

## Coping Mechanisms of Mathematics Teachers in a Modular Distance Learning in the Selected Secondary Schools in the Division of Ilocos Sur



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**ABSTRACT:** The purpose of this study was to find out the problems faced and how Mathematics teachers managed to teach their subject in selected secondary schools in Ilocos Sur during the school year 2020-2021. The key areas in that were explored included: difficulty encountered and ways of handling that; the positive well-being; time management; change readiness; peer coaching; and teamwork. The study sought to establish co-relations between various challenges, coping strategies, and teacher performance under modular distance learning paradigm and, therefore, the research design adopted was descriptive-correlational. Questionnaire was of two parts and was administered to 31 Mathematics teachers and the regularity was compared using weighted mean and correlation analysis. Results highlighted that despite these difficulties in modular distance learning teachers overwhelmed and improvised through time management the principles of change management, the use of technology, team work and peer coaching. Several indicators also pointed to teacher effectiveness; this based on their circumstance reports containing IPCRF ratings. Only time management and peer mentoring were found to have relation with the teacher's performance while the employees considering the challenges did not affect performance. A recommended intervention, therefore, includes training and development of teachers, and facilitating counselling services, interprofessional collaboration, and teacher enabled schools. Professional standards suggest that teachers should carry on changing, technological, and professional learning with peers in order to maintain high levels of performance and effectively answer to the difficulties occurred in the context of distance learning.

**KEYWORDS:** challenges, coping mechanisms, modular distance learning

### I. INTRODUCTION

The COVID-19 outbreak was declared a public health emergency of international concern by the World Health Organization (WHO) in early 2020, disrupting the lives and, consequently, work and education processes in various countries. The literature indicates that those challenges were not only physical or financial but psychological and emotional since fear and uncertainty increase with the virus spread (World Health Organization, 2020). Lockdown of businesses, lay off, economic recessions, travel bans, and closure of schools disrupted education systems across the Globe. At the moment, due to COVID-closures, over 1.5 billion learners have been out of school, thus turning education facilities into entities that had to quickly switch to other forms of delivery.

In the Philippines the education system changes dramatically as the move from the traditional face-to-face delivery to multiple modalities of remote learning in order to continue education as the pandemic spread (Cahapay, 2020). The Department of Education (DepEd) came up with the Basic Learning Continuity Plan (BLEP) focusing on the competencies for basic learning, multiple learning delivery methods, and health and safety standards (DepEd, 2020). Modular Distance Learning or (MDL) was identified as the mode adopted most with region adopting distance learning mostly when Internet connection is poor. This self-learning approach offered the students standardized mode of learning to use at their own pace (Llego, 2020).

Nevertheless, a transition to modular distance learning proved problematic for educators, particularly mathematics teachers and trickled down the problem of preparing, delivering, and evaluating the modular content, as well as providing timely support in delivering complex lessons. Research indicates that Mathematics as a subject that entails critical thinking skills was hampered in the pandemic by a lack of direct contact between students and teachers (Magsambol, 2020). In addition, challenges cited by

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educators include lack of print media, connectivity problems, and delays in submitted work by the students (Baticulon et al., 2021).

Because these challenges are significant, this study basically sought to establish the following research questions: The specific challenges encountered by secondary-level Mathematics teachers as they implement modular distance learning and the coping strategies used while implementing modular distance learning. The current literature has highlighted the need for coping and working conditions, team collaboration, psychological counseling and training, so as not to compromise the negative impact of the pandemic on learning (García and Weiss, 2020; Kim and Asbury, 2020). The findings of this research will be useful in planning subsequent interventions to bolster teachers' coping ability and performance in a changing education environment.

## II. RESEARCH METHODOLOGY

### Research Design

The researcher used the descriptive-correlational research design which provided answers to what's and how's of the current research. It also explained the coping mechanism of the participating Mathematics teachers and their level of performance during the pandemic. The correlational research design as cited by Pantaleon (2022), sheds light on the relationships between the challenges of the respondents and their coping mechanisms.

### Population and Locale of the Study

The Mathematics Teachers in the selected Secondary Schools in the Division of Ilocos Sur, SY 2020 – 2021 gave meaning to the research through their responses. The distribution of respondents is presented below.

Table 1. Distribution of Respondents

School	Population	Percentage (%)
Santa Maria National High School	12	38.71
Ag-agrao National High School	2	6.451
San Esteban National High School	5	16.129
Burgos National High School	7	22.58
Santiago National High School	5	16.129
<b>Total</b>	<b>31</b>	<b>100.00</b>

Using total enumeration, a total of 31 mathematics teachers were involved in the study as respondents.

### Research Instrument

The research instrument was divided into two parts. Part I contains the data on the challenges met by the teachers in modular distance learning while Part II is a set of checklists of coping mechanisms. The questionnaire was adopted from the study of Makabenta (2021). An interview guide was used in the gathering data on the coping mechanisms of teachers qualitatively. Document analysis was also used to gather data on the performance of teachers based on their latest IPCRF.

### Data Gathering Procedure

The researcher secured permission from the Office of the Schools Division Superintendent of the Schools Division of Ilocos Sur and the school principal of the selected Secondary Schools in the Division of Ilocos Sur before gathering data. A survey questionnaire that includes challenges, a checklist on coping mechanisms was distributed, retrieved, tallied, analyzed and interpreted.

### Statistical Treatment of Data

To treat and analyze the data gathered, the following statistical tools were used:

**Weighted Mean** was used to determine the extent of challenges and coping mechanisms of teachers during the pandemic. It also determined the level of the performance of the teachers as indicated in their IPCRF during the School Year 2020-2021.

**Spearman rho** was utilized to measure the degree of relationships between the challenges of the respondents and their coping mechanisms, challenges and performance of the respondents, and the coping mechanism and the performance of teachers, respectively.

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## Data Categorization

The researcher used the following scales to interpret the gathered data:

### A. Challenges and Coping Mechanisms of Teachers

Scale	Range	Descriptive Rating	Overall Rating
5	4.21 – 5.00	Strongly Agree (SA)	Very High (VH)
4	3.41 – 4.20	Agree (A)	High (H)
3	2.61 – 3.40	Moderately Agree (MA)	Moderate (M)
2	1.81 – 2.60	Slightly Agree (SA)	Slight (S)
1	1.00 – 1.80	Disagree (D)	Low (L)

### B. Individual Performance Commitment and Review Form Rating of Mathematics Teachers

Range	Descriptive Rating
4.500 – 5.000	Outstanding (O)
3.500 – 4.499	Very Satisfactory (VS)
2.500 – 3.499	Satisfactory (S)
1.500 – 2.499	Unsatisfactory (U)
below 1.499	Poor (P)

## III. RESULTS AND DISCUSSIONS

The table shows the challenges met by teachers in the implementation of modular distance learning.

**Table 2. Challenges Met by Teachers in the Implementation of Modular Distance Learning**

Indicators	Mean	DR
1. Unstable internet connectivity	3.35	A
2. Lack of materials and equipment for the reproduction of learning resources.	3.16	MA
3. Unable to deliver the lesson to the pupils in a face-to-face classroom.	3.90	A
4. Unsure of the lessons conveyed are mastered by the pupils.	3.97	A
5. Increase the number of non-readers and non-numerates in the class.	3.77	A
6. Enhancing the skills of the learners.	3.71	A
7. Parents support the learning of the pupils.	3.45	A
8. There are certain parents who lack the desire and ability to teach their children the substance of the lessons.	3.61	A
9. Some parents never provide guidance and assistance to their children's studies.	3.68	A
10. Low marginal status of the family.	3.35	MA
11. Teachers are affected by this DepEd intervention.	3.48	A
12. Some of the time is used in the implementation of the DepEd program.	3.55	A
13. Teachers continue to work overtime only to comply with all of these.	3.74	A
14. Lack of training to craft video lessons.	3.74	A
15. Teachers are still under stress in the execution of their roles and obligations.	3.52	A
<b>Overall Challenges Met</b>	<b>3.60</b>	<b>H</b>

Overall, the results reflected a mean score of 3.60 interpreted as high which yielded the same outcome in the study of Makabenta (2021). On the other hand, Solis (2021) posited that the respondents got an overall mean score of 4.91 interpreted as very high. The results imply that the respondents agreed that they have experienced challenges during the implementation of modular distance learning. Therefore, teachers must be provided with the necessary knowledge, attitude and skills in the preparation and implementation of MDL. With the provision of technical assistance, teachers are expected to perform their jobs and responsibilities effectively even in the midst of the pandemic.

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The results, in particular, reflected that item number 4 which is “*Unsure of the lessons conveyed is mastered by the pupils*” got the highest mean score of 3.97 with a descriptive rating of agree. The result suggests that the respondents are uncertain whether the learners achieved mastery of the most essential learning competencies provided the limitations of using the modular distance learning. Teachers had difficulty validating their actual performance as Anzaldo (2021) claimed that not all learners do their modules committedly and without the presence of teachers and classmates who remind them of their work.

Furthermore, the results also indicate that item number 2 “*Lack of materials and equipment for the reproduction of learning resources*” got the lowest mean score of 3.16 with a descriptive rating of moderately agree. This denotes that they are provided with materials and equipment in the production of self-learning modules and assessment tools such as printers, ink, bond papers and staplers. On the study of Gueta and Janer (2021), they also mentioned the same challenges. According to them, teachers lack resources for reproduction and delivery of modules. Sometimes they don’t have time printing the modules due to time constraint, malfunctioned printers and unavailability of printing materials such as bond papers and ink.

However, in the study conducted by Hernandez (2021) “*Lack of focus due to work-related and home-related activities at home*” garnered the highest frequency and rank among the enumerated challenges by the teacher-respondents. This result only shows variations of impact of modular distance learning on teachers.

**Table 3. Coping Mechanism of Teachers Along Positive Well-Being**

INDICATORS	Mean	DR
1.Boosting self-confidence by encouraging others.	4.23	SA
2.I take vitamins for my health to reduce stress	3.39	A
3.When I feel tired, I also take a rest for a moment and pray for God’s strength.	4.52	SA
4.The only thing I have in mind now is positivity	4.42	SA
5.I still believe that above all of these things we are experiencing right now, there will always be ways to reduce the learners holistically.	4.39	SA
<b>Overall Positive Well-Being</b>	<b>4.19</b>	<b>H</b>

On coping mechanisms along positive well-being, item number 3 “*When I feel tired, I also take a rest for a moment and pray for God’s strength*” got the highest mean score of 4.52 described as strongly agree which deviates from the study of Makabenta (2020). The results signify that the respondents gain positive well-being from God and find peace in the midst of difficult circumstances brought by the changes in the modality of learning. However, they don’t usually take vitamins to reduce stress as reflected in the result with the lowest mean score of 3.99 described as agree conforming to the finding of Makabenta (2020).

De Villa and Manalo (2020) cited that encouraging outlook, self-confidence gained from encouragement and motivation, healthy lifestyle, and stress reduction allows them to continue performing their duties and responsibilities despite the challenges of these trying times

**Table 4. Coping Mechanism of Teachers Along Time Management**

INDICATORS	Mean	DR
1.Even there are a lot of things to do, I still do my best to accomplish those things on time.	4.52	SA
2.I give more than enough time to work with the learning materials even late at night.	4.10	A
3.I believe that time management is very important to accomplish the tasks.	4.74	SA
4.I make my on-time line in accomplishing the tasks given me	4.06	A
5.I work on the task given me and submit or accomplish it on time	4.45	SA
<b>Overall Time Management</b>	<b>4.37</b>	<b>VH</b>

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Along time management, most of the respondents picked the indicator *“I believe that time management is very important to accomplish the tasks”* with a mean score of 4.74 termed as strongly agree. The outcome implies that the respondents value time and its relevance in the accomplishment of their various tasks. On the other hand, indicator *“I make my own timeline in accomplishing the tasks given me”* got the lowest mean score of 4.06 interpreted as agree which denotes that the respondents merely make or organize timeline. Both results conform to the study of Makabenta (2020) concluding that time management helps them accomplish things on time which allows them to attend to school duties and household chores. De Villa and Manalo (2020) further adds that establishing routines through habits and practices in a set schedule help them to utilize time efficiently.

**Table 5. Coping Mechanism of Teachers Along Openness to Change**

INDICATORS	Mean	DR
1.It’s a good thing that I’m very open to new learnings and I’m very interested in the new techniques as to the technology tools and online resources are involved.	4.61	SA
2.We, teachers, are very adaptive to the changing teaching-learning process because we are said to engage in never-ending learning.	4.65	SA
3.Every day we learn new things and these things are helpful for us to cope with the challenges of the new normal.	4.55	SA
4.I am resilient to change.	4.45	SA
5.I tried my best to learn new things from peers and superior to effectively implement the new normal way of education	4.58	SA
<b>Overall Openness to Change</b>	<b>4.57</b>	<b>VH</b>

On openness to change, all indicators got a descriptive rating of strongly agree; however, the second indicator which is *“We, teachers, are very adaptive to the changing teaching-learning process because we are said to engage in never-ending learning”* got the highest mean score of 4.65 while the fourth indicator *“I am resilient to change”* got the lowest mean score of 4.45. The results signify that the respondents are open for changes that come along with the shifting of learning modality. The same results yielded in the study of Makabenta (2020) stating that flexibility and adaptability are important qualities that every teacher must acquire De villa and Manalo (2020) which allows them to survive and still succeed.

**Table 6. Coping Mechanism of Teachers Along Peer Mentoring**

INDICATORS	Mean	DR
1 Seeking help from my co-teachers since we are dealing with the same pressure in making good outputs is important	4.32	SA
2.I ask help from my colleagues in studying different computer applications and gathering online resources and references to make my teaching easier.	4.00	A
3.I ask assistance from those who are experts in using technology so I will be more acquainted in integrating it into my lessons.	3.97	A
4.I value the support given me by my colleagues	4.45	SA
5.I apply the technical assistance given to me by my mentor.	4.39	SA
<b>Overall Peer Mentoring</b>	<b>4.23</b>	<b>VH</b>

As presented in the table, majority of the respondents picked item number 4 *“I value the support given me by my colleagues”* with a mean rating of 4.45 described as strongly agree while indicator 3 *“I ask assistance from those who are experts in using technology so I will be more acquainted in integrating it into my lessons”* got the least mean score of 3.97. This implies that mentoring is magnified in the workplace between and among the respondents. They help one another by providing technical assistance in the accomplishment of different tasks. De Villa and Manalo (2020) Mentoring provides a strong support system in holistic well-being and development of educators. As teachers embrace change, peer mentoring allows them to build confidence and nurture competence in the new normal.

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On the other hand, in a similar study conducted by Makabenta (2020), item 4 also got the highest mean score along items 3 and 4; however, the result negates the item with the lowest mean score. This implies differences of the respondents' perception or practice of seeking guidance and support from one another.

**Table 7: Coping Mechanism of Teachers Along Collaboration**

INDICATORS	Mean	DR
1.We ask assistance from the stakeholders in the proper implementation of distance learning modality.	4.16	A
2.We seek help from external stakeholders for the other things we need that our schools cannot provide.	4.13	A
3.I seek help and support from the parents of my pupils in assisting and guiding their children learning at home.	4.13	A
<b>Overall Collaboration</b>	<b>4.14</b>	<b>H</b>

Along collaboration, the table reveals that item number 1 *"We ask assistance from the stakeholders in the proper implementation of distance learning modality"* got the highest mean score of 4.16 described as Agree while the second and the third indicators *"We seek help from external stakeholders for the other things we need that our schools cannot provide"* and *"I seek help and support from the parents of my pupils in assisting and guiding their children learning at home"* got the least mean score of 4.13 also deduced as agree. This indicates that the respondents maintain strong partnership with stakeholders during the implementation of modular distance learning.

On one hand, the results negate the findings of Makabenta (2022) having item 3 as the indicator with the highest mean score while item 5 with the lowest mean score. This shows that the respondents have different ways of collaborating with stakeholders.

This means that due to limited resources, the gaps are filled through the continuous support of stakeholders through community engagement and partnership. This implies that everyone in the school system is involved in designing learning opportunities to attain quality education despite of this pandemic.

**Table 8. Summary on the Coping Mechanisms of Teachers**

INDICATORS	Mean	DR
<b>Positive Well-Being</b>	4.19	High
<b>Time Management</b>	4.37	Very High
<b>Openness to Change</b>	4.57	Very High
<b>Peer Mentoring</b>	4.23	Very High
<b>Collaboration</b>	4.14	High
<b>Overall Coping Mechanisms</b>	<b>4.30</b>	<b>Very High</b>

Overall, openness to change obtained the highest mean score of 4.57 described as strongly agree while collaboration obtained the least mean score of 4.14 interpreted as agree. The results negate the study of Makabenta (2021) where collaboration garnered the highest mean score opposite to positive well-being. The results entail that the respondents had expressed various coping mechanism in dealing with the challenges during the implementation of modular distance learning. Some might have perceived that embracing changes could help them ease the challenges encountered during the implementation of modular distance learning while some embraced collaboration (Makabenta 2020) where everyone in the school system is involved in designing learning opportunities to attain quality education despite of this pandemic.

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Table 9. Performance of Teachers (IPCRF)

Range	Frequency	Percentage	Adjectival Rating
3.500 – 4.499	14	45.16%	Outstanding
2.500 – 3.499	17	54.84%	Very Satisfactory
Total	31	100%	

As reflected in the table, 17 or 54.84% of the respondents obtained the rating equivalent to 3.500 to 4.499 with a descriptive rating of VS. Followed by 14 or 45.16% of the respondents obtained the rating equivalent to 4.500-5.00 with a descriptive rating of outstanding.

Overall the final average rating of the respondents is 4.40 described as very satisfactory. The same result was reflected in the study of Jomoad et al (2021). This implies that most of the respondents employ more than their expected and acceptable performance in the delivery of their duties and responsibilities as Mathematics teachers. The overall performance of teachers (Baluyos and Baluyos, 2019) indicated that the teachers were able to carry their job very satisfactorily in the teaching-learning process, in initiating activities that promote parents and community members' participation, and in updating themselves through attending seminars, workshops, and conferences.

### Coping Mechanisms of Mathematics Teachers

The Covid-19 pandemic brought immense challenges in the implementation of the new learning modality. The following interview revealed the coping mechanisms expressed by the selected secondary teachers in the Division of Ilocos Sur.

The data from the transcript was analyzed using the Collaizi's Method of Data Analysis. The results of the analysis resulted to five themes.

#### Theme 1: Embracing change

Change is inevitable. Therefore, it requires people particularly educators to prepare themselves with changes in various aspects. Having such outlook allows them to embrace and engage in different tasks with ease and flexibility. Flexibility and adaptability are important qualities that every teacher must acquire (De Villa and Manalo, 2020). One participant stressed that being flexible helps them make the necessary adjustments in fulfilling their jobs even in the midst of difficult circumstances. As verbalized:

*"So, the first thing to do, the first thing I did in order to cope is being openness to change. So, I am very open to new learning in which I'm very interested then, whatever changes, I'm very adapted to that change and I followed all the instructions with openness, all the suggestions or all the implementing guidelines in doing or implementing the distance learning." (Participant 1).*

Another participant said that: *"I think we must always think positive and be ready for the different challenges that will come that will arise. So, for us teachers we must always flexible and open for changes just to meet the need of our learners since our priority in the DepEd is how we cater our learners especially and of course for the challenges during pandemic". (Participant 4).*

#### Theme 2: Time Management

According to De Villa and Manalo (2020), time management is an important practice to meet the demands of home and work. Time is essential for it affects the quality and efficiency of one's work. When time is consumed wisely, more and better things are done. With time management, plans are carried out smoothly which prevents haste and waste. One of the participants shared that they usually prepare a plan.

As verbalized:

*"Since we are loaded with paper works and other auxiliary services, I always make a plan which serves as my guide in accomplishing those tasks" (Participant1).*

*Another one said: "I prepare a list to do things and I make sure that everything is properly executed." (Participant 5).*

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## Theme 3: Digital Learning

The use of technology such as PowerPoint and videos provides both teachers and learners better learning opportunities. It serves as a teaching aid in the delivery of the teaching and learning process. One of the participants also stressed that using various social media platforms such as messenger, facebook and google forms help them reconnect with their learners. As verbalized:

*“So, to cope up with all these challenges, kailangan mo siyang i-one on one. Talagang may interaction sa mga students thru messenger o kaya I call them to provide assistance sa pagsagot nila ng kanilang module.” (Participant 5)*

Another participant said:

*“No ania ti topic mi agaramidak ti video na, kasla koma ivideok diay bagbagik nga agsolve then i-explain ko no kasano.” (Participant 4).*

## Theme 4: Collaboration

The participation of external stakeholders filled the gaps (De Villa and Manalo, 2020) during the pandemic, thus partnership with stakeholders is encouraged. Having healthy partnership with the community contributes in the success of the implementation of school activities or programs. One of the participants mentioned the challenges in the delivery of materials; however, it became a bit lighter through the help of the external stakeholders.

As verbalized:

*“The delivery of materials to learners is very hard. So, what we did is to ask help from the barangay officials and also parents in the distribution of the modules.” (Participant 4).*

## Theme 5: Monitoring

Keeping a track on learners’ progress during the pandemic is challenging. Communication is almost impossible; however, its importance is tantamount to the success of the learner in understanding the lessons. A participant shared that regular monitoring can help them in their academic journey.

As verbalized:

*“I do some regular checking on the output of my students following them up if they were able to finish it on time and aside from that also I also some regular communications with my fellow teachers and friends who are teaching from other schools to ask about what they are doing, as part of benchmarking let’s say for example, just to be more excellent when it comes to deliver the lesson to them and lastly for the students to really know if they are learning a lot, I do some interventions, necessary interventions for those who hardly cope up with lessons and then that will be my basis if the students are already on track when it comes to the lessons being given to them.” (Participant 5)*

Table 10 presents the relationship between the challenges met by the teachers and their level of coping mechanism.

**Table 10: Relationship between Coping Mechanisms to Challenges Met by the Teachers**

Indicators	rho	p-value	Interpretation
Positive Well-Being	0.342	0.059	Not Significant
Time Management	0.272	0.138	Not Significant
Openness to Change	0.336	0.065	Not Significant
Peer Mentoring	0.308	0.092	Not Significant
Collaboration	0.402*	0.025	Significant

The table presents that among the coping mechanisms, collaboration displays a significant relationship with the challenges encountered by the respondents during the implementation of modular distance learning with a positive correlation coefficient of 0.402 and p-value=0.025 values. This means that teachers who worked together, especially on a goal or shared projects have a greater capacity to manage internal and external stressful situations. This requires teachers to work together to address problems they encounter in teaching and other issues concerning students.



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A variety of studies have shown that teachers benefit from collaboration. Connecting with other educators reduces stress because we are able to share problems and difficulties with people who can help find solutions. In fact, teachers who collaborate often report higher levels of job satisfaction, increased confidence in their abilities and a higher feeling of value (Barshay, 2014). Teacher collaboration also reduces the sense of isolation and can reduce the workload that teachers must shoulder by enabling them to compile common resources (Hanover Research, 2015). Gajendran and Brewer (2012) also claimed that collaboration is seen as an essential business trait in the construction industry for effective project delivery. In an organization, the solution of problems is based on the collective effort of the individuals who work together to attain it.

Other indicators such as positive well-being ( $\rho=0.342$ ), time management ( $\rho=0.272$ ), openness to change ( $\rho=0.336$ ), and peer mentoring ( $\rho=0.308$ ) show insignificant relationship to their performance.

Table 11 shows the relationship between challenges and performance of teachers.

**Table 11. Relationship between Challenges and Performance of Teachers**

Indicator	$\rho$	p-value	Interpretation
Challenges	-0.272	0.139	Not Significant

The table shows that there is an inverse relationship between challenges and performance of teachers. This is supported by the computed  $\rho$  of -0.272 with a p-value of 0.139. This indicates that teachers with lower level of challenges, or teachers with lesser issues, problems and concerns performed better. However, the result further shows that the relationship is insignificant. The researcher fails to reject the null hypothesis stating that there is no significant relationship between challenges and the performance of teachers.

Khan, Sha, Khan and Gul (2012) pointed out that the teacher's performance is negatively influenced by the different challenges contributing factors which either exists within or outside the educational institution, that impede the performance of teachers, resulting in lower individual as well as institutional productivity. The study further emphasized that educational institutions should focus on teachers' problems by understanding teachers' problems and also providing proper support to the teachers dealing with the problem. Yunarti, Asaloei, Wula, and Werang (2020) show parallel results showing a negative correlation between challenges and performance. However, it negates the findings showing that there is a significant relationship between these two variables. The study arrived at the conclusion that teachers of higher challenges performed lower.

Table 12 shows the relationship between coping mechanism and performance of the teachers.

**Table 12. Relationship between Coping Mechanisms to Performance of Teachers**

Indicators	$\rho$	p-value	Interpretation
Positive Well-Being	-0.281	0.126	Not Significant
Time Management	0.385	0.033	Significant
Openness to Change	-0.324	0.075	Not Significant
Peer Mentoring	0.434	0.015	Significant
Collaboration	0.015	0.935	Not Significant

It can be noted from the table that two of the indicators of coping mechanism show significant relationship to performance. This includes time management and peer mentoring which are directly related with the performance of the teachers.

Time manage is significantly related to performance of teachers with a computed  $\rho$  of 0.385 with a computed p-value of 0.033. This indicates that those teachers balance their time in the accomplishment of their various duties and responsibilities performed better.

Teacher time management is directly proportioned with the performance of students, teachers of public primary schools do plan actively and intelligently then they may be able in future to produce more intelligent minds for the future development of the nation. The significant relationship between teachers' time management and students' academic performance was found. The level of teachers' time management and academic performance was moderate, that's why it was recommended that teachers should improve their time management skills through consciousness about controlling their time

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(Kayode, & Ayodele, 2015). In addition, effective utilization of teachers' time management (Ayodele & Oyewole, 2012) directly impacts teachers' performance (Ayodele & Ige, 2012; Achibong & Nja, 2011).

Peer mentoring also shows significant relationship to teachers' performance. This is supported by the computed  $\rho = 0.434$  with  $p\text{-value} = 0.015$ . This means that peer mentoring is significantly related to teacher's performance. The researcher fails to research the null hypothesis that there is no significant relationship between coping mechanism along this indicator and teacher's performance. When teachers share knowledge, skills and abilities; they are expected to perform better.

Fletcher and Tienda (2009) showed that taking part in a course of study together with other teachers resulted in better performance than working in alone or in isolation. Lorenzetti et al. (2020) posit that peer mentorship promoted the development of work environments that emphasized community, collaboration, and shared purpose.

### **IV. CONCLUSIONS AND RECOMMENDATIONS**

The following conclusions are drawn based on the salient findings of the study.

1. Teachers encounter challenges in the implementation of modular distance learning.
2. Teachers still manage to cope with the challenges brought by the implementation of modular distance learning.
3. Teachers performed very satisfactorily based on their latest IPCRF.
4. Teachers embrace changes, manage time, use digital technology, collaborate, and monitor students' progress to cope with the challenges met in modular distance learning.
5. Teachers used collaboration to cope with the challenges encountered in modular distance learning.
6. The challenges met by the teachers do not significantly influence the performance of teachers.
7. Time management and peer mentoring significantly affect the performance of teachers.

Based on the conclusions drawn, the following recommendations are forwarded.

1. Teachers shall be provided with training and faculty development programs to enhance their technical skills and pedagogies in teaching to hurdle the challenges brought about by the utilization of modular distance learning in mathematics.
2. The Department of Education may establish counseling programs for teachers to help them cope with the challenges brought about by the changes in the implementation of new modalities of teaching like modular learning.
3. The Department of Education and school principals should work with teachers at the pre-implementation of distance learning to address their needs in resources and training to effectively facilitate the delivery of quality education for students.
4. Teachers shall continue embracing changes, managing time, using digital technology, collaborating with peers, and monitoring students' progress to cope with the challenges met in modular distance learning.
5. Teachers shall nurture a culture of collaboration, cooperation, and teamwork in the performance of their functions and responsibilities to sustain impressive performance.
6. School heads shall create a sense of empowerment for teachers through training, involvement in decision-making, and develop a pleasant school environment.
7. Teachers shall form discussion groups and practice together where peer tutoring can be carried out to provide opportunities in overcoming the problems and challenges and to elevate teachers' performance.

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