachers to teach subjects that requires skills if the students cannot see the actual process on operating a machine or tool specially in electronics subjects. Students tend to fail to understand the lesson that may cause of their failure to pass the necessary skills in their chosen senior high school strand or track. When it comes to school administrators, Hughes and Pickeral (2013) as cited in Bermejo (2018) stated that school principal should not work in isolation, where the connectedness/engagement of stakeholders should also need to consider. When the teachers, students, staff, and parents the school will establish a shared responsibility ensuring that everyone is engaged making the school community a better place to learn working as a team rather than as individual. The school becomes a place where the members of the school community captured their interest and promote the appropriate school behaviors protecting the rights of every individuals as it shows a positive school environment is.

Table 8: Relationship Between the School Climate as Assessed by the Respondents and their Individual Performance Commitment and Review Form (IPCRF) Rating

IPCRF Rating	Pearson r	p-value	Decision	Interpretation
Safety	-.146	.214	Null hypothesis not rejected	Not Significant
Relationship	-.107	.362	Null hypothesis not rejected	Not Significant
Teaching and learning	-.152	.196	Null hypothesis not rejected	Not Significant
External environment	-.080	.497	Null hypothesis not rejected	Not Significant

****Significant at 0.05**

For the relationship between the school climate as assessed by the respondents and their Individual Performance Commitment and Review Form (IPCRF) rating, Pearson r values of -.146 (safety), -.107 (relationship), -.152 (teaching and learning), -.080 (external environment) were noted, with probability values of .214, .362, .196 and .497, respectively. These p-values were all higher than the test of significance at 0.05 signifying no significant relationship between the variables

correlated, which resulted in the non-rejection of the null hypothesis. This means that the school climate along safety, relationship, teaching and learning and external environment as assessed by the respondents have nothing to do with their Individual Performance Commitment and Review Form (IPCRF) rating. This non-relationship can be explained by having the idea of despite on what school climate it has, the performance of senior high school Mathematics teachers were still the same. Their level of performance depends on their own choice if they want to exert effort or not because they know what they need to do on different school climate as an educated individual with huge responsibilities. The findings support the results of the study of Khan (2019), that one of the distinct characteristics of an educator is by having devotion and committed to the improvement of their students when it comes to academic performance. Furthermore, he also says that a good teacher-student relationship is easy with those committed teachers who can carry out their duties and responsibility effectively and efficiently in line with the demands on their profession. These are the teachers who abide the rules and regulations, embracing the principles of the teaching profession (Tahadlangit, 2019).

Table 9: Relationship Between the Respondents' Level of Work Motivation and their Individual Performance Commitment and Review Form (IPCRF) Rating

IPCRF Rating	Pearson r	p-value	Decision	Interpretation
Intrinsic Motivation	-.038	.749	Null hypothesis not rejected	Not Significant
External Motivation	.015	.901	Null hypothesis not rejected	Not Significant

***Significant at 0.05*

For the relationship between the respondents' level of work motivation and their Individual Performance Commitment and Review Form (IPCRF) rating, Pearson r values of -.038 (intrinsic) and .015 (extrinsic) were noted, with probability values of .749 and .901, respectively. These p-values were both higher than the test of significance at 0.05 signifying no significant relationship between the variables correlated, which resulted in the non-rejection of the null hypothesis. This means that the respondents' level of work motivation along intrinsic and extrinsic dimensions have nothing to do with their Individual Performance Commitment and Review Form (IPCRF) rating. This non-relationship can be explained by the concept of whether the teachers is motivated or not, it has no impact on their level of performance. This implies that the teachers have a common denominator of being dedicated and responsible in their chosen profession whether they are motivated or not.

This non-relationship can be explained by Tahadlangit (2019) stating that teachers choose this profession because of devotion to teach and prioritize students' wants, needs, interest and most specially the importance of providing learning that will help the students to become educated and successful someday. That is why, whether they are motivated or not (intrinsically or extrinsically) they are still committed and doing their best performance as educator of complicated yet very important senior high school Mathematics subject. The findings also support the study of Cox (2013) as further cited in Tahadlangit (2019), explained that teachers who are committed not only to their students, but also to the whole thing about his chosen noble profession is considered as effective educators. These committed teachers are willing to accept the different challenges for the

sake of providing quality education. However, teachers with narrow goal, with biased on teaching results, these can lower their efficiency and level of intrinsic work motivation (Liu et al., 2019).

Table 10: Action Plan for Sustaining School Climate

Activity	Objectives	Time Frame	Persons Involved	Expected Outcomes	Budget Allocation	Sources of Fund	Success Indicators
Online meeting with the school head and teachers.	To conduct a meeting regarding the plan in sustaining the good school climate.	May 2021	School head, Key Teachers, and Teachers	The school head and teachers will be informed about the plan and ideas will be solicited from the teachers.	500 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the teachers attended the meeting.
Planning for the various activities and program to be done	To plan regarding activities to be done.	May 2021	School head, Key Teachers, Teachers, and Team Members	The letter of request will be rendered for the approval of activities to be done.	1,000 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the plans were finalized.
Preparation of the activities	To prepare the activities to be implemented	May 2021	Key Teachers, Teachers, and Team Members	The plans regarding the activities for sustaining the school climate will be finalized.	2,000 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the activities to be implemented were prepared.
Webinar about School Climate Part 1: The Importance and Implementation of Positive School Climate	To conduct a webinar regarding the importance of safety, good relationship, quality teaching and learning, and supportive external environment as component of positive school climate and how to implement this.	June 2021	Resource Speakers, School Head, Key Teachers, Teachers, Parents, Students, and other stakeholders	The school head, teachers, parents, and students will have the chance to be nurtured about their important participation in building positive school climate.	5,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders/Support budget from Schools Division Office (SDO), Laguna specifically in Research Department.	96% of the participants attended and actively participated in the seminar.
Webinar about School Climate Part 2: Importance of Parental Involvement in Improving Students' Academic Performance	To conduct a webinar on that will strengthening Importance of parent involvement in improving students' academic performance.	June 2021	Resource Speakers, School Head, Key Teachers, Teachers, Parents/Guardians	The school head, teachers, and parents/guardians will have the chance to become knowledgeable on the effect of positive school climate in students' academic performance. This could also a way on how to inform the parents about the importance of parental involvement in students' academic performance.	5,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	96% of the participants attended and actively participated in the seminar and Demo Teaching Fest.
Strengthening the School Monitoring, Evaluation, and Adjustment	To have a good foundation of School Monitoring, Evaluation, and Adjustment (SMEA) focusses not only on school Programs, Projects, and Activities (PPAs), School Improvement Plan (SIP), and Annual Implementation Plan (AIP), but most specially with the issues and concerns of the stakeholders as well as providing Technical Assistance (TA) if necessary.	July 2021-March 2022	School Head, School SMEA Coordinator, Key Teachers, Teachers, Parents/Guardians, Students, and other Stakeholders	The school will sustain its positive school climate that will help all stakeholders to have a good performance specially for teachers and students.	10,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders/Support budget from Support budget from Schools Division Office (SDO), specifically in Research Department.	The school reach 90% and above rating in implantation of positive school climate.
School Monitoring	To monitor and evaluate the performance of the school when it comes to implementation of positive school climate.	July 2021-March 2022	School Head, School Monitoring and Evaluation Coordinator, and Team Members	The teachers will be given pieces of advice regarding the good and weak points in the way they handle their classes.	500 pesos	MOOE/Canteen Fund/Support budget from Schools Division Office (SDO), specifically in Research Department.	98% of school climate components were observed.
Plan Evaluation	To evaluate the efficacy of the plan through the result of the assessment of the students, parents, and other stakeholders on the implementation of positive school climate.	March 2022	School Head, School Monitoring and Evaluation Coordinator, and Team Members	The plan will be evaluated with regard to the results of the monitoring and the assessment results of the students, parents, and other stakeholders.	500 pesos	MOOE/Canteen Fund/Support budget from Schools Division Office (SDO), specifically in Research Department.	The school reach 90% and above rating in implantation of positive school climate.

The plan is proposed to sustain the good school climate. This would be accomplished through planning and preparation of activities, series of webinars on school climates, strengthening School Monitoring, Evaluation, and Adjustment (SMEA), and evaluation of the plan. Through this, the school heads, teachers, parents, students, and other stakeholders can sustain or further improve their school climate.

Table 11: Action Plan for Sustaining Teachers' Work Motivation

Activity	Objectives	Time Frame	Persons Involved	Expected Outcomes	Budget Allocation	Sources of Fund	Success Indicators
Online meeting with the school head and teachers.	To conduct a meeting regarding the plan in sustaining teachers' work motivation.	May 2021	School head, Key Teachers, and Teachers	The school head and teachers will be informed about the plan and ideas will be solicited from the teachers.	500 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the teachers attended the meeting.
Planning for the various activities and program to be done	To plan regarding activities to be done.	May 2021	School head, Key Teachers, Teachers, and Team Members	The letter of request will be rendered for the approval of activities to be done.	1,000 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the plans were finalized.
Preparation of the activities	To prepare the activities to be implemented	May 2021	Key Teachers, Teachers, and Team Members	The plans regarding the activities for sustaining the school climate will be finalized.	2,000 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the activities to be implemented were prepared.
Webinar about teachers' work motivation: Ignite the Internal and External Work Motivation of the Teachers	To conduct a webinar regarding the factors that affect the teachers' intrinsic and extrinsic work motivation and sustain their work motivation.	June 2021	Guest Speakers, School Head, Key Teachers, Teachers, Parents, Students, and other stakeholders	The school head and teachers will be aware on what are the factors that affects their intrinsic and extrinsic work motivation and ignite their passion as teacher and reflect on what their real purpose as a teacher.	6,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	96% of the participants attended and actively participated in the webinar.
Providing bulletin board and incentives that will recognize the good performance and impact of the accomplishment of the teachers in their school and community. School can also have a corner for "Teacher of the Month" and "Hall of Fame."	To recognize the effort and good performance of the teachers that has an impact in their workplace and serve as an individual who can inspire others.	July 2021-March 2022	School Head, School Monitoring and Evaluation (SMEA), Key Teachers, Teachers, Parents/Guardians, Students, and other Stakeholders	The school will create an atmosphere that will inspire one another with healthy competition. Monthly result for "Teacher of the month", with perfect attendance, and overall outstanding teacher for the whole school year.	5,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders.	65% of the teachers will have a very satisfactory IPCRF rating and the remaining 35% have an outstanding performance.
Year-end culminating activity for teachers	To give awards to selected teachers in their commendable performance.	March 2022	School Head, Teachers, Parents, Students, and Other Stakeholders	Well-deserved teachers will be awarded with their outstanding performance, accomplishment, and contribution to the success of the institution.	25,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders.	98% of the teachers were participated.
Listen to the comments and suggestions by the teachers.	To motivate teachers through valuing their opinions and strengthen the shared governance.	May 2021-March 2022	School Head and Teachers	Teachers will be comfortable and motivated to work when they felt that they also have the right to express their ideas on how to make changes in their institution that will benefits everyone.	5,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders.	65% of the teachers will have a very satisfactory IPCRF rating and the remaining 35% have an outstanding performance.
Plan Evaluation	To evaluate the efficacy of the plan through the result of the assessment of the students, parents, and other stakeholders on the implementation of sustaining teachers' work motivation.	March 2022	School Head, School Monitoring and Evaluation (SMEA) Coordinator, and Team Members	The plan will be evaluated with regard to the results of the monitoring and assessment of the students, parents, and other stakeholders.	500 pesos	MOOE/Canteen Fund/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the plan was successfully evaluated.

The plan is proposed to sustain the work motivation of teachers. This would be accomplished through planning and preparation of activities, series of webinars on teachers' work motivation, provide bulletin board for teachers' accomplishment, and evaluation of the plan. Through this, the school heads, parents, students, and other stakeholders can be aware on their part as contributing factors to sustain or further improve the work motivation of teachers. They can work as one to motivate one another and create a healthy school community or positive school climate that will benefits each and everyone. Teachers' work motivation will be sustained or fully strengthened to provide quality education with an ignite passion inside their heart in a very challenging kind of profession.

Table 12: Action Plan for Sustaining Performance of Mathematics Teachers

Activity	Objectives	Time Frame	Persons Involved	Expected Outcomes	Budget Allocation	Sources of Fund	Success Indicators
Online meeting with the school head, Mathematics coordinator, and senior high school Mathematics teachers.	To conduct a meeting regarding the plan in sustaining the performance of Mathematics teachers.	May 2021	School head, Mathematics Department Coordinator and Mathematics Teachers	The school head and teachers will be informed about the plan and ideas will be solicited from the teachers.	500 pesos	MOOE/Canteen Fund, and Donation from other stakeholders	95% of the teachers attended the meeting.
Planning for the various activities and program to be done	To plan regarding activities to be done.	May 2021	School head, Mathematics Department Coordinator, Mathematics Teachers, and Team Members.	The letter of request will be rendered for the approval of activities to be done.	1,000 pesos	MOOE/Canteen Fund, and Donation from other stakeholders	95% of the plans were finalized.
Preparation of the activities	To prepare the activities to be implemented	May 2021	Mathematics Department Coordinator, Mathematics Teachers, and Team Members.	The plans regarding the activities for sustaining the school climate will be finalized.	2,000 pesos	MOOE/Donation from other stakeholders/Support budget from Schools Division Office (SDO), specifically in Research Department.	95% of the activities to be implemented were prepared.
Webinar about Pedagogical Skills of Mathematics teachers Part 1: The Importance of Mastery of Basic Skills in Mathematics	To conduct a webinar regarding the importance of strengthening students' basic skills in Mathematics.	June 2021	Resource Speakers, School head, Mathematics Department Coordinator and Mathematics Teachers	The school head and Mathematics teachers will be aware on what they need to do on how to strengthen the basic skills of the students in Mathematics in order to cope up in eminent level of Mathematics topics in senior high school.	5,000 pesos	MOOE/Canteen Fund/Donation from other stakeholders/ Support budget from Schools Division Office (SDO), Laguna specifically in Research Department.	96% of the participants attended and actively participated in the webinar.
Webinar about Pedagogical Skills of Mathematics teachers Part 2: Making Mathematics Enjoyable and Exciting to Learn.	To conduct a webinar on how to make teaching and learning Mathematics become exciting and enjoyed by the students.	June 2021	Resource Speakers, School head, Mathematics Department Coordinator and Mathematics Teachers	The school head and Mathematics teachers will have the chance to be aware on how to create the teaching-learning process in Mathematics become productive through active participation of the students because there is enjoyment and excitement in Mathematics subject.	5,000 pesos	MOOE/ Canteen Fund Donation from other stakeholders	96% of the teachers attended and actively participated in the seminar.
Conducting action research	To conduct action research by the Mathematics teachers on how to create interventions or programs that will fully development the performance of the students in Mathematics.	July 2021- March 2022	School head, Mathematics Department Coordinator, Mathematics Teachers, and Schools Division Office (SDO) Research Department	The Mathematics teachers can provide an action research that can implement their school to increase the level of proficiency of the students in Mathematics.	15,000 pesos	MOOE/Canteen Fund/ Support budget from Schools Division Office (SDO) Research Department, Donation from other stakeholders.	95% of mathematics teachers submitted their final output for an action research in Mathematics.
Observation of Teachers	To assess the Mathematics teachers in the way they handle their classes	July 2021- March 2022	Mathematics Department Coordinator	The Mathematics teachers will be guided about their pedagogical skills on how they delivered their lesson aligned with the objectives on how to make Mathematics enjoyable and excited.	500 pesos	MOOE/ Canteen Fund/	97% of the teachers were observed in their classes.
Plan Evaluation	To evaluate the efficacy of the plan through the result of the assessment of the students on teachers' pedagogical skills.	March 2022	School Principal, Language Department Coordinator and team members	The plan will be evaluated with regard to the results of the class observations and the assessment results of the students.	500 pesos	Donation from other stakeholders	95% of the plan was successfully evaluated.

The plan is proposed to sustain the performance of Mathematics teachers. This would be accomplished through planning and preparation of activities, series of webinars on pedagogical skills, conducting action research, and evaluation of the plan. Through this, the school heads can support Mathematics teachers on how to sustain their performance and work hand in hand in delivering effective pedagogy in Mathematics. This would help the Mathematics teachers on how to give importance on strengthening students' basic skills in Mathematics and make complicated topics in senior high school Mathematics subjects become meaningful with enjoyment and excitement by the students to learn from it.

CONCLUSIONS

The respondents had very good assessment on the school climate along safety, relationship, teaching and learning, and external environment. This could also the reason why the respondents had very high level of intrinsic and extrinsic level of work motivation. It is what the result of the

study showed that the better the respondents' school climate along safety, relationship, teaching and learning, and external environment, the higher is their level of work motivation along intrinsic and extrinsic dimensions. It was also observable that majority of the senior high school Mathematics teachers in public schools had very satisfactory (3.500-4.499) performance based on their IPCRF rating. Moreover, this study revealed that the respondents' school climate along its components, including their level of work motivation (internal and external motivation) have nothing to do with their very satisfactory Individual Performance Commitment and Review Form (IPCRF) rating. This could be explained by their personal choice having their passion and commitment to perform well in their chosen profession despite of any circumstances. Though it is still necessary to comprehensively implement the action plan to sustain the school climate, work motivation, and performance of senior high school Mathematics teachers to achieve quality education.

RECOMMENDATIONS

It is recommended to future researchers to conduct similar study to see the consistency of the result and determine the effectiveness of the action plan to sustain and continuously enhance the positive school climate of public schools, senior high school Mathematics teachers' work motivation and performance. In addition, active involvement of all stakeholders most specially the school administrators and parents to support the educators in providing quality education to the students is essential. The Philippine Department of Education and the government need to continuously provide appropriate support to the needs of teachers equivalent to their hardship in this kind of noble profession to provide quality education. It is also important to strengthen by the Mathematics teachers the mastery of basic skills plus appropriate pedagogical skills that will catch the attention of new generation students and appreciate this subject. The senior high Mathematics teachers also need to ensure that the students are well equipped after their study facing the challenges of real world.

REFERENCES

- Adato, J. R. (2018). "The Emotional Intelligence, Personal Values, and Academic Performance in English of Senior High School Students in Sto. Domingo National High School" Unpublished Thesis: University of Perpetual Help System-Jonelta. City of Biñan, Laguna, Philippines, 4024.
- Akman, Y. (2020). *The Role of Classroom Management on Confidence in Teachers and Educational Stress*. *International Journal of Contemporary Educational Research*, 7(1), 335–345.
- Arena, R.J. B. (2018). "Effectiveness of Strategic Intervention Material (SIM) Teaching Grade 11 Mathematics in Balibago Senior High School" Unpublished Thesis: University of Perpetual Help System-Jonelta. City of Biñan, Laguna, Philippines, 4024.
- Baclig, C. E. (2020). *PH's grade 4 students lowest in math, science around the world – int'l study*. Inquirer.net. Retrieved from <https://newsinfo.inquirer.net/1370289/phs-grade-4-students-lowest-in-math-science-around-the-world-study>.
- Bermejo, H. M. (2018). "School Climate, School Leadership, and Teachers' Efficacy in the University of Perpetual Help System Delta-Calamba" Unpublished Thesis: University of Perpetual Help System-Jonelta. City of Biñan, Laguna, Philippines, 4024.

- CNN Philippine Staff, (2019). *Philippines ranks low in reading, science, math, global survey shows*. <http://www.cnnphilippines.com/news/2019/12/3/PH-ranks-low-in-reading,-math,-science,-survey-shows.html>
- Essay Sauce. (2016). *Essay: Causes of low performance of students in mathematics*. <https://www.essaysauce.com/education-essays/causes-of-low-performance-of-students-in-mathematics/>
- Heathfield, S. (2020). *9 ways to inspire employee motivation in the workplace*. Retrieved from <https://www.thebalancecareers.com/does-your-workplace-inspire-motivation-1918742>.
- Jaudinez, A. S. (2019). *Teaching Senior High School Mathematics: Problems and Interventions*. *Pedagogical Research*, 4(2)
- Kariuki, L. W., Njoka, J. N. and Mbugua, Z. K. (2019). Influence of Teachers Preparedness on Performance of Pupils in Mathematics in Lower Primary Schools in Aberdares Region of Kenya. *European Journal of STEM Education*, 4(1), 01. <https://doi.org/10.20897/ejsteme/3931>
- Khan, N. (2019). The Impact of Organizational Climate on Teachers Commitment. *Journal of Education and Educational Development*, 6(2), 327–342.
- Lacerna, T. L. (2018). “*Effective of Structured Teaching Strategy Among Pupils with Learning Difficulty in Understanding Mathematics of the University of Perpetual Help System-Dalta Calamba Campus*” Unpublished Thesis: University of Perpetual Help System-Jonelta. City of Biñan, Laguna, Philippines, 4024.
- Litvinov, A., Alvarez, B., Long, C., & Walker, T. (2018). *10 Challenges Facing Public Education Today*. <http://neatoday.org/2018/08/03/10-challenges-facing-public-education-today/>
- Liu, W., Li, X.-W., & Zou, Y. (2019). The Formation of Teachers’ Intrinsic Motivation in Professional Development. *Integrative Psychological & Behavioral Science*, 53(3), 418–430. <https://doi.org/10.1007/s12124-018-9465-3>
- Manila, P. A. (2018). “*Teachers’ Pedagogical Skills, Senior High School Students’ Attitude Towards Academic Writing, and Academic Writing Skills in Pulo Senior High School S.Y. 2017-2018*” Unpublished Thesis: University of Perpetual Help System-Jonelta. City of Biñan, Laguna, Philippines, 4024.
- Özgenel, M. (2020). An Organizational Factor Predicting School Effectiveness: School Climate. *International Journal of Psychology and Educational Studies*, 7(1), 38–50.
- Pasathang, S., Tesaputa, K., & Sataphonwong, P. (2016). Teachers’ Performance Motivation System in Thai Primary Schools. *International Education Studies*, 9(7), 119–129.
- Sivertson, M. (2018). The Relationship between Intrinsic Motivation, Extrinsic Motivation, and Teachers’ Perceptions of Principal’s Leadership on Teacher Performance [ProQuest LLC]. In *ProQuest LLC*.
- Tahadlangit, A. B. (2019). “*A Neophyte Diary: Understanding the Lived Experience of Fresh Graduate Teachers Teaching Senior High School Students*” Unpublished Thesis: University of Perpetual Help System-Jonelta. City of Biñan, Laguna, Philippines, 4024.
- Teach Pinas. (2020). *IPCRF templates 2020 (manual and automated)*. Retrieved from <https://www.teachpinas.com/ipcrf-templates-manual-automated/>.
- Times Reporter. (2017). *Absentee Parents: How it affects your child’s studies*. <https://www.newtimes.co.rw/section/read/208666>
- Tulyakul, S., Sangkaew, T., Buaduang, N., Methethammawat, C., Sirirattanapun, K., Pantusa, K., Sangthong, N., Boontawee, N., Puichumpol, P., Kaewmanee, C., Teabput, K., & Junhom, T. (2019). Classroom Management Strategies and Teaching Motivation among Physical

- Education Teachers in Primary School. *African Educational Research Journal*, 7(4), 212–219.
- Uyanne, E. O., Badamas, O. L., & Balogun, A. O. (2020). Influence of Motivation on Teachers' Effectiveness in Ilorin West Local Government, Kwara State. *Journal of Education and Learning (EduLearn)*, 14(3), 345–351.
- Yango, A., Bermudo, P. and Quendangan, E. (2019) College Students' Attitude towards the Internet as Communication Medium and Level of Utilization of English Language in the Classroom. *Open Journal of Social Sciences*, 7, 438-452. doi: 10.4236/jss.2019.77036.
- Yango, A., Somido, F. and Salinas, M. E. (2021). Concept of the Teaching Profession, Academic Performance and Pedagogical Competence of the Pre-service Teachers at a Philippine Private University. *Asian Journal of Educational Research*, 9 (1), 1-11.
- Zamojski, P. (2019). Teaching, Otherness, and the Equalizing Thing. *Studies in Philosophy & Education*, 38(5), 563–568. <https://doi.org/10.1007/s11217-019-09670-3>
- Zhang, A., Wang, K., Zhang, J., Oudekerk, B. A., National Center for Education Statistics (ED), US Department of Justice, O. of J. P., & American Institutes for Research (AIR). (2019). Indicators of School Crime and Safety: 2018. NCES 2019-047/NCJ 252571. In *National Center for Education Statistics. National Center for Education Statistics*.