

STRESS MANAGEMENT AND COPING MECHANISMS OF PHYSICAL EDUCATION INSTRUCTORS IN ONLINE TEACHING

Allan C. Guanlao^a

^a amoresericajane@gmail.com

^aLaguna State Polytechnic University, Santa Cruz, Laguna, 4009 PHILIPPINES

Abstract

Covid19 as a global issue, the education sector is greatly affected by the pandemic (SONA 2020). Despite the many challenges, the educational institutions could not afford to deprive the students of the opportunity for learning. Schools in higher education still in a continuous effort to look for measures and alternative mode to education journey of the students without compromising safety.

Questionnaire in the form of checklist was utilized in the gathering of needed information and in the completion of the investigation.

The statistical treatments applied in the study consisted of mean, standard deviation and Pearson-R correlation/ Regression analysis.

Related readings on the literature and studies were gathered in the formulation of the hypothesis and the conceptual framework which was presented in a form of paradigm.

Keywords: Physical Educator; Stress; Coping Mechanism

1. Introduction

Considering Covid19 as a global issue, the education sector is greatly affected by the pandemic (SONA 2020). Despite the many challenges, the educational institutions could not afford to deprive the students of the opportunity for learning. Schools in higher education still in a continuous effort to look for measures and alternative mode to education journey of the students without compromising safety.

As such, various modalities in teaching are implemented including online teaching to serve as a modality in the teaching-learning process.

However, the implementation of this to replace the usual face-to-face method is quite a challenge for many of instructional leaders, especially for physical education instructors as they are expected to deliver the utmost quality in education despite the challenges they face. These challenges may include constant monitoring and performance tasks assessment among others as physical education classes focus on tasks that requires direct instruction and coaching.

With this, teachers, including physical education instructors in tertiary education during the pandemic are said to be burned as they try to make ends meet by doing developing alternative modes to deliver learning. This could result to the skyrocketing stress of educators during the time of pandemic Gewertz (2020). Though stress is not new to teaching, clamber of developing strategies to cater for distance (online) learning make physical education instructors adopt the latest technology that was not quite required on traditional face-to-face learning, not to mention the constant teleconferencing, webinars and calls to attend to, from school administrators, parents and students just make it to stressful and tiring. In addition, (Talidong & Toquero, 2020) school closures, lock down and home quarantine, physical distancing as implemented by the “new normal” system also add to stress among teachers. (Ramos 2020).

In line with the above discussion, it can be said that instructional leaders, especially those teaching physical education are now facing challenges that may affect their efficacy. In addition, the implementation of distance (online) teaching makes it harder and challenging as teaching PE requires specific strategies to achieve the target goals. With this, the researcher understands that it is necessary to look how they are coping up. It is important to note that in this current pandemic, a lot remains undiscovered on the status of stress management and coping mechanisms of physical education instructors in Cavite State University.

Thus, the researcher seeks to find out the stress management and coping mechanisms employed and used by physical education instructors in Cavite State University and its relationship to their teaching efficacy. This needs to be analyzed in order to further improve and develop awareness, propose programs and psychosocial aid to be given to them.

This research will take a deeper dive in the stress management and coping mechanism of physical education instructors now that they are most challenged by this time of crisis.

1.1 Statement of the Problem

697

The primary aim of the study is to determine the relationship of stress and coping mechanism of Physical Education instructors in online teaching.

Specifically, it seeks to answer the following questions:

1. What is the level of stress management of Physical Education instructors in online teaching as to:
 - 1.1 Sports and recreation;
 - 1.2 Social activity;
 - 1.3 Planning and decision making;
 - 1.4 Conflict resolution; and
 - 1.5 Self-Regulation?
2. What is the level of coping mechanism of Physical Education instructors in online teaching in terms of:
 - 2.1 Action-based coping mechanism; and
 - 2.2 Emotion-based coping mechanism?
3. What is the level of Teachers' Efficacy of Physical Education in online teaching in terms of:
 - 3.1 Content mastery;
 - 3.2 Instructional design skills;
 - 3.3 Instructional delivery skills;
 - 3.4 Instructional assessment skills; and
 - 3.5 Class management skills?
4. Do stress management and coping mechanism have significant relationship on teaching efficacy of Physical Education in Online Teaching?

2. Methodology

2.1 Research Design

The researcher will use the descriptive survey research method. This method refers to the collection of data from members of the population in which direct contact is made by means of survey questionnaires and checklist.

The descriptive method is preferred since it yields valid and reliable results for a manageable number of respondents and can be accomplished with limited resources. A survey instrument will be used to obtain data from the randomly selected respondents.

The process of descriptive survey research goes beyond mere gathering and tabulation of data. It involves an element of interpretation of the meaning or significance of what is being described. Since the investigation is concerned with the effect of stress management and coping mechanisms of PE instructors in online teaching, the researcher believes that it the best research method to use in this undertaking.

2.2 Respondents of the Study

The sample of this study was comprised of twenty five (25) randomly selected physical education instructors in Cavite State University that are gathered for the needed information which answered the research problem.

2.3 Research Instrument

The instrument that used in the study is a survey questionnaire-checklist.

The questionnaire is a research-made instrument devised to determine the effect of stress management and coping mechanism of PE instructors in online teaching to their efficacy.

The questionnaire used a five point likert scale to find out the mean level of stress management, coping mechanism and teaching efficacy of the respondents included in this study.

In the questionnaire, a five-point rating scale indicated below

Scale	Numerical Value	
5	4.20-5.0	To a very great extent
4	3.40-4.19	To a great extent
3	2.60-3.39	To a moderate extent
2	1.80-2.59	To a low extent
1	1-1.79	To a very low extent

In the construction of questionnaire described above, an extensive review of various books, publications and internet sites was used. An initial draft of the research tool has prepared and presented to professors and panel members for comments and suggestions. Validation was done to assess the representation of the items with those of others dealing with same area of investigation. The assistance of the adviser relevant to the contents of the questionnaire has been solicited.

The final form of the questionnaire was reproduced and administered to respective respondents.

2.4 Statistical Treatment

The responses were tabulated as basis for statistical treatment of the data. In order to analyze and interpret the data gathered, the following statistical tools were utilized in the study.

3. Results and discussion

This chapter presents the data gathered which were statistically treated, presented, analyzed in tables and interpreted in relation to the problems and hypotheses specified in the study. The results were presented in the same sequence with the research questions posed for the study.

Table 1. Level of stress management of Physical Education instructors in online teaching as to Sports and recreation

<i>Statement</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>Join sports events for at least once a month to enhance well-being.</i>	4.46	0.65	To a very great extent
<i>Participate other recreational activities such as games and dancing.</i>	4.44	0.64	To a very great extent
<i>Spend time in leisure activities to reduce and manage stress.</i>	4.60	0.70	To a very great extent
<i>Find time to do other activities that are not related on teaching such as cooking, handicrafts, music etc.</i>	4.42	0.73	To a very great extent
<i>Engages in other outdoor activities such as swimming, hiking, camping etc.</i>	4.54	0.71	To a very great extent
Overall Mean = 4.49			
Standard Deviation = 0.68			
Verbal Interpretation = Very High			

Table 1 illustrates the level of stress management of Physical Education instructors in online teaching as to Sports and recreation. Among the statements above, “*Spend time in leisure activities to reduce and manage stress*” yielded the highest mean score ($M=4.60$, $SD=0.70$) and was remarked to a very great extent. This is followed by “*Engages in other outdoor activities such as swimming, hiking, camping etc*” with a mean score ($M=4.54$, $SD=0.71$) and was also remarked to a very great extent. On the other hand, the statement “*Find time to do other activities that are not related on teaching such as cooking, handicrafts, music etc*” received the lowest mean score of responses with ($M=4.42$, $SD=0.73$) yet was also remarked to a very great extent.

Overall, the level of stress management of Physical Education instructors in online teaching as to Sports and recreation attained a mean score of 4.49 and a standard deviation of 0.68 and was Very High among the respondents.

Finding shows that in terms of sports and recreation, PE instructors are active and have their initiative to participate in other activities to manage their stress.

Preliminary findings suggest sport participation is positively associated with happiness. study offers initial evidence that sport membership elicits happiness across many different societies. (Balish, Conacher and Dithurbide, 2016)

Table 2. Level of stress management of Physical Education instructors in online teaching as to Social Activity

<i>Statement</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>Participates in charity walk or run.</i>	4.56	0.73	To a very great extent
<i>Join groups and organization outside the school.</i>	4.44	0.76	To a very great extent
<i>Volunteer work for community programs.</i>	4.48	0.74	To a very great extent
<i>Enjoy meeting and socializing with friends and peers.</i>	4.46	0.76	To a very great extent
<i>Watch theatre or movies to relieve stress.</i>	4.46	0.76	To a very great extent
Overall Mean = 4.48			
Standard Deviation = 0.75			
Verbal Interpretation = Very High			

Table 2 illustrates the level of stress management of Physical Education instructors in online teaching as to Social Activity. Among the statements above, “*Participates in charity walk or run*” yielded the highest mean score ($M=4.56$, $SD=0.73$) and was remarked to a very great extent. This is followed by “*Volunteer work for community programs*” with a mean score ($M=4.48$, $SD=0.74$) and was also remarked to a very great extent. On the other hand, the statement “*Join groups and organization outside the school*” received the lowest mean score of responses with ($M=4.44$, $SD=0.76$) yet was also remarked to a very great extent.

Overall, the level of stress management of Physical Education instructors in online teaching as to Social Activity attained a mean score of 4.48 and a standard deviation of 0.75 and was Very High among the respondents.

Findings show that PE instructors are sociable and find time to enjoy their time with other people. This behavior also depends on their interest and habit, nevertheless the result is evident that most of the them are sociable.

Physical Education teachers who have never practiced any social activity as a technique in the classroom is a factor that teachers should pay attention to. Therefore, there is a need to enhance teacher training by using socialization technique in physical education learning (Holubova, 2017).

Table 3. Level of stress management of Physical Education instructors in online teaching as to Planning and Decision Making

Statement	MEAN	SD	REMARKS
<i>Plan big decision ahead of time to avoid unexpected outcomes.</i>	4.26	0.69	To a very great extent
<i>Study the options before making decisions.</i>	4.28	0.64	To a very great extent
<i>Assess the situations to avoid distressful decisions.</i>	4.34	0.72	To a very great extent
<i>Keep the plans and decision in with perspectives.</i>	4.38	0.67	To a very great extent
<i>Look forward on the positive outcome of every plan and decision made.</i>	4.30	0.68	To a very great extent
Overall Mean = 4.31			
Standard Deviation = 0.68			
Verbal Interpretation = Very High			

Table 3 illustrates the level of stress management of Physical Education instructors in online teaching as to Planning and Decision Making. Among the statements above, “*Keep the plans and decision in with perspectives*” yielded the highest mean score ($M=4.38$, $SD=0.67$) and was remarked to a very great extent. This is followed by “*Assess the situations to avoid distressful decisions*” with a mean score ($M=4.34$, $SD=0.72$) and was also remarked to a very great extent. On the other hand, the statement “*Plan big decision ahead of time to avoid unexpected outcomes*” received the lowest mean score of responses with ($M=4.26$, $SD=0.69$) yet was also remarked to a very great extent.

Overall, the level of stress management of Physical Education instructors in online teaching as to Planning and Decision Making attained a mean score of 4.31 and a standard deviation of 0.68 and was Very High among the respondents.

Since the respondents are teachers/instructors who are adult, they are capable of making plans according to what is needed. They may also firm with their decisions and can choose situation that will make them better.

Effective stress management helps students break the hold stress has on their life, so they can be happier, healthier, and more productive. The ultimate goal is a balanced life, with time for work, relationships, relaxation, and fun—and the resilience to hold up under pressure and meet challenges head on. Stress management also gives a student a range of tools to reset their alarm system. It can help their mind and body adapt. Without it, their body might always be on high alert. Over time, chronic stress can lead to serious health problems. (Scott, 2021)

Table 4. Level of stress management of Physical Education instructors in online teaching as to Conflict Resolution

Statement	MEAN	SD	REMARKS
<i>Enhances interpersonal skills and develop effective social interaction with the people around.</i>	4.42	0.76	To a very great extent
<i>Demonstrates emotional intelligence and control expressions.</i>	4.34	0.77	To a very great extent
<i>Understand the diverse culture and personalities of every people in the surrounding.</i>	4.30	0.71	To a very great extent
<i>Analyze the conflicts and try to make the most effective solutions.</i>	4.32	0.71	To a very great extent
<i>Review options to avoid and/or resolve conflicts.</i>	4.34	0.77	To a very great extent
Overall Mean = 4.34			
Standard Deviation = 0.74			
Verbal Interpretation = Very High			

Table 4 illustrates the level of stress management of Physical Education instructors in online teaching as to Conflict Resolution. Among the statements above, “*Enhances interpersonal skills and develop effective social interaction with the people around*” yielded the highest mean score ($M=4.42$, $SD=0.76$) and was remarked to a very great extent. This is followed by “*Demonstrates emotional intelligence and control expressions*” and “*Review options to avoid and/or resolve conflicts*” with a mean score ($M=4.34$, $SD=0.77$) and were also remarked to a very great extent. On the other hand, the

statement “Understand the diverse culture and personalities of every people in the surrounding” received the lowest mean score of responses with ($M=4.30$, $SD=0.71$) yet was also remarked to a very great extent.

Overall, the level of stress management of Physical Education instructors in online teaching as to Conflict Resolution attained a mean score of 4.34 and a standard deviation of 0.74 and was Very High among the respondents.

Instructors have a wide understanding and perspectives about the diversity. They are also trained to be more patient and understand the situation first before making an argument and/or taking step to resolve the conflict. The result of the study reveals that as to conflict resolution instructors are very wise and shows professionalism.

According to Black and William (2018), assessment in education must first and foremost serve the purpose of supporting learning. Teachers need to plan the learning environment and activities that the students need to engage in the assessment of their learning. The impact of assessment on learning requires a broader focus than the feedback intervention itself, specifically the student’s responses to the feedback, and the learning environment in which the feedback works.

Table 5. Level of stress management of Physical Education instructors in online teaching as to Self-Regulation

Statement	MEAN	SD	REMARKS
<i>Manages behavior and control emotions even on the stressful moments.</i>	4.26	0.63	To a very great extent
<i>Balance on decisions based on what is the most important to reduce problem occurrence.</i>	4.32	0.71	To a very great extent
<i>Remain calm and productive even when stressed.</i>	4.36	0.69	To a very great extent
<i>Think clearly and make good decisions even under pressure.</i>	4.42	0.73	To a very great extent
<i>Regulate reactions to strong emotions like frustrations and stress.</i>	4.34	0.72	To a very great extent
Overall Mean = 4.34			
Standard Deviation = 0.69			
Verbal Interpretation = Very High			

Table 5 illustrates the level of stress management of Physical Education instructors in online teaching as to Self-Regulation. Among the statements above, “Think clearly and make good decisions even under pressure” yielded the highest mean score ($M=4.42$, $SD=0.73$) and was remarked to a very great extent. This is followed by “Remain calm and productive even when stressed” with a mean score ($M=4.36$, $SD=0.69$) and was also remarked to a very great extent. On the other hand, the statement “Manages behavior and control emotions even on the stressful moments” received the lowest mean score of responses with ($M=4.26$, $SD=0.63$) yet was also remarked to a very great extent.

Overall, the level of stress management of Physical Education instructors in online teaching as to Self-Regulation attained a mean score of 4.34 and a standard deviation of 0.69 and was Very High among the respondents.

The result of the study reveals that PE instructors can really control their emotions and can regulate themselves. Their trainings and knowledge may also affect on how they view things based on their perspectives. They are good on managing their attitude and behavior.

Moreover, Self-regulation is also defined as the ability to monitor attention, thoughts and emotions. Students who have the ability to regulate their emotions and behavior are able to better engage with other students and respond to the varying activities of the day (Newman 2019).

Table 6. Level of coping mechanism of Physical Education instructors in online teaching in terms of Action-based coping mechanism

Statement	MEAN	SD	REMARKS
<i>Engages in physical and recreational activities.</i>	4.38	0.75	To a very great extent
<i>Watch movies, listen to music and/or play instruments as a stress reliever.</i>	4.44	0.70	To a very great extent
<i>Go out with friends to take a walk, shopping and/or other outdoor activities.</i>	4.36	0.69	To a very great extent
<i>Do aerobic exercise and stretching whenever feel stress.</i>	4.36	0.75	To a very great extent
<i>Release stress from crying and/or sleeping.</i>	4.30	0.74	To a very great extent
Overall Mean = 4.37			
Standard Deviation = 0.72			
Verbal Interpretation = Very High			

Table 6 illustrates the level of coping mechanism of Physical Education instructors in online teaching in terms of Action-based coping mechanism. Among the statements above, “Watch movies, listen to music and/or play instruments as a stress reliever” yielded the highest mean score ($M=4.44$, $SD=0.70$) and was remarked to a very great extent. This is followed by “Engages in physical and recreational activities” with a mean score ($M=4.36$, $SD=0.75$), and were also remarked to a very great extent. On the other hand, the statement “Release stress from crying and/or sleeping” received the lowest mean score of responses with ($M=4.30$, $SD=0.74$) yet was also remarked to a very great extent.

Overall, the level of coping mechanism of Physical Education instructors in online teaching in terms of Action-based coping mechanism attained a mean score of 4.37 and a standard deviation of 0.72 and was Very High among the respondents.

The findings show that instructor tend to do actions and other physical activities to release their stress. They may find it helpful for both of their physical and mental health. 701

Active coping mechanisms usually involve an awareness of the stressor and conscious attempts to reduce stress. Avoidant coping mechanisms, on the other hand, are characterized by ignoring or otherwise avoiding the problem. Some coping methods, though they work for a time, are not effective for a long-term period. These ineffective coping mechanisms, which can often be counterproductive or have unintended negative consequences, are known as “maladaptive coping.” Adaptive coping mechanisms are those generally considered to be healthy and effective ways of managing stressful situations (Apeto, 2017).

Table 7. Level of coping mechanism of Physical Education instructors in online teaching in terms of Emotion-based coping mechanism

<i>Statement</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>Practices positive thinking and meditation.</i>	4.30	0.71	To a very great extent
<i>Talk with other people to seek emotional support and take advises.</i>	4.34	0.72	To a very great extent
<i>Develops reframing and change the perspectives into positive.</i>	4.38	0.67	To a very great extent
<i>Uses journal/diary to record experiences and future plans.</i>	4.42	0.70	To a very great extent
<i>Make self busy to take mind off the stress.</i>	4.18	0.77	To a great extent
Overall Mean = 4.32			
Standard Deviation = 0.71			
Verbal Interpretation = Very High			

Table 7 illustrates the level of coping mechanism of Physical Education instructors in online teaching in terms of Emotion-based coping mechanism. Among the statements above, “*Uses journal/diary to record experiences and future plans*” yielded the highest mean score ($M=4.42$, $SD=0.70$) and was remarked to a very great extent. This is followed by “*Develops reframing and change the perspectives into positive*” with a mean score ($M=4.38$, $SD=0.67$) and was also remarked to a very great extent. On the other hand, the statement “*Make self busy to take mind off the stress*” received the lowest mean score of responses with ($M=4.18$, $SD=0.77$) yet was remarked to a great extent. Overall, the level of coping mechanism of Physical Education instructors in online teaching in terms of Emotion-based coping mechanism attained a mean score of 4.32 and a standard deviation of 0.71 and was Very High among the respondents.

Emotion-focused coping is a type of stress management that attempts to reduce negative emotional responses associated with stress. Negative emotions such as embarrassment, fear, anxiety, depression, excitement and frustration are reduced or removed by the individual by various methods of coping. Emotion-focused techniques might be the only realistic option when the source of stress is outside the person’s control. (Raypole, 2020)

Table 8. Level of Teachers’ Efficacy of Physical Education in online teaching in terms of Content mastery

<i>Statement</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>Presents the mastery of knowledge during the discussion.</i>	4.28	0.70	To a very great extent
<i>Demonstrates the real-life application of every lesson.</i>	4.36	0.66	To a very great extent
<i>Highlights the main points of the lesson to the learner while clarifying the knowledge misconceptions.</i>	4.40	0.64	To a very great extent
<i>Provides alternative teaching methods for students on a needed basis.</i>	4.32	0.71	To a very great extent
<i>Demonstrates critical and inventive thinking for the students.</i>	4.30	0.79	To a very great extent
Overall Mean = 4.33			
Standard Deviation = 0.70			
Verbal Interpretation = Very High			

Table 8 illustrates the level of Teachers’ Efficacy of Physical Education in online teaching in terms of Content mastery. Among the statements above, “*Highlights the main points of the lesson to the learner while clarifying the knowledge misconceptions*” yielded the highest mean score ($M=4.40$, $SD=0.64$) and was remarked to a very great extent. This is followed by “*Demonstrates the real-life application of every lesson*” with a mean score ($M=4.36$, $SD=0.66$) and was also remarked to a very great extent. On the other hand, the statement “*Presents the mastery of knowledge during the discussion*” received the lowest mean score of responses with ($M=4.28$, $SD=0.70$) yet was remarked to a very great extent.

Overall, the level of Teachers’ Efficacy of Physical Education in online teaching in terms of Content mastery attained a mean score of 4.33 and a standard deviation of 0.70 and was Very High among the respondents.

Globally competent teachers integrate learning experiences for students that promote content-aligned explorations of the world. These real-world global learning experiences have a clear connection to content area standards and the world beyond the classroom and use student-centered pedagogy such as project-based learning (Keiler, 2018).

Table 9. Level of Teachers’ Efficacy of Physical Education in online teaching in terms of Instructional design skills

<i>Statement</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>Creates instructional materials that promotes multiple intelligence</i>	4.36	0.66	To a very great extent

<i>learning.</i>			
<i>Provides IMs that advocates inclusive education.</i>	4.40	0.76	To a very great extent
<i>Use constructive patterns to make more precise instructional materials.</i>	4.36	0.69	To a very great extent
<i>Provides materials that are inclined with the curriculum.</i>	4.40	0.78	To a very great extent
<i>Utilizes instructional tools that are appropriate for all the students.</i>	4.40	0.70	To a very great extent
Overall Mean = 4.38			
Standard Deviation = 0.71			
Verbal Interpretation = Very High			

Table 9 illustrates the level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional design skills. Among the statements above, "*Provides IMs that advocates inclusive education*", "*Provides materials that are inclined with the curriculum*", and "*Utilizes instructional tools that are appropriate for all the students*" yielded the highest mean score ($M=4.40$, $SD=0.76$), ($M=4.40$, $SD=0.78$) and ($M=4.40$, $SD=0.70$) respectively and were remarked to a very great extent.

On the other hand, the statements "*Creates instructional materials that promotes multiple intelligence learning*" and "*Use constructive patterns to make more precise instructional materials*" received the lowest mean score of responses with ($M=4.36$, $SD=0.66$) and ($M=4.36$, $SD=0.69$) yet was remarked to a very great extent.

Overall, the level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional design skills attained a mean score of 4.38 and a standard deviation of 0.71 and was Very High among the respondents.

The result of the study reveals that in terms of instructional design, PE instructors are skilled. This also means that they can provide instructional materials that are appropriate for their students.

Instructional Design Skills of all walks of life and subjects have the ability to shape opinions and help form ideas about society, life and personal goals. Instructional Leaders can also expand students' limits and push their creativity. Instruction is a tough job, but it is one where can make the most impact in another person's life (Malamed, 2020).

Table 10. Level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional delivery skills

Statement	MEAN	SD	REMARKS
<i>Start with a highly motivating activity and build lesson upon prior student knowledge.</i>	4.28	0.67	To a very great extent
<i>Encourages everyone to listen first before giving instructions.</i>	4.22	0.68	To a very great extent
<i>Ensures that distractions are removed before the lesson proper.</i>	4.26	0.75	To a very great extent
<i>Describe expectations, activities and evaluation procedures.</i>	4.30	0.71	To a very great extent
<i>Use imperative mood on giving instructions for doing student's activities.</i>	4.30	0.68	To a very great extent
Overall Mean = 4.27			
Standard Deviation = 0.69			
Verbal Interpretation = Very High			

Table 10 illustrates the level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional delivery skills. Among the statements above, "*Describe expectations, activities and evaluation procedures*" and "*Use imperative mood on giving instructions for doing student's activities*" yielded the highest mean score ($M=4.30$, $SD=0.71$) and ($M=4.30$, $SD=0.68$) respectively, and were remarked to a very great extent. This is followed by "*Start with a highly motivating activity and build lesson upon prior student knowledge*" with a mean score ($M=4.28$, $SD=0.67$) and was also remarked to a very great extent. On the other hand, the statement "*Encourages everyone to listen first before giving instructions*" received the lowest mean score of responses with ($M=4.22$, $SD=0.68$) yet was remarked to a very great extent.

Overall, the level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional delivery skills attained a mean score of 4.27

and a standard deviation of 0.69 and was Very High among the respondents.

Though there are some variations, the findings still show that PE instructors are skilled in terms of instructional delivery. Their approaches maybe different depending on the age, level and size of their classes. Despite, they can still give instructions that are clear, specific and understandable for the learners.

Wood & Su (2017), state that teaching-learning processes should consider variables that predict good student performance. Currently, teaching style and teaching practices are considered relevant dimensions for academic performance.

Table 11. Level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional assessment skills

Statement	MEAN	SD	REMARKS
<i>Address the needs of the students by correcting their mistakes and/or misconceptions.</i>	4.20	0.78	To a very great extent
<i>Provides assessment that can improve student's critical thinking skills.</i>	4.24	0.82	To a very great extent
<i>Promotes assessment that cultivate cognitive engagement of the students.</i>	4.18	0.77	To a great extent
<i>Use cooperative learning to attain learning objectives effectively.</i>	4.06	0.82	To a great extent
<i>Monitor and evaluate student's progress.</i>	4.22	0.76	To a very great extent

Overall Mean = 4.18
 Standard Deviation = 0.79
 Verbal Interpretation = High

Table 11 illustrates the level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional assessment skills. Among the statements above, "*Provides assessment that can improve student's critical thinking skills*" yielded the highest mean score ($M=4.24$, $SD=0.82$) and was remarked to a very great extent. This is followed by "*Monitor and evaluate student's progress*" with a mean score ($M=4.22$, $SD=0.76$) and was also remarked to a very great extent. On the other hand, the statement "*Use cooperative learning to attain learning objectives effectively*" received the lowest mean score of responses with ($M=4.06$, $SD=0.82$) yet was remarked to a great extent. Overall, the level of Teachers' Efficacy of Physical Education in online teaching in terms of Instructional assessment skills attained a mean score of 4.18 and a standard deviation of 0.79 and was High among the respondents.

The answers and the result may be affected of the learning modality that they are using during the time of pandemic. Since Physical Education must be interactive and collaborative, online learning modality may limit the capabilities of the teachers to engage their students on other assessment that they are needed.

Instructional assessment (IA) is a process or set of procedures that sample skills from the student's current curriculum to determine the instructional needs. It is a process of data collection rather than an assessment instrument. Assessments should reveal how well students have learned what many want them to learn while instruction ensures that they learn it. For this to occur, assessments, learning objectives, and instructional strategies need to be closely aligned so that they reinforce one another. (Hudgens, 2017)

Table 12. Level of Teachers' Efficacy of Physical Education in online teaching in terms of Class management skills

Statement	MEAN	SD	REMARKS
<i>Know student's background to productively manage the whole class.</i>	3.98	1.02	To a great extent
<i>Reinforce appropriate behavior on students.</i>	4.02	1.02	To a great extent
<i>Establish fairness and avoid biases within the classroom.</i>	3.92	1.05	To a great extent
<i>Consistent on class rules and regulations.</i>	3.90	0.99	To a great extent
<i>Take and assess feedbacks from the student to improve teaching strategies.</i>	4.14	0.95	To a great extent
Overall Mean = 3.99			
Standard Deviation = 1.00			
Verbal Interpretation = High			

Table 12 illustrates the level of Teachers' Efficacy of Physical Education in online teaching in terms of Class management skills. Among the statements above, "*Take and assess feedbacks from the student to improve teaching strategies*" yielded the highest mean score ($M=4.14$, $SD=0.95$) and was remarked to a great extent. This is followed by "*Reinforce appropriate behavior on students*" with a mean score ($M=4.02$, $SD=1.02$) and was also remarked to a great extent. On the other hand, the statement "*Consistent on class rules and regulations*" received the lowest mean score of responses with ($M=3.90$, $SD=0.99$) yet was remarked to a great extent.

Overall, the level of Teachers' Efficacy of Physical Education in online teaching in terms of Class management skills attained a mean score of 3.99 and a standard deviation of 1.00 and was High among the respondents.

Table 13. Significant Relationship between the stress management and coping mechanism and teaching efficacy of Physical Education in Online Teaching

	Teacher efficacy of physical education in online teaching	Computed r-value	Strength	Critical r-value	p-value	Analysis
Stress Management	Content mastery	0.839	Very Strong	0.235	0.000	Significant
	Instructional design skills	0.826	Very Strong	0.235	0.000	Significant
	Instructional delivery skills	0.826	Very Strong	0.235	0.000	Significant
	Instructional assessment skills	0.786	Strong	0.235	0.000	Significant
	Class management skills	0.817	Very Strong	0.235	0.000	Significant
Coping Mechanism	Content mastery	0.893	Very Strong	0.235	0.000	Significant
	Instructional design skills	1.000	Very Strong	0.235	0.000	Significant
	Instructional delivery skills	0.819	Very Strong	0.235	0.000	Significant

	Instructional assessment skills	0.817	Very Strong	0.235	0.000	Significant
	Class management skills	0.852	Very Strong	0.235	0.000	Significant

Legend:**Range**

0.80-1.00

0.60-0.79

0.40-0.59

0.20-0.39

0.00-0.19

Verbal Interpretation

Very Strong

Strong

Moderate

Weak

Very Weak

Table 13 presents the significant relationship between the stress management and coping mechanism and teaching efficacy of Physical Education in Online Teaching. Specifically, it presents the relationship of the Stress Management and Coping Mechanism and Content mastery, Instructional Design Skills, Instructional Delivery Skills, Instructional Assessment Skills and Classroom Management Skills of Physical Education in Online Teaching.

The stress management and coping mechanism are observed to have a significant strong to very strong relationship with the teaching efficacy of Physical Education in Online Teaching. This is evidenced by the computed r values across all tests which are greater than the critical values for r . Furthermore, the computed p -values for all the tests were shown to not be greater than 0.000 which is far less than the significance alpha of 0.05, hence the significance of the tests.

From the findings above, it can infer that at 0.05 level of significance, the null hypothesis "There is no significant relationship between the stress management and coping mechanism and teaching efficacy of Physical Education in Online Teaching" is rejected. Hence, it calls for the acceptance of the alternative which incites that there is a significant relationship between the two.

4. Conclusion and recommendation

On the basis of the foregoing findings, the following conclusion was drawn. From the findings above, study reveals that there is a strong relationship between the two indicators. Then, the researcher further concluded that the hypothesis stating that "There is no significant relationship between the stress management and coping mechanism and teaching efficacy of Physical Education in Online Teaching" is rejected. It infers that the alternative hypothesis is accepted.

Based on the drawn conclusions resulted to the following recommendations:

1. It is highly recommended that the teachers should be engage on other leisure activities that can help them relax and motivate on teaching. Stress management should be normalized and given attention by the school administrators, school heads and have and advocacy for helping teachers on their difficult moments.
2. It is suggested that teachers must became more aware of their own selves, so that they will be able to manage their selves especially in times of breaking down and whenever they experience anxiety. School should promote the importance of mental health and stress management for both the teachers and learners.
3. Moreover, not only for the sake of the instructors, the needs for modifications on teaching approaches should also be given priority. Quality education should still be properly delivered despite of what modalities the school are using. Student should feel that they are really gaining and learning even without the proper interaction between them and their instructors.

Acknowledgments

The researcher wishes to express his profound gratitude to those who extended their invaluable assistance for the realization of this work most especially to:

Hon. Mario R. Briones, EdD. University President, for his words of wisdom that serve as an inspiration to the researcher to strive for excellence in every aspect of life;

Rosario G. Catapang, PhD. Associate Dean of the College of Teacher Education, for the untiring support, assistance, suggestion, and guidance for him to complete this study;

Freddie S. Javiña, EdD. His Research Adviser, for painstakingly editing this work and providing her unwavering support and encouragement to push through with the quality research;

Evelyn A. Sunico, EdD. His Research Statistician, for the statistical computation of data gathered and the relevant information shared to complete this research;

Dennis N. Daran, PhD. His Subject Specialist, for sharing his expertise which contributed to the development of the research work;

Julie Rose P. Mendoza, EdD. His Technical Editor, for polishing the settings and format of this paper following norms of academic writing;

Florhaida V. Pamatmat, PhD. His Language Critic, for polishing the language of this paper in accordance with norms of academic writing;

Allan M. Bautista, EdD. his External Panel Member, for sharing his knowledge and expertise in the field of Physical Education;

His mentors in the **Laguna State Polytechnic University** Sta. Cruz Campus, who inspired him in pursuing this study;

To the Cavite State University President **Dr. Hernando D. Robles**, for their approval in the conduct of the researcher's study. Dean of College of Sport Physical Education and Recreation **Jazmin P. Cubillo** and the Director of Sports and Development **Ana Liza R. Mojica** for their assistance in the conduct of the researcher's study.

The Physical Education Instructors in Cavite State University, for their support, love, and prayers during the period of processing the research work and who unselfishly shared their expertise in the preparation and fulfillment of this work;

His family, for their unconditional love and understanding which served as his moral and spiritual strength;

And Above All, the **Almighty God** who has given him the wisdom, the knowledge, patience, and understanding to accomplish the research work with a humble heart and renewed spirit of service.

References

- Abun, D. (2018). Academic Self-Regulation of STEM of Senior High School Students of Divine Word Colleges in Region I, Philippines and Their Academic Performance. Retrieved from https://www.researchgate.net/publication/325469418_Academic_Self-Regulation_of_STEM_of_Senior_High_School_Students_of_Divine_Word_Colleges_in_Region_I_Philippines_and_Their_Academic_Performance
- Agustina, M., Kristiawan, M., Tobari. (2021). The Influence of Principal's Leadership and School's Climate on the Work Productivity of Vocational Pharmacy Teachers in Indonesia. Retrieved from <https://eric.ed.gov/?id=ED612234>
- Alghamdi, F., Nylen, A., & Pears, A. (2019). Teachers' Awards: an Incentive for Pedagogical Development in Saudi Arabia. Retrieved July 1, 2021, from DIVA website: <http://uu.diva-portal.org/smash/record.jsf?pid=diva2%3A1481935&dsid=3609>
- Apeto, D. (2017). Coping Mechanisms. Retrieved from <https://www.goodtherapy.org/blog/psychpedia/coping-mechanisms>
- Austin, O. (2014). Perceived Impact of Classroom Management on Effective Teaching: A Study of Five Schools in Education District 11, Lagos State, Nigeria. Retrieved from <https://core.ac.uk/download/pdf/328024438.pdf>
- Balish, S., Conacher, D., Dithurbide, Lori. (2016). Sport and Recreation Are Associated With Happiness Across Countries. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/27732168/>
- Barton, E. (2018). Community of Inquiry as an instructional approach: What effects of teaching, social and cognitive presences are there in blended synchronous learning and teaching? *Computers & Education*, 81, 191–201. <https://doi.org/10.1016/j.compedu.2014.10.015>
- Black, J. (2018). Community Action and Community Involvement. Retrieved from <https://www.govinfo.gov/content/pkg/ERIC-ED467082/pdf/ERIC-ED467082.pdf>
- Black, P., William, D. (2018). Chapter 2: Assessment for Learning in the Classroom. Retrieved from <https://sk.sagepub.com/books/assessment-and-learning-2e/n2.xml>
- Bush, E. (2017). Community of Inquiry as an instructional approach: What effects of teaching, social and cognitive presences are there in blended synchronous learning and teaching? *Computers & Education*, 81, 191–201. <https://doi.org/10.1016/j.compedu.2014.10.015>
- Chabbot, C., Ramirez, F. (2017). Development and Education. Retrieved from https://link.springer.com/chapter/10.1007/0-387-36424-2_8?noAccess=true
- Cheng, A. L. (2017). Co-planning in Co-teaching. *Intervention in School and Clinic*, 52(4), 243–249. <https://doi.org/10.1177/1053451216659474>
- Daniel, J., Quartz, K., Oakes, J. (2019). Teaching in Community Schools: Creating Conditions for Deeper Learning. Retrieved from <https://journals.sagepub.com/doi/full/10.3102/0091732X18821126>
- Darling-Hammond, L., et. al. (2017). Effective Teacher Professional Development. Retrieved from <https://files.eric.ed.gov/fulltext/ED606741.pdf>
- Darling-Hammond, M. (2018). Parents' interest in their child's education and children's outcomes in adolescence and adulthood: Does gender matter? *International Journal of Educational Research*, 85, 131–147. <https://doi.org/10.1016/j.ijer.2017.07.010>
- Davis, B. G. (2019). Tools for teaching (2nd.ed.). San Francisco: Jossey-Bass. Retrieved from <https://core.ac.uk/download/pdf/82406316.pdf>
- De La Rosa-Rojas G., Chang-Grozo S., Delgado-Flores L., Oliveros-Lijap L., Murillo-Pérez D., Ortiz-Lozada R., et al. . (2015). Stress levels and confrontation forms among medical students in comparison with students of other schools. *Gaceta Médica de México* 151, 443–449. Retrieved from <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=60915>
- Debra, A. (2017). Ensure Quality and Relevance of Education and Learning. Retrieved from <http://www.ibe.unesco.org/en/what-we-do/ensure-quality-and-relevance-education-and-learning>
- Drachsler, H., Kirschner, P. (2012). Retrieved from https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1428-6_347
- Duncan, R. (2017). Instructional leadership. Retrieved from Emerald Insight website: <https://studyonline.ecu.edu.au/blog/effective-leadership-styles-education>
- Elmore, R. (2016). Standards, Assessments, and Accountability. Retrieved from <https://files.eric.ed.gov/fulltext/ED531138.pdf>
- Ergen, J., & Kanadli, A. S. (2017). The Effectiveness of Professional Development in Overcoming Obstacles to Effective Online Instruction in a College of Education. *Online Learning*, 23(2), 1–20. Retrieved from <https://eric.ed.gov/?id=EJ1218368>
- Faggelia, K. (2018). Awarding teaching excellence: “what is it supposed to achieve?” Teacher perceptions of student-led awards. *Teaching in Higher Education*, 21(2), 166–174. <https://doi.org/10.1080/13562517.2015.1136277>
- Ferrantali, C. D. S. (2019). Awards and recognition: Do they matter in Instructional Leaders' income trajectory? *Studies in Educational Evaluation*, 66, 100901. <https://doi.org/10.1016/j.stueduc.2020.100901>

- Ferrantelli, P. R. (2019). Community Profile of Primary Education in Madras Presidency in the Nineteenth and Early Twentieth Centuries: Part I: 1825–185. *Indian Historical Review*, 45(2), 189–212. <https://doi.org/10.1177/0376983617747982>
- Folkman, S. (2011). Stress: Appraisal and Coping. Retrieved from https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1005-9_215
- Gaeta, L., Gaeta, M., Rodriguez, M. (2021). The Impact of COVID-19 Home Confinement on Mexican University Students: Emotions, Coping Strategies, and Self-Regulated Learning. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.642823/full>
- Garber, M. (2017). Exercise as a Stress Coping Mechanism in a Pharmacy Student Population. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5423066/>
- Gewertz, C. (2020). Exhausted and Grieving: Teaching During the Coronavirus Crisis. Retrieved from <https://www.edweek.org/teaching-learning/exhausted-and-grieving-teaching-during-the-coronavirus-crisis/2020/04>
- Gunuc, S., Kuzu, A. (2015). Confirmation of Campus-Class-Technology Model in Student Engagement: A Path Analysis. Retrieved from <https://dl.acm.org/doi/abs/10.1016/j.chb.2015.01.041>
- Heck, D., et. al. (2018). Studying the Effects of Professional Development: The Case of the NSF's Local Systemic Change through Teacher Enhancement Initiative. Retrieved from <https://www.jstor.org/stable/30034894>
- Hergüner, G., et. al. (2020). The Effect of Online Learning Attitudes of University Students on their Online Learning Readiness. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1272871.pdf>
- Holubova, R.A. (2017), "Establishing productive principal/principal supervisor partnerships for instructional leadership", *Journal of Educational Administration*, Vol. 57 No. 5, pp. 463-483. <https://doi.org/10.1108/JEA-09-2018-0184> Download as .RIS
- Hudgens, J. (2017.). The Importance of Classroom Environment in Positive Learning. Retrieved June 9, 2021, from ResearchGate website: https://www.researchgate.net/publication/346008940_The_Importance_of_Classroom_Environment_in_Positive_Learning
- Hughes, B., Macnaughton, R. (2016). Reflective journals as a research tool: The case of student teachers' development of teamwork. *Cogent Education*, 4(1). <https://doi.org/10.1080/2331186x.2017.1374234>
- Hwang, N., Wang, A., Lai R., (2020). The Principal's Managerial Competence in Improving School Performance in Pidie Jaya Regency. *Advanced Science Letters*, 24(11).
- Jones, V., & Jones, L. (2012). *Comprehensive classroom management: Creating communities of support and solving problems* (10th ed.). New York, NY: Pearson. ISBN-13: 978-0132697088
- Kadtong, M., et. al. (2018). Teaching Performance and Job Satisfaction Among Teachers at Region XII. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3169846
- Keiler, S. (2018). Teachers' Roles and Identities in Student-Centered Classrooms. Retrieved from <https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-018-0131-6>
- Ken, A. (2019). Allocation of Education Budget in Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 1(2), 141–147.
- Kurumaniginrum, L., Ravago, M.-L. V., & Mapa, C. D. S. (2020). Awards and recognition: Do they matter in teachers' income trajectory? *Studies in Educational Evaluation*, 66, 100901. <https://doi.org/10.1016/j.stueduc.2020.100901>
- Lee, G. (2017). Why Teaching is the Most Important Profession. Retrieved from [www.linkedin.com](https://www.linkedin.com/pulse/leading-from-classroom-arne-duncan) website: <https://www.linkedin.com/pulse/leading-from-classroom-arne-duncan>
- Lynn, C. (2017). Achieving High Quality Through Transformational Leadership: A Qualitative Multilevel Analysis of Transformational Leadership and Perceived Professional Quality. *Public Personnel Management*, 47(1),
- Maitah, Ebot, B. I., (2017). Problems of school management and students' academic performance in secondary schools in Calabar Education Zone, Cross River State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 2(10), 120–127.
- Malamed, C., (2020). 10 Qualities of the Ideal Instructional Designer. Retrieved from https://thelearningcoach.com/elearning_design/isd/10-qualities-of-the-ideal-instructional-designer/
- Mandinach, E. (2019). Using Data to Promote Culturally Responsive Teaching (Webinar). Retrieved from <https://www.sciencedirect.com/science/article/pii/S0191491X1930416X#bib0415>
- Marcos, S. (2017). The Importance of Teaching and Learning Process. Retrieved from <https://www.ipl.org/essay/The-Importance-Of-The-Teaching-And-Learning-P326LX74ACFR>
- Newman, P. (2019). Self-Regulation Strategies to Improve Student Classroom Behavior. Retrieved from <https://www.kickboardforschools.com/classroom-behavior-management/self-regulation-strategies-to-improve-student-classroom-behavior/>
- Obet, J. S., & Madukwe, B. (2018). A model for developing and assessing students' teamwork competencies. *Research in Higher Education Journal*, 31, 1–21. Retrieved from <https://www.aabri.com/manuscripts/162484.pdf> [Google Scholar]
- Parasuraman, B., Jegak, U., Abdullah, M. (2016). Job Satisfaction among Secondary School Teachers. Retrieved from https://www.researchgate.net/publication/41757991_Job_satisfaction_among_secondary_school_teachers
- Paul, T. (2015). Report Writing: Types, Format, Structure and Relevance. Retrieved from <https://www.slideshare.net/tulikapaul524/report-writingtypes-format-structure-and-relevance>
- Raypole, C., (2020). 7 Emotion-Focused Coping Techniques for Uncertain Times. Retrieved from <https://www.healthline.com/health/emotion-focused-coping>

- Redmond, P., Heffernan, A., Abawi, L., Brown, A., & Henderson, R. (2018). An Online Engagement Framework for Higher Education. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1179626.pdf>
- Rehman, A.-U., Khan, M. I., & Waheed, Z. (2019). School Heads' Perceptions about Their Leadership Styles. *Journal of Education and Educational Development*, 6(1), 138–153. Retrieved from <https://eric.ed.gov/?id=EJ1216760>
- Rifa'i, P. (2018). The Influence of Principal's Leadership and School's Climate on the Work Productivity of Vocational Pharmacy Teachers in Indonesia. In *ERIC* (Vol. 3). Retrieved from <https://eric.ed.gov/?id=ED612234>
- Robbins, M., & Jamal, A. (2016). The state of social justice in the Arab world: The Arab uprisings of 2011 and beyond. *Contemporary Readings in Law and Social Justice*, 8, 127–157.
- Robert, A., & Owan, J. (2019, September 21). Students' Perception of Instructional Leaders' Effectiveness and Learning Outcomes in Mathematics and Economics in Secondary Schools of Cross River State, Nigeria. Retrieved August 10, 2021, from [papers.ssm.com website: https://papers.ssm.com/sol3/papers.cfm?abstract_id=3457807](https://papers.ssm.com/sol3/papers.cfm?abstract_id=3457807)
- Rurato, P., Gouveia, L. (2014). The Importance of the Learner's Characteristics in Distance Learning Environments: A Case Study. Retrieved from https://www.researchgate.net/publication/269268724_The_importance_of_the_learner's_characteristics_in_distance_learning_environments_A_case_study
- Schneider, A., Preckel, T. (2017), "Does teaching experience increase teacher effectiveness? A review of US research", *Journal of Professional Capital and Community*, Vol. 4 No. 4, pp. 286-308. <https://doi.org/10.1108/JPC-12-2018-0032> Download as .RIS
- Schrum D., Hong, F. (2019). Instructional Leadership Skills: Definition and Examples. Retrieved from Indeed Career Guide website: <https://www.indeed.com/career-advice/career-development/instructional-leadership>
- Scott, E. (2021). Avoidance Coping and Why It Creates Additional Stress
- Retrieved from <https://www.verywellmind.com/avoidance-coping-and-stress-4137836>
- Spence, B. I., & Bol, E. C. (2017). Problems of school management and students' academic performance in secondary schools in Calabar Education Zone, Cross River State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 2(10), 120–127.
- Stahl, K. A. D., Flanagan, K., & McKenna, M. C. (2019). Assessment for Reading Instruction, Fourth Edition. In Google Books. Retrieved from https://books.google.com.ph/books?hl=en&lr=&id=NCO7DwAAQBAJ&oi=fnd&pg=PR1&dq=instruction&ots=8xek7U-IZc&sig=py8EomqgeGhCijE-0e3vnNGkMzc&redir_esc=y#v=onepage&q=instruction&f=false
- Supovitz, J., Turner, H. (2018). The Effects of Professional Development on Science Teaching Practices and Classroom Culture. Retrieved from [https://onlinelibrary.wiley.com/doi/abs/10.1002/1098-2736\(200011\)37%3A9%3C963%3A%3AAID-TEA6%3E3.0.CO%3B2-0](https://onlinelibrary.wiley.com/doi/abs/10.1002/1098-2736(200011)37%3A9%3C963%3A%3AAID-TEA6%3E3.0.CO%3B2-0)
- Tucker, P., Stronge, J., Ward, T., Hindman, J. (2016). What is the Relationship Between Teacher Quality and Student Achievement? An Exploratory Study. Retrieved from https://www.researchgate.net/publication/227112086_What_is_the_Relationship_Between_Teacher_Quality_and_Student_Achievement_An_Exploratory_Study
- Van Praag, L., Demanet, J., Stevens, P. A. J., & Van Houtte, M. (2017). "Everyone has their own qualities": tracking and academic self-appraisal in Flemish secondary education. *Social Psychology of Education*, 20(3), 601–618. <https://doi.org/10.1007/s11218-017-9371-4>
- Warsi, A. (2018). School-Based Management: Promise and Process, School of Business at the University of Southern California.
- Whitebread, D., Basilio, M. (2012). The Emergence and Early Development of Self-regulation in Young Children. Retrieved from https://www.researchgate.net/publication/272828327_The_emergence_and_early_development_of_self-regulation_in_young_children
- Wood, M., Su, P. (2017). Emotional Presence, Learning and the Online Learning Environment. "The International Review of Research in Open and Distributed Learning", 13:4, 20 (12) pp. 272-273
- Yumul, E. (2016). Community Linkages: A Partnership of Trust and Support. Retrieved from <https://www.pressreader.com/philippines/sunstar-pampanga/20161124/281633894836476>
- Yurdugil, I., Mary, M. (2020). The Effectiveness of a Customized Online Collaboration Tool for Teaching and Learning. *Journal of Information Technology Education: Research*, 18, 275–292. Retrieved from <https://www.informingscience.org/Publications/4367?Source=%2FJournals%2FJITERResearch%2FArticles%3FVolume%3D0-0>
- Zheng, M. (2017). Teachers as Producers and Consumers of Educational Materials: An Analysis. Retrieved from <https://www.dlsu.edu.ph/wp-content/uploads/pdf/conferences/research-congress-proceedings/2016/LLI/LLI-II-05.pdf>
- Zimmerman, B. (2018). Self-Regulation. Retrieved from <https://cehs.unl.edu/secd/self-regulation/>