

RESEARCH ARTICLE

THE MEDIATING EFFECT OF SYMPTOMS OF ANXIETY ON THE RELATIONSHIP BETWEEN APPRAISAL AND TEACHING COMPETENCE OF TEACHERS IN SAN ISIDRO, DAVAO ORIENTAL, PHILIPPINES

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Manuscript Info

Abstract

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Key words:-

Education, Appraisal, Teaching Competence, Symptoms Of Anxiety, Mediation, Philippines

This study determined the mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence of teachers in elementary and secondary schools of San Isidro North and South Districts. The descriptive-correlational research design was utilized in this study employing stratified random sampling with 300 sampled teachers. Data collection was made through administration of survey questionnaires. Three sets of adapted survey questionnaires were used and were subjected for content validity and reliability test. The analysis of data was done using the Mean, Pearson-r, Multiple Regression Analysis and Medgraph using Sobel z-test. The results revealed that the level of appraisal and teaching competence of teachers were very high and the level of symptoms of anxiety was high. A positive significant relationship between appraisal and teaching competence, appraisal and symptoms of anxiety, and symptoms of anxiety and teaching competence was proven in the study. Further, the findings showed that symptoms of anxiety played a partial mediation, thus, it cannot fully account on the influence of appraisal towards teaching competence. Although teachers manifested a high level of symptoms of anxiety, still, they showed a very high level of appraisal and a very high level of teaching competence. Moreover, a high level of symptoms of anxiety did not hinder teachers' capability to be very highly competent in teaching.

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Introduction:-

Teaching competence as a fundamental element in the educational system forms the basis of nation's educational status (Fachrurazzi, 2017). With this, competence and eligibility are required for teachers (Syamsinar & Jabu, 2015). Over the past years, professionals, lawmakers and researchers continuously probe on the indications of teaching competence among teachers (Kim et al., 2019). Queries are directed towards the evidence of teaching competence since credentials alone cannot guarantee that teachers possess the required competence (Soepriyatna, 2012). While competent teachers foster an improved student performance, incompetent teachers on the other hand, hamper learners' instructional outcomes (Grauf, 2015). Students taught by incompetent teachers are unable to advance to another level compared to others (Hardin, 2019). Problems sprout since having poor teaching competence compromises learners' academic achievement (Sumaryanta et al., 2018).

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Corresponding Author:- Gilly B. Ferrando Address:- Purok Casa Bajada, La Union, San Isidro, Davao Oriental, 8209, Philippines. A general notion posits that teachers' positive attributes influence the condition of educational outcomes (Beckmann, 2018). An advanced teaching competence transmits an outstanding level of education, while poor teaching competence results to a poor educational quality (Fachrurrazi, 2017). Teaching competence caters the scholastic attainment of learners and enhances students' abilities which serves as basis of the enhancement of teacher practices (Omar et al., 17). Thus, in order for students to compete on different areas in the global setting, it is deemed necessary to address academic disparities and improve teachers' competence (Hardin, 2019).

The Self-Efficacy Theory of Albert Bandura in 1896 explains the relationship between appraisal and teacher competence stating that self-efficacy beliefs influence teachers' motivation on the appraisal process, which in turn develops teaching effectiveness and competence (Becchio, 2016). Congruently, the Self-Determination Theory of Edward Deci and Richard Ryan also explains that teachers' attitude and motivation towards performance appraisal will significantly predict the outcomes and teachers' level of competence and performance (Deci & Ryan, 2008). Meanwhile, the Stimulus-Response Theory of B.F. Skinner establishes the connection between appraisal as the stimulus and symptoms of anxiety as a response (Nazir, 2018). Larsen (2009) revealed that some teachers regard appraisal as the root of stress, apprehension and anxiousness. Finally, the Psychoanalytic Theory of Sigmund Freud in 1896 proposes that anxiety hinders individuals to do tasks and impedes willingness to attain desired targets (Akman et al., 2007), thus affecting the quality of teachers (Aslrasouli & Vahid, 2014). Given that teaching is an anxiety-provoking job, symptoms of anxiety could affect the extent of teachers' competence and effectiveness.

Since most of the existing literatures mainly focused on teacher evaluation process, teachers' role in the classroom and teaching competence framework, more studies are required to support the claims on the effect of appraisal and teaching competence on the educational process. After reading several researches, none has dealt with the analysis on how symptoms of anxiety mediate the relationship between appraisal and teaching competence among public school teachers. There is a need to conduct this study in the locale to guide administrators in formulating strategic plans on how to improve the competence of teachers since students' poor academic performance is linked to teachers' inability to effect learning. In addition, this study seeks to probe the mediating role of symptoms of anxiety on the relationship between appraisal and teaching competence of teachers.

Literature Review:-

Appraisal

Teacher appraisal has been given various names such as teacher evaluation, performance appraisal, performance review, employee appraisal, personnel rating and employee evaluation. It is regarded as a strategical management utility in which the primary aim is to ensure that the employee's performance develops continuously (Obasi & Ohia, 2014). It is also defined as a judgement that may influence the position of employees whether they may be retained, promoted, recommended for salary adjustment, or recommended for more training (Awan et al., 2010). An efficient performance appraisal is significant in determining the improvement of personnel (Babagana et al., 2019), hence, it can enhance the efficiency and effectiveness of a certain institution as a whole (Nadeem et al., 2019).

For some countries like China, Zhang and Ng (2011) detailed that teacher appraisal has been widely practiced for how many years. It was further viewed as a tool for administrative purposes in the past, but now, it serves as a bridge in improving the professional well-being of teachers. While Awan et al. (2010) stated that performance appraisal is a mechanism which aids administrators in noticing discrepancies and encourages workers with outstanding fervor, and a way of assessing the effectiveness of employees in relation to their duty (Nadeem et al., 2019), in contrast, McGrath (2016) posited that teacher appraisal is a nonsensical routine in which teachers and evaluators are the ones who suffer.

Congruently, Rigsby (2014) stated that teacher appraisal practices have made teachers more accountable of their practices, thus, making them well-driven to implement learning. Curran (2011) revealed that constructive appraisal and feedback are significant in developing one's self professionally. With this, O'Pry and Schumacher (2012) reported that those who invested ample time of preparation and were given enough support by superiors and colleagues viewed teacher appraisal as a positive experience.

The very high level of teacher appraisal is in congruence with the perspectives of Kagema and Irungu (2018) which states that performance appraisal should be at the highest level for the purpose of achieving the goals of educational institutions. With this, teacher appraisal must support teachers' professional growth and career advancement (Curran, 2011; Zhang & Ng, 2011). On the contrary, few studies were conducted to probe the ineffectiveness of teacher

appraisal across different countries. For instance, Flores (2012) delved on the teacher appraisal system in Portugal and found out that the perceptions of teachers towards teacher appraisal is both uncertain and skeptic. In addition, Matete (2016) found out that the appraisal system in Tanzania was rejected since it created an animosity between the appraiser and appraisee.

To sum it up, teacher appraisal has an impact towards developing the performance of educators. Apart from the educational institutions, other organizations have also practiced a routinary performance appraisal to ensure that the employees are performing the job well. As a whole, appraisal has provided both positive and negative impact towards the employees. Thus, in order to maximize objectivity of the said appraisal, the tool to be used should be considered to avoid subjectivity and impartiality.

Teaching Competence

Teaching competence as a concept has been defined by various authors in diverse perspectives. For instance, teaching competence is defined as the individual's capacity to perform tasks bearing the skills, cognition, and attitude as job requirements (Ludwikowska, 2019; Qodriyah, 2016; Soepriyatna, 2012) and is characterized as the teacher's ability to do the task at a certain level (Casolo et al., 2019). While Thakur and Shekhawat (2014) defined competence as a way of imparting knowledge and skills to the learners, Amalia and Saraswati (2018) regarded teaching competence as a contributory element in developing teachers' job performance in the field of teaching.

Teachers hold the responsibility in teaching students knowledge and abilities needed for forthcoming endeavors. They are assumed to be competent individuals who will help students grow (Ludwikowska, 2019) and are tagged as influential figures in the educational process (Adetayo, 2016; Tope, 2012). Quality teaching has an influence on students' academic performance and self-growth (Carvalho & Abreu, 2018; Ranjbar & Narafshan, 2016; Zhukova, 2018), thus, measuring teachers' quality is significant (Thakur & Shekhawat, 2014).

Teaching competence possessed by teachers is the most fundamental part of the educational system and forms the basis of the quality of education in a certain country (Fachrurrazi, 2017). Hiring competent teachers and retaining them in the position is one of the most essential factors in promoting quality education and improving student achievement (Grauf, 2015). In fact, Hardin (2019) posited that students need competent teachers to scaffold them to become better learners who continuously grow and develop.

A very high level of teaching competence had prevailed on the findings of Vecaldo et al. (2017) indicating that elementary school teachers were very competent in terms of pedagogical competence using the imposed standards for professional teachers and exhibited exceptional performance in academics. Meanwhile, Murkatik et al. (2020) revealed that professional and pedagogical competence have partially influenced the performance of teachers. While the findings of Achwarin (2009) had shown that the level of teaching competence among teachers of the three southern border provinces of Thailand was reportedly high, in South Africa, Beckmann (2018) indicated that the quality of learners was below average due to the fact that a considerable number of teachers were not categorized as competent.

Furthermore, teaching competence is a requirement for teachers whether they are novice or experienced. Competence in teaching is an essential ingredient in making a better quality of education, thus, teachers must be equipped with the necessary skills and abilities since teaching requires competent teachers.

Symptoms of Anxiety

Anxiety can be a good reference of motivation for a person to be at his or her best, but at the same time, it may hinder him or her from doing other tasks or interact with others (Gaesser, 2018). In fact, symptoms of anxiety has become a serious psychological condition among all diseases and even until now, it keeps rising placing seventh on the rank of all most dangerous diseases (Shi et al., 2015). Workloads and responsibilities can result to stress and pressure which leads to anxiety and even sudden death, but some people try to handle anxieties smoothly by looking alright even if not (Koçak & Seçer, 2018). In addition, Rincon and Howard (2019) stated that teachers who manifested anxiety disorder were said to be prone to successive absence to school and were more likely become aggressive to quit the job.

Several studies have proven the existence of anxiety among teachers and even other professionals in the field. To name a few, Ameen et al. (2002) revealed that teaching anxiety among United States professors in accounting was

reportedly high and some of the factors that provoked anxiety were teaching position, age, years spent in teaching and the school's nature. In addition, Peele and Wolf (2020) stated that anxiety and depression have surged higher over the course of the year among teachers of Ghana. Aydin (2016) also indicated that pre-service teachers experience anxiety before, during and after teaching activities.

Accordingly, Othman and Sivasubramaniam (2019) also investigated on the prevalence of anxiety, depression and stress symptoms among secondary school teachers in Malaysia and findings had shown that teachers had a high level of depression, high level of anxiety and high level of stress symptoms. Similarly, the study conducted by Desouky and Allam (2017) revealed that occupational stress, anxiety and depression were experienced by Egyptian teachers. Aslrasouli and Vahid (2014) also posited that teachers bear a high level of anxiety for both experienced and novice teachers in Iran.

In the same sense, Aydin (2016) also focused on problems of practicing teachers and identified that anxiety was one of the most frequently reported problems among pre-service teachers of English. He concluded that teaching experiences in the past, non-conducive classrooms, observations from superiors, time management struggles, level of students' capability, non-technologically adept and fear of committing mistakes were some of the factors that evoked anxiousness. Hence, teachers strive to do better with of the fear of committing mistakes.

Hence, research has proven that symptoms of anxiety affect the extent of teachers' performance and behaviors. It has a greater impact on the attitudes and behaviors of teachers towards the subject matter. While several studies report on the negative impact of symptoms of anxiety towards teachers, however, few studies have proven that it has become a driving force that enables teachers to excel in different fields and strive to be better.

Purpose of the Study

1.

2.

The main purpose of this study was to find out the mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence of teachers. Specifically, this study:

- Assessed the level of appraisal of teachers in terms of:
 - 1.1 professional development and performance;
 - 1.2 teaching and learning; and
 - 1.3 pupils' learning experiences and progress.
 - Ascertained the level of teaching competence of teachers in terms of:
 - 2.1 planning;
 - 2.2 development; and
 - 2.3 result
- 3. Evaluated the level of symptoms of anxiety of teachers.
- 4. Determined the significant relationship between:
 - 4.1 appraisal and teaching competence;
 - 4.2 appraisal and symptoms of anxiety; and
 - 4.3 symptoms of anxiety and teaching competence.
- 5. Found out the significant mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence of teachers.

Research Questions

In accordance with the specific purposes of the study, the following research questions were answered:

- 1. What is the level of appraisal of teachers in terms of:
 - 1.1 professional development and performance;
 - 1.2 teaching and learning; and
 - 1.3 pupil's learning experiences and progress?
- 2. What is the level of teaching competence of teachers in terms of:
 - 2.1 planning;
 - 2.2 development; and
 - 2.3 result?
- 3. What is the level of symptoms of anxiety of teachers?
- 4. Is there a significant relationship between:
 - 4.1 appraisal and teaching competence;

4.2 appraisal and symptoms of anxiety; and

4.3 symptoms of anxiety and teaching competence?

5. Is there a significant mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence?

Research Hypotheses

1. There are no significant relationships between appraisal and teaching competence, appraisal and symptoms of anxiety, and symptoms of anxiety and teaching competence.

2. There is no significant mediating effect of symptoms of anxiety on the relationship between teacher appraisal and teaching competence.

Methodology:-

Research Design

This study utilized a quantitative, non-experimental research design particularly descriptive-correlational technique. In a broader sense, quantitative research is used to quantify the existence of relationships between and among variables under investigation (Sousa et al., 2002). A non-experimental research design is used to discover, distinguish and analyze connections between and among the variables without the researcher's intervention, variable manipulation or comparison between groups (Glasofer & Townsend, 2020; Sousa et al., 2002).

Moreover, a descriptive-correlational design was specifically used to describe the variables and the correlations that happen naturally (Sousa et al., 2002). This design had sought to determine whether changes in a certain variable relates to the changes that occur with the other variable (de Lima & Valério, 2011). Furthermore, mediation was also employed in this study. MacKinnon (2007) pointed out that mediation is a presupposed causative sequence in which the independent variable causes the mediating variable, which in turn, causes the dependent variable.

Research Locale

This study was conducted in public elementary and secondary schools in San Isidro, Davao Oriental. This municipality is a third class municipality and is one of the gulf-towns of Davao Oriental. Further, this municipality is divided into two districts: San Isidro North and San Isidro South with schools ranging from small to big-sized schools located in low-lying and far-flung areas. The researchers opted to conduct the study in the locality to validate the claims on the level of competence of teachers and to purposely examine whether teachers' level of teaching competence reflects some of the students' poor academic achievement especially in the secondary level. Moreover, the results of this study may benefit teachers in the locality to evaluate teaching practices and improve the skills, knowledge and abilities required for teachers.

Population and Sample

Regular and permanent public elementary and secondary school teachers who were currently teaching were the respondents of this study. From the population, a sample of 300 teachers were taken as study informants. To get the sample size, the population was grouped according to age, gender, teaching experience, levels taught and employment status. Respondents were drawn from these subgroups to suffice the data needed for the study. The respondents who were fit for the inclusion criteria for informants were all teachers in elementary and secondary levels of San Isidro North and San Isidro South District regardless of subjects taught and teaching positions. The chosen secondary school teachers were either teaching in Junior High School or Senior High School, male or female, 20 to 59 years old, and regular and permanent who have served for at least a year in teaching.

Research Instrument

Three sets of adapted survey questionnaires were utilized in the conduct of the study. The fist survey questionnaire is the Teacher Appraisal: Self-review Questionnaire adapted from Abrams (2017). This questionnaire has 3 indicators. The first indicator which is the Professional Development and Performance is composed of 6 items. The second indicator, Teaching and Learning has 5 items and the third indicator which is Pupils' Learning Experiences and Progress has 6 items. The second survey questionnaire is composed of 28 items with three indicators. The first indicator which is made up of four items. The second indicator is Development which has 17 items. Lastly, the third indicator which is Result has seven items. The last survey questionnaire is the Symptoms of Anxiety adapted from the study of Jedynak (2011). Upon the validation of instrument, these survey questionnaires were merged into a single instrument with three parts. The first part is Symptoms of Anxiety, the second part is

Teacher Appraisal with indicators and statement items for each indicator, and the third part is Teaching Competence with corresponding indicators and item statements. A 5-point Likert Scale is used in this instrument in which (1) means never (2) means rarely, (3) means sometimes, (4) means often, and (5) means always.

The instrument had undergone thorough validation by four experts from the University of Mindanao Professional Schools and one external validator. During the process of validation, each validator was given a copy of the merged instrument and was requested to give comments as to the construction of statements, grammatical errors, and clarity of statements. During validation, the instrument got an overall mean score of 3.9 described as very good. After the validation phase, the instrument was subjected to reliability test. It was administered to 30 teachers from a selected school in San Isidro South District. After data analysis, symptoms of anxiety gained a Cronbach's Alpha score of .851, Teacher Appraisal gained a Cronbach's Alpha value of .896 and Teaching Competence got a Cronbach's Alpha score of .942. Thus, the instrument was proven to be highly acceptable and reliable.

Data Collection

Before data collection, the researchers had sought permit to conduct the study from the University of Mindanao Ethics Review Committee. After the approval, the researchers then obtained permit from the Schools Division Superintendent of Davao Oriental to conduct the study in San Isidro North and San Isidro South Districts. After getting the approval, the researchers sent a letter to conduct the study to school heads of the identified schools and personally appeared to their office. Once permitted, the researchers then scheduled the distribution and retrieval of survey questionnaires in each school. When all instruments were retrieved, the data gathered were tabulated and were sent to the statistician for data analysis. Once the data were analyzed, the researchers then interpreted the results and formulated the findings.

In interpreting the mean scores for Research Question One, a scale of 4.20-5.00 described as very high means that measures of appraisal is always observed, 3.40-4.19 described as high means oftentimes observed, 2.60-3.39 described as moderate means sometimes observed, 1.80-2.59 described as low means seldom observed and 1.00-1.79 described as very low means never observed. Meanwhile, in answering Research Question Two and Research Question Three, the same interpretation scale is used for both. 4.20-5.00 described as very high means that measures of teaching competence and measures of symptoms of anxiety is always manifested, 3.40-4.19 described as high means oftentimes manifested, 2.60-3.39 described as moderate means sometimes manifested, 1.80-2.59 described as low means seldom manifested and 1.00-1.79 described as wery low means never observed.

Results:-

Research Question One

What is the level of appraisal of teachers in terms of professional development and performance, teaching and learning, and pupils' learning experiences and progress?

Shown in Table 1 below are the data answering Research Question One

 Table 1:- Appraisal among Public Elementary and Secondary School Teachers of San Isidro North and San Isidro South.

 Indicators

| Indicators | Mean | SD | Descriptive Level |
|-------------------------------------------|------|------|-------------------|
| Professional Development and Performance | 4.12 | .458 | high |
| Teaching and Learning | 4.54 | .405 | very high |
| Pupils' Learning Experiences and Progress | 4.45 | .445 | very high |
| Overall | 4.40 | .375 | very high |

In Table 1 above, the level of appraisal among public elementary and secondary school teachers of San Isidro North and South Districts showed a weighted mean of 4.40, standard deviation of .375 and a verbal interpretation of very high. Since 4.40 falls within the range of 4.20-5.00,this means that appraisal is always observed by teachers.

Research Question Two

What is the level of teaching competence of teachers in terms of planning, development and result? Shown in Table 2 on the next page are the data answering Research Question Two

| Indicators | Mean | SD | Descriptive Level |
|-------------|------|------|-------------------|
| Planning | 4.35 | .528 | very high |
| Development | 4.50 | .385 | very high |
| Results | 4.41 | .497 | very high |
| Overall | 4.42 | .418 | very high |

Table 2:- Teaching Competence among Public Elementary and Secondary School Teachers of San Isidro North and San Isidro South.

In Table 2 above, the level of teaching competence among public elementary and secondary school teachers of San Isidro North and South Districts has an overall weighted mean of 4.42 with a standard deviation of .418 described as very high.All of the indicators got a mean score ranging from 4.35-4.50. This means that teaching competence is always manifested by teachers.

Research Question Three

What is the level of symptoms of anxiety of teachers? Shown in Table 3 below are the data answering Research Question Three

Table 3:- Symptoms of Anxiety among Public Elementary and Secondary School Teachers of San Isidro North and San Isidro South.

| Indicators | Mean | SD | Descriptive |
|--------------------------------------------------------------------------------|------|-------|-------------|
| | | | Level |
| 1. Being a dedicated teacher. | 4.74 | .481 | very high |
| 2. Realizing ambitions. | 4.58 | .587 | very high |
| 3. Being an enthusiast and optimist as to profession. | 4.56 | .600 | very high |
| 4. Being self-confident and a successful person. | 4.17 | .749 | high |
| 5. Liking public speeches and feeling comfortable when being looked by others. | 3.47 | .919 | high |
| 6. Having a calm and well audible voice at public speeches. | 3.67 | .822 | high |
| 7. Possessing high level of language skills. | 3.56 | .759 | high |
| 8. Being able to improvise in the classroom. | 4.25 | .666 | very high |
| 9. Demanding much from students. | 2.81 | 1.022 | moderate |
| 10. Being able to talk to students on all issues. | 3.64 | .980 | high |
| 11. Telling students about making mistakes. | 3.90 | .881 | high |
| 12. Being popular teacher at school. | 3.37 | 1.069 | moderate |
| 13. Showing authority to students. | 4.19 | .918 | high |
| 14. Smiling to students. | 4.52 | .652 | very high |
| 15. Liking challenges and risks at work. | 3.98 | .856 | high |
| Overall | 3.96 | .449 | high |

Revealed in Table 3 above is the level of symptoms of anxiety among public elementary and secondary school teachers of San Isidro North and South Districts with an overall weighted mean score of 3.96 and a standard deviation of .449 with a descriptive interpretation of high. The mean score of the items range from 2.81-4.74 which means that out of the 15 responses, two are moderate, 8 items are high and five items are very high. However, the overall mean score of 3.96 falls with the range of 3.40-4.19, which means that symptoms of anxiety is oftentimes manifested by teachers.

Research Question Four

4.1 Is there a significant relationship between appraisal and teaching competence?

4.2 Is there a significant relationship between appraisal and symptoms of anxiety?

4.3 Is there a significant relationship between symptoms of anxiety and teaching competence?

Shown in Table 4 on the next page are the data answering Research Question Four

| Pair | Variables | Correlation | p-value | Decision on |
|-----------|-----------------------------------|-------------|---------|-------------|
| | | Coefficient | | Но |
| IV and DV | Appraisal and Teaching Competence | 0.751 | 0.000 | Reject |
| IV and MV | Appraisal and Symptoms of Anxiety | 0.533 | 0.000 | Reject |
| MV and DV | Symptoms of Anxiety and Teaching | 0.513 | 0.000 | Reject |
| | Competence | | | |

Table 4:- Correlation Analysis of the Variables.

Revealed in Table 4 above are the results of the test of relationship between appraisal and teaching competence, appraisal and symptoms of anxiety, and symptoms of anxiety and teaching competence. The relationship is significant if the p-value is less than 0.05. Meanwhile, a p-value which is more than 0.05 means that the relationship is not significant. Reflected on the table above, appraisal and teaching competence has an r-value of 0.751 and a p-value of 0.000. This means that there is a significant relationship between appraisal and teaching competence. Appraisal is correlated with teaching competence signifying a positive correlation thus, answering the first sub-question in Research Question Four.

In addition, exhibited in Table 4 above is the result of the test of relationship between appraisal and symptoms of anxiety. The result reveals that appraisal is positively correlated with symptoms of anxiety with an r-value of .533 and p-value of 0.000. This means that appraisal is positively correlated with symptoms of anxiety, hence, briefly answering the second sub-question in Research Question Four. Lastly, the results of the test of relationship between symptoms of anxiety and teaching competence can also be seen in Table 4 above. It is shown that symptoms of anxiety has a positive correlation with teaching competence with an r-value of 0.513 and p-value of 0.000 This means that symptoms of anxiety is positively correlated with teaching competence, thus, answering the third sub-question in Research Question Four.

Research Question Five

Is there a significant mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence?

Shown in Table 5 below are the data answering Research Question Five

| Step | Path | Beta (Unstandardized) | Standard Error | Beta (Standardized) |
|--------|------|-----------------------|-----------------------|---------------------|
| Step 1 | c | 0.836 | 0.043 | 0.751 |
| Step 2 | a | 0.638 | 0.059 | 0.533 |
| Step 3 | b | 0.146 | 0.041 | 0.157 |
| Step 4 | c' | 0.743 | 0.049 | 0.668 |

Table 5:- Regression Results of the Variables in the Four Criteria of the Presence of Mediating Effect.

Displayed in Table 5 above is the regression analysis on the mediating effect of symptoms of anxiety on appraisal and teaching competence. The data in this table were utilized as input to the medgraph. In Step 1 (Path c), appraisal as the independent variable (IV) significantly predicts teaching competence, the dependent variable (DV). In Step 2 (Path a), appraisal (IV) significantly predicts the symptoms of anxiety, the mediating variable (MV). In Step 3 (Path b), symptoms of anxiety (MV) significantly predicts teaching competence (DV). In Step 4, the combined effect of appraisal and symptoms of anxiety on teaching competence is significant.

The researchers affirmed that mediation is significant and there is partial mediation. First regression, the independent variable (appraisal) affects the dependent variable (teaching competence) at beta coefficient of 0.836 with p-value of less than 0.05 and the relationship is significant. Second regression, the independent variable (appraisal) affects the mediating variable (symptoms of anxiety) at beta coefficient of 0.638 with a p-value of less than 0.05 and the relationship is significant. Third regression, the mediating variable (symptoms of anxiety) at beta coefficient of 0.638 with a p-value of less the dependent variable (teaching competence) at beta coefficient of 0.146 with a p-value of less than 0.05 and the relationship is significant. Third regression, the mediating competence) is regressed on both the relationship is significant. Finally, the dependent variable (teaching competence) is regressed on both the independent variable (appraisal) and the mediator (symptoms of anxiety). Since the coefficient of the appraisal has been reduced from 0.836 to 0.743, but still significant, partial mediation of symptoms of anxiety on the relationship between appraisal and teaching competence is achieved.

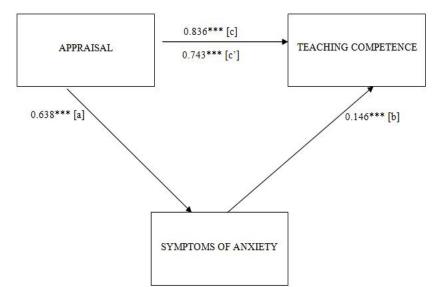


Figure 2:- Medgraph Showing the Variables of the Study.

Mediation Analysis

| Sobel z-value |
|-------------------------------------------------|
| Percentage of the total effect that is mediated |
| Ratio of the indirect to the direct effect |

| 3.366487 <i>p</i> <0.05 |
|-------------------------|
| 11.146463% |
| 0.125448 |

Effect Size Measures

Unstandardized Coefficients

| Total: | .836 |
|--------------|------|
| Direct: | .743 |
| Indirect: | .146 |
| Ratio Index: | .175 |

To assess the significance of the mediating effect, the use of medgraph which involves Sobel z-test was utilized for further mediation. Full mediation will be attained if the effect of the IV on DV is not significant at the last step in the analysis. With this, all of the effects are mediated by the mediating variable. Partial mediation will be achieved if the regression coefficient is reduced but remains significant in the last step. Part of the IV is mediated by the MV but other parts are either direct or mediated by other variables which are not included in the model. In this case, the effect of appraisal (IV) on teaching competence (DV) is weakened as revealed in the lowered beta value after symptoms of anxiety (MV), thus, showing a significant relationship that implies a partial mediation.

As shown in the Mediation Analysis above, the Sobel z-value of 3.366487 yielded a p-value which is less than 0.05, thus significant partial mediation occurred. The association between appraisal (IV) and teaching competence (DV) has been significantly reduced through the inclusion of the mediating variable which is symptoms of anxiety. It is visible in the graph that 0.836 is significantly reduced to 0.743 in the succeeding regression. The effect size which is .175 measures how much of the effect of appraisal (IV) on teaching competence (DV) can be attributed to the indirect path (IV to MV to DV). The total effect (.836) is the raw correlation between appraisal (IV) and teaching competence (DV). The direct effect (.743) is the size of the correlation between appraisal (IV) and teaching competence (DV) with the inclusion of symptoms of anxiety (MV) in the regression. The indirect effect which is .146 is the original correlation between the IV and the DV that undergoes through the MV to the DV. In terms of the ratio index, it seems that about 17.5% of the total effect of the IV on the DV goes through the MV, and about 82.5% of the total effect is either direct or mediated by other variables not included in the model.

Hypothesis One

There is no significant relationship between appraisal and teaching competence, appraisal and symptoms of anxiety, and symptoms of anxiety and teaching competence.

Reflected in Table 4, the correlation analysis between appraisal and teaching competence has a p-value of 0.000, which is less than 0.05 level of significance. This implies that there is a significant relationship between the two variables. Hence, the null hypothesis of no significant relationship between appraisal and teaching competence is rejected. Accordingly, the data presented on the correlation analysis between appraisal and symptoms of anxiety revealed a p-value which is 0.000. This means that there is a significant relationship between the two variables, thus, the null hypothesis of no significant relationship between appraisal and symptoms of anxiety is rejected. Lastly, the correlation analysis between symptoms of anxiety and teaching competence indicates a p-value of 0.000, which is less than 0.05 level of significance. This signifies that there is a significant relationship between symptoms of anxiety and teaching competence is a significant relationship between symptoms of anxiety and teaching competence is a significant relationship between symptoms of anxiety and teaching competence is a significant relationship between symptoms of anxiety and teaching competence. The null hypothesis of no significant relationship between symptoms of anxiety and teaching competence is rejected.

Hypothesis Two

There is no significant mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence.

The Sobel z-value of 3.366487 has a probability value of p<0.05 level of significance. Thus, significant mediation is determined and hypothesis two is rejected. There is a significant mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence among public elementary and secondary school teachers of San Isidro North and South Districts. However, since it is only partial mediation, it cannot entirely claim that symptoms of anxiety is the sole reason how appraisal affects teaching competence. This means that symptoms of anxiety can be one of the many reasons how teacher appraisal can influence teaching competence.

Discussion of Findings:-

The very high level of teacher appraisal is in congruence with the perspectives of Kagema and Irungu (2018) which states that performance appraisal should be at the highest level for the purpose of achieving the goals of the educational institutions. With this, teacher appraisal must support teachers' professional growth and career advancement (Curran, 2014; Zhang & Ng, 2011). Specifically, the high level of professional development and performance conforms to the views of Monyatsi et al. (2006)) and Curran (2014) which state that appraisal practices are significant in honing teachers' professional self within their teaching career. Thus, leading to the enhancement of teaching performance (Hakrim, 2015). With this, the use of teacher appraisal system has made teachers more accountable of their teaching practices (Matete, 2016; OECD, 2013; Rigsby, 2014). In terms of the overall descriptive level, this study is higher compared to the results of the study of Monyatsi et al. (2006) which revealed that teacher appraisal system in Botswana is satisfactory.

The very high level of teaching competence conformed to the findings of Vecaldo et al. (2017) which indicated that elementary school teachers were very competent in terms of pedagogical competence using the imposed standards for professional teachers. In addition, they also exhibited exceptional performance in academics. Meanwhile, the present study is partly similar with the study of Murkatik et al. (2020) which revealed that professional and pedagogical competence have partially influenced the performance of teachers. The current result of the level of teaching competence is higher compared to the findings of Achwarin (2009) as results have shown that the level of teaching competence among teachers of the three southern border provinces of Thailand was documented as high. The findings of the previous study is lower compared to the result of the present study. While the results on the recent study reveals a very high level of competence among teachers, Beckmann (2018), however, discovered that the quality of learners in South Africa was below average due to the fact that considerable number of teachers were not competent.

The high level of symptoms of anxiety conformed to the study of Aslrasouli and Vahid (2014) in Iran where teachers bear a high level of anxiety for both experienced and novice teachers. In fact, a high level of anxiousness was felt by teachers across all genders. Subsequently, the present study is aligned with the study of Othman and Sivasubramaniam (2019) which showed that a high prevalence of depression, stress and anxiety were reported among Malaysian secondary school teachers. This, in turn, affirms that teaching is indeed a highly-stressful career to undertake. Similarly, this study is congruent with the findings of Desouky and Allam (2017) which revealed that occupational stress, anxiety and depression were experienced by Egyptian teachers, and that anxiety and depression have surged higher over the course of the year among teachers of Ghana (Peele & Wolf, 2020).

The result on the relationship between appraisal and teaching competence showed a significant relationship. This result is aligned with the study of Zhang and Ng (2011) as revealed in the study that appraisal system was able to positively uplift Chinese teachers' professional competence and development at some point. Hence, teacher appraisal must support teachers' professional growth and career advancement (Curran, 2011; Zhang & Ng, 2011). The test of relationship between appraisal and symptoms of anxiety revealed a positive significant relationship. As teacher appraisal arouses anxiety among teachers, self-evaluation has been the focus of some appraisers to give teachers the opportunity of balancing teacher's volition and responsibility. Further, the results of this study is similar with Larsen (2009) which revealed that some teachers claimed that appraisal had a positive effect on enhancing their capabilities in the field. However, most of them had expressed that teacher appraisal had caused them stress, self-apprehension and anxiousness. The test of relationship between symptoms of anxiety and teaching competence showed a positive significant relationship. The result on the test of relationship between symptoms of anxiety and teaching competence is aligned with the viewpoints of Gaesser (2018) which states that a high level of anxiety can be a good reference of motivation for a person to be at his or her best. This, in turn fuels the teacher to do better in his or her job (Koçak & Seçer, 2018).

Conclusion and Recommendations:-

The findings of the study affirmed the mediating effect of symptoms of anxiety on the relationship between appraisal and teaching competence of teachers. Even if the symptoms of anxiety played a partial mediation, it cannot fully account on the influence of appraisal towards teaching competence. The findings showed that appraisal is significant in teaching competence. Teachers manifested a very high level of appraisal, high level of symptoms of anxiety and a very high level of teaching competence. We can conclude that there is a significant relationship between appraisal and teaching competence, appraisal and symptoms of anxiety, and symptoms of anxiety and teaching competence. Although teachers have manifested a high level of symptoms of anxiety, still, they showed a very high level of teaching competence and a very high level of appraisal. This means that symptoms of anxiety does not hinder the capacity of teachers to become very highly competent in the field.

This study contradicts the claims on the Psychoanalytic Theory of Freud in 1896 stating that anxiety is a hindrance in successfully performing tasks and disallowing individuals to do the job at their best. Specifically, this study claims that even with the presence of a high level of symptoms of anxiety, still, teachers are manifesting a very high level of teaching competence. This justifies that symptoms of anxiety are positive predictors of teaching competence, thus, making them a good determinant of teachers' capacity to perform at an exceptional level.

Based on the findings and conclusions of the study, several recommendations are drawn:

1. It is suggested that Education Program Supervisors may implement training such as a Moral Intervention Program for public school teachers to alleviate and overcome symptoms of anxiety in order to maintain the level of competence of teachers in the field. In addition, an anxiety-coping strategy may be integrated during the training.

2. School administrators may devise anxiety-coping mechanisms through games and interactive activities to help teachers ease anxiousness and develop self-confidence.

3. School heads may conduct peer-tutorial for teachers during Learning Action Cell Sessions on areas they find difficult.

4. Teachers may ask technical assistance from technologically-advanced teachers to transform classroom interactions into a more engaging environment by integrating Information and Communication Technology.

5. Teachers may enhance their computer literacy skills through direct and hands-on manipulation of software.

References:-

- 1. Abrams, B. (2017). Teacher appraisal: Self-review questionnaire. https://schoolleaders.thekeysupport.com/staff/performance-management/teaching-staff//performance-management-teacher-self-review-checklist/.
- 2. Achwarin, N. (2009). The study of teacher competence of teachers at schools in the three southern provinces of Thailand." *Scholar*, 1(1).
- 3. Adetayo, J. (2016). Teachers' factors as determinants of the professional competence of the Nigeria certificate in education teachers." *Journal of Education and Practice*, 7(13), 1-11.
- 4. Akman, B., Izgi, Ü., Bağçe, H., & Akilli, H. A. (2007). The effect of elementary students' attitude towards science on their levels of test anxiety." *Education and Science*, 32(146), 3-11.

- 5. Amalia, L., & Saraswati, T. (2018). The impact of competencies toward teacher's performance moderated by the certification in Indonesia." *KnE Social Sciences*, 86-98.
- 6. Ameen, E., Guffey, D., Jackson, C., & Mendez, I. (2002). Evidence of anxiety among accounting educators." *Journal of Education for Business.*
- 7. Aslrasouli, M., & Vahid, M.S.P. (2014). An investigation of teaching anxiety among novice and experienced Iranian efl teachers across gender. *Social and Behavioral Sciences*, 98, 304-313.
- 8. Awan, R., Anwar, M.N., & Azher, M. (2010). An investigation of foreign language classroom anxiety and its relationship with students' achievement. *Journal of College Teaching and Learning*, 7(11), 33-40.
- 9. Aydin, S. (2016). A qualitative research on foreign language teaching anxiety. *The Qualitative Report*, 21(4), 629-642.
- Babagana, S.A., Mat, N.B., & Ibrahim, H.B. (2019). Determinants of effectiveness of performance appraisal (EPA) for academics in Nigerian higher education institutions (HEIS): A pilot study." *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(1), 11-20.
- 11. Becchio, J.A. (2016). Teacher evaluation and its impact on teacher self-efficacy".
- 12. Beckmann, J.L. (2018). Competent educators in every class: the law and provision of educators. *Journal for Juridical Science*, 43(2), 1-31.
- 13. Carvalho, R., & Abreu, C. (2018). Students' characteristics and teachers' estimates about their academic achievement. *School and Educational Psychology*, 28, 1-8.
- 14. Casolo, F., Coco, D., Frattini, G., & Casolo, A.(2019). Effective teaching competences in physical education. Journal of Physical Education and Sport, 19(5), 1806-1813.
- 15. Curran, C. (2011). In-service teacher perception of feedback from formative evaluation within the teacher appraisal process and its relationship to teacher self-efficacy. (Doctoral Dissertation) search.proquest.com/docview/1719539263/519FFBA76B994B1DPQ/1?accountid=31259.
- 16. Deci, E., & Ryan, R. (2008). Self-determination theory: amacrotheory of human motivation, development, and health. *Canadian, Psychological Association*, 49(3), 182-185.
- 17. De Lima, M., & Valerio, D. (2011). Research design: A contribution to the author. *Online Brazilian Journal of Nursing*, 10(2),1-18.
- 18. Desouky, D., & Allam, H. (2017). Occupational stress, anxiety and depression among Egyptian teachers. *Journal of Epidemiology and Global Health*, 7, 191-198.
- Fachrurrazi. (2017). Relationship between teacher professional competences and teacher work-autonomy. (Doctoral Dissertation). www.semanticscholar.org/paper/Relationship-between-Teacher-ProfessionalandFachrurrazi/3569442a43fc6ce3ed495340915396482084fd81.
- 20. Flores, M. A. (2012). The implementation of a new policy on teacher appraisal in Portugal: How do teachers experience it at school? *Educ Asse Eval Acc*, 24, 351-368.
- Gaesser, A. (2018). Befriending anxiety to reach potential strategies to empower our gifted youth." *Gifted Child Today*, 41(4), 186-195.
- 22. Glasofer, A., & Townsend, A. (2020). Determining the level of evidence: nonexperimental research designs." *Nursing Critical Care*, 15(1), 24-27.
- 23. Grauf, C. (2015). Principals' perceptions of incompetent teachers: incidence rates, characteristics, and barriers to dismissal in Missouri. (Doctoral Dissertation). www.proquest.com/docview/1678954550/FB3E8C5D85344CDFPQ/1?accountid=31259.
- 24. Hakrim, B.M. (2015) Teacher evaluation as a tool for professional development: A case of Saudi Arabia. *Advances in Language and Literary Studies*, 6(5), 97-103.
- 25. Hardin, J. (2019). Principal stories of working with ineffective teachers. (Doctoral Dissertation) www.proquest.com/docview/2287611651/6424099E214F46D2PQ/1?accountid=31259.
- 26. Jedynak, M. (2011). Teaching experience and its role in foreign language teachers anxiety. *Acta Neophilologica*, 13, 59-72.
- 27. Kagema, J., & Irungu, C. (2018). An analysis of teacher performance appraisals and their influence on teacher performance in secondary schools in Kenya." *International Journal of Education*, 11(1), 93-98.
- 28. Kim, L., Jörg, K., & Klassen, R. (2019). A meta-analysis of the effects of teacher personality on teacher effectiveness and burnout. *Educational Psychological Review*, 31, 163-195.
- 29. Kocak, L., & SeÇer, I. (2018). Investigation of the relationship between school burnout, depression and anxiety among high school students. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 47(2), 601-622.
- 30. Larsen, M. (2009). Stressful, hectic, daunting: A critical policy study of the Ontario teacher performance appraisal system. *Canadian Journal of Educational Administration and Policy*, (95), 1-44.

- 31. Ludwikowska, K. (2019). Teacher Competence inventory an empirical study on future-oriented competences of the teaching profession in higher education in India. *Education* + *Training*, 61(9), 1123-1137.
- 32. MacKinnon, D., Fairchild, A., & Fritz, M. (2007). Mediation analysis. Annu Rev Psychol, 58(593), 1-22.
- 33. Matete, R.E. (2016). Implementation of management by objective through open performance review and appraisal system for teachers in Tanzania. *International Journal of Education & Literacy Studies*, 4(3), 24-33.
- 34. McGrath, J. (2016). The People and the Policy: The Possibilities and Limitations of Current Supervisory Appraisal Practices for Experienced Secondary Teachers in Ontario. ProQuest, search.proquest.com/docview/1820870527/1F6BA5DED182445FPQ/1?accountid=31259.
- 35. Monyatsi, P., Steyn, T., & Kamper, G. (2006). Teacher perceptions of the effectiveness of teacher appraisal in Botswana." *South African Journal of Education*, 26(3), 427-441.
- Murcia, J.A., Torregrosa, Y., & Pedreño, N. (2015). Questionnaire evaluating teaching competencies in the university environment. Evaluation of teaching competencies in the university. *New Approaches in Educational Research*, 4(1), 54-61.
- 37. Murkatik, K., Harapan, E., & Wardiah, D. (2020). The influence of professional and pedagogic competence on teacher's performance. *Journal of Social Work and Science Education*, 1(1), 58-69.
- 38. Nadeem, M., Arif, M., & Qadeer, M.C. (2019). Effectiveness of the teacher appraisal system in public higher secondary schools of Punjab (Pakistan)." *Global Regional Review*, 4(1), 194-208.
- 39. Nazir, F. (2018). Stimulus response theory: a case study in the teaching and learning of Malay language among year 1 pupils. *The Journal of Social Sciences Research*, 4(10), 153-157.
- 40. OECD (2013). Teacher appraisal: Enhancing teacher professionalism in synergies for better learning: An international perspective on evaluation and assessment, OECD Publishing, Paris, DOI: https://doi.org/10.1787/9789264190658-9-en.
- 41. Obasi, K., & Ohia, A. (2014). Teacher performance evaluation techniques in public and private secondary schools in South East Nigeria. *Global Journal of Educational Research*, 13,117-123.
- 42. Omar, R., Hassan, S., Ahmad, N.A., & Roslan, S. (2018). Importance of teachers' competency through students' perception in relationships between parental involvement and motivation with students' achievement. *Sains Humanika*, 10(3), 17-23.
- 43. O'Pry, C., & Schumacher, G. (2012). New teachers' perceptions of a standards-based performance appraisal system. *Educ Asse Eval Acc*, 24,325-350.
- 44. Othman, Z.,& Sivasubramaniam, V. (2019). Depression, anxiety, and stress among secondary school teachers in Klang, Malaysia. *International Medical Journal*, 26(2), 71-74.
- 45. Peele, M.,& Wolf, S. (2020). Predictors of anxiety and depressive symptoms among teachers in Ghana: Evidence from a randomized controlled trial. *Social Science & Medicine*, 253, 1-10.
- 46. Qodriyah, W.R. (2016). An Analysis of Teachers' Pedagogical Competence in Teaching English for Young Learners at Nara Islamic School Cirebon. 2016. Syekh Nurjati State Islamic Institute. CORE, core.ac.uk/download/pdf/147421096.pdf.
- 47. Ranjbar, N.A., & Narafshan, M. H. (2016). A study of students' attitude toward teachers' affective factors in efl classrooms. *Advances in Language and Literary Studies*, 7(5), 142-146.
- 48. Rigsby, D. (2014). Teachers' perceptions regarding one district's newly implemented appraisal system. (Doctoral Dissertation). www.proquest.com/docview/1651196040/367B32187E34F3FPQ/1?accountid=31259.
- 49. Rincon, A., & Howard, K. (2019). Anxiety in the workplace: a comprehensive occupational health evaluation of anxiety disorder in public school teachers. *Journal of Applied Biobehavioral Research*, 24(1), 1-3.
- 50. Saad, A., & Dawson, C. (2018). Requirement elicitation techniques for an improved case based lesson planning system. *Journal of Systems and Information Technology*, 20(1), 19-32.
- 51. Shi, M., Liu, L., Wang, Z.W., & Wang, L. (2015). The mediating role of resilience in the relationship between big five personality and anxiety among Chinese medical students: A cross-sectional study." *PLOS ONE*, 10(3),1-12.
- 52. Soepriyatna. (2012). Investigating and assessing competence of high school teachers of English in Indonesia. *Malaysian Journal of ELT Research*, 8(2), 38-49.
- 53. Sousa, V., Driessnak, M., & Mendes, I. (2007). "An Overview of Research Designs Relevant to Nursing: Part 1: Quantitative Research Designs." *Rev Latino-am Enfermagem*, 15(3), 502 -507.
- Sumaryanta, Mardapi, D., Sugiman, & Herawan, T. (2018). Assessing teacher competence and its follow-up to support professional development sustainability. *Journal of Teacher Education for Sustainability*, 20(1), 106-123.
- 55. Syamsinar, H., & Jabu, B. (2015). The problems in professional competence of teachers in teaching English subject at vocational high schools. *ELT Worldwide*, 2(2),95-109.

- 56. Thakur, A., & Shekhawat, M. (2014). The study of different components of teacher competencies and their effectiveness on student performance. *International Journal of Engineering Research & Technology*, 3(7), 1426-1428.
- 57. Tope, O. (2012). "Effects Of Teachers' Competence On Students' Academic Performance: A Case Study Of Ikeja Local Government Area Of Lagos State." pdfs.semanticscholar.org/e35c/02d8e42c1b5f8550ece387aa6649560aaf04.pdf.
- 58. Vecaldo, R., Andres, A., Carag, C., & Caraguian, C. (2017). Pedagogical competence and academic performance of pre-service elementary teachers in Tuguegarao City, Philippines. *Asia Pacific Journal of Multidisciplinary Research*, 5(1), 47-54.
- 59. Wacker, A. (2016). Creating an effective lesson plan. School Band & Orchestra, 19(4), 34-35.
- 60. Zhang, X.F., & Ng, H.M. (2011). A case study of teacher appraisal in Shanghai, China: In relation to teacher professional development. *Asia Pacific Educational Review*, 12, 569-580.
- 61. Zhukova, O. (2018). Novice teachers concerns, early professional experiences and development: implications for theory and practice. *Discourse and Communication for Sustainable Education*, 9(1),100-11.