

STRESS, JOB SATISFACTION, RESILIENCE, AND TEACHING PERFORMANCE OF HIGH SCHOOL MATHEMATICS TEACHERS IN THE NEW NORMAL

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Abstract

The purpose of this study was to propose a model of the relations between stress, job satisfaction, teacher's resilience, and teaching performance of high school mathematics teachers from the province of Negros Occidental in the A.Y. 2021 – 2022. This study covered responses from 380 randomly selected public high school teachers of the province of Negros Occidental teaching mathematics who taught during AY 2021-2022. The teachers answered the following questionnaires: Job Satisfaction Survey, Resilience Assessment Questionnaire, Teacher Stress Inventory and Pandemic-Related Perceived Stress Scale of COVID-19, and Teaching Performance Questionnaire. Means and standard deviations were used for descriptive data analyses, Descriptive statistics was used to determine the level of stress, job satisfaction, teacher's resilience, and teaching performance in terms of technological competence, pedagogical competence and attitudinal competence of high school mathematics teachers. Structural equation model was used to find test if teacher's resilience played a moderating role with regard to the contribution of teacher's job satisfaction and stress to teaching performance and to find the best fit model that best influence on the teaching performance of the teachers. The level of stress of mathematics teachers in the province of Negros Occidental was moderate. The level of job satisfaction high school mathematics teachers was ambivalent. The level of resilience of high school mathematics teachers was high. The teaching performance of the teachers was also high. The exogenous variables problem-solving, vision, supervision, using technology, fatigue manifestations, time management, determination, and operation procedures significantly predict teaching performance. The results and findings latent variables resilience representing the measured variables determination and problem solving; job satisfaction represented by the measured variables in terms of pay, contingent rewards,

and nature of work have significant contribution to the latent variable teaching performance.

Keywords: Stress, Job Satisfaction, Resilience, Teaching Performance, Structural Equation Model.

Introduction

The teaching profession continued to be a complex field as the population demands and changing needs of the evolving world. The teaching profession roles has not been only that of transferring knowledge, skills, values and attitudes but also shaping the individuals to fit the world that is changing socially, politically, economically and technologically [1].

For centuries, teaching has been characterized as a profession that is “emotionally taxing and potentially frustrating” [16]. Stress in teachers has been linked to teaching quality, student achievement, teacher retention, and the general school climate [36]. As cited by Keshavarz and Mohamaddi [24], teaching ranked as the second most stressful job out of 26 occupations analyzed, with only ambulance drivers exceeding the stress levels found in the teaching profession.

Research on successful teachers can be classified into two main strands that rarely overlap. The first, research on learning and instruction, focuses on the quality of instruction as a major outcome variable that in turn predicts students' achievement gains and motivational and personality development [27]. The major emphasis is on the teacher's role as an instructor, and successful teachers are identified as those who provide good instruction. The second strand, research on occupational health, focuses on teachers' health and affective well-being. In this research tradition, successful teachers are characterized as experiencing low stress, showing no symptoms of burnout, and reporting high job satisfaction [27].

In occupational research, the concept of job satisfaction is one of the most studied aspects of job-related well-being, reflecting “a positive (or negative) evaluative judgment one makes about

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one's job or job situation" [56] which can be explained by the perceived degree of need fulfillment within the organizational setting. Teaching is a complicated practice that requires an interweaving of many kinds of specialized knowledge. Miller [37] support the idea that, job satisfaction is a positive or pleasant emotional state resulting from a person's appreciation of his/ her own job, is the most referenced and generally accepted description, characterizing the necessary component needed to depict what is meant by broad construct of job satisfaction. Insofar as expectations that an individual has in relation to his work overlapped with what he really obtains performing the job [9].

In the Philippines, teachers are experiencing huge problems on societal, emotional, and economic crisis. Societal problems include corruption in the government offices, and the change of educational leadership and its system particularly K to 12 program which is impulsive implementation even the schools and the teachers were not yet ready to assume [54]. On other hand, emotional problems are based on teacher's depression; number of students in the classrooms, occupational acceptance and satisfaction, and appropriate occupation to one's personality [14]. The most serious economic problems of the teachers encountered at present are poverty, which is because of low salary they received and that is why some of them made unethical manner. The concerns and issues on salaries, working conditions, status, and other extrinsic motivators are not being met, they will be unable to work at their full potential have been raised by the ordinary teachers to the highest authority but unfortunately majority of these has been neglected [51]. With this scenario, many of them experienced too much occupational stress and may become ineffective in their profession.

Teacher resiliency is the "ability to adjust to varied situations and increase one's competence in the face of adverse conditions" [4]. Resiliency is an indispensable skill set for teachers facing adverse situations in their classrooms and larger school environment. Howard and Johnson [19] asserted that there are three attributes or qualities that resilient teachers employ: agency, a strong support system, and competence/sense of achievement. Educators with "a pervasive sense of agency - a strong belief in their ability to control what happens to them (the opposite of which is fatalism or helplessness)" able to nimbly recover from setbacks or problems. Resilient educators also have strong support systems consisting of friends and family as well as supportive administrative teams and coworkers. "What was particularly interesting in this group of teachers was their unanimous claim of strong support from colleagues and school leadership" [19]. Finally, resilient teachers believe they are

wholly competent in their work and are impacting the lives of their students.

As Philippines battles the COVID-19 pandemic, the Department of Education (DepEd) started to brace for the new normal in education amid the pandemic situation in the country. DepEd conducted a nationwide consultation with stakeholders and education experts and prepared for a Learning Continuity Plan to deliver education to learners. In preparation for School Year 2020-2021, DepEd will provide Self-Learning Modules (SLMs) with the alternative learning delivery modalities for various types of learners across the Philippines, including modular, television-based, radio-based instruction, blended, and online. SLMs are delivered in printed format to schools located in coastal areas, far-flung provinces, and communities without access to the internet or electricity. For households with gadgets and devices, the department has announced that SLMs can also be accessed online or offline. The department also assured that teachers' safety and health will be its top priority as SLMs can be done at home. Teachers who would need to visit their schools to get materials to prepare the SLMs are required to follow the existing work arrangement and health protocols [13].

Structural equation modeling (SEM) allows to make use of several indicator variables per construct simultaneously, which leads to more valid conclusions on the construct level. It is a set of statistical techniques used to measure and analyze the relationships of observed and latent variables. SEM examines linear causal relationships among variables, while simultaneously accounting for measurement error. It is important that we investigate the constructs namely, stress, job satisfaction, teacher's resilience, and their causal effect relationship to teaching performance of high school mathematics teachers.

Theoretical Framework

This study was anchored on the perspective of Self-Determination Theory (SDT). This contemporary theory, conceptualized by Deci and Ryan [11], is a theory of motivation and personality that addresses three universal, innate and psychological needs: competence, autonomy, and psychological relatedness. In this case, stress level, job satisfaction, and resilience are conceived to be antecedents of teachers' instructional performance in the classroom [34].

Job satisfaction influences job performance. According to Usop, et al [53] Disgruntled teachers who are not satisfied with their job will not be committed and productive. SDT also suggests that controlled or external motivations can thwart teacher motivation. Stress contributes to decreased organizational performance, decreased employee

overall performance, high error rate and poor quality of work [2]. Previous studies have mostly focused on the negative effects of job stress on performance, which argue that higher pressures can make individuals perform less effectively on tasks that call for tolerance and concentration, subsequently resulting in lower productivity and job quality [12]. Resilience represents an important predictor of job performance. Resilient workers are more satisfied and engaged at work and attain a better job performance than their less resilient peers. These

workers are usually healthier and are less likely to quit [17].

When conditions support autonomy, competence, and relatedness, teachers experience the highest quality motivational environment and sense of emotional well-being [11]. Teaching performance, persistence, and creativity enhance. However, if any of the three conditions are unsupported for a teacher, a detrimental impact to well-being ensues in that environment [11].

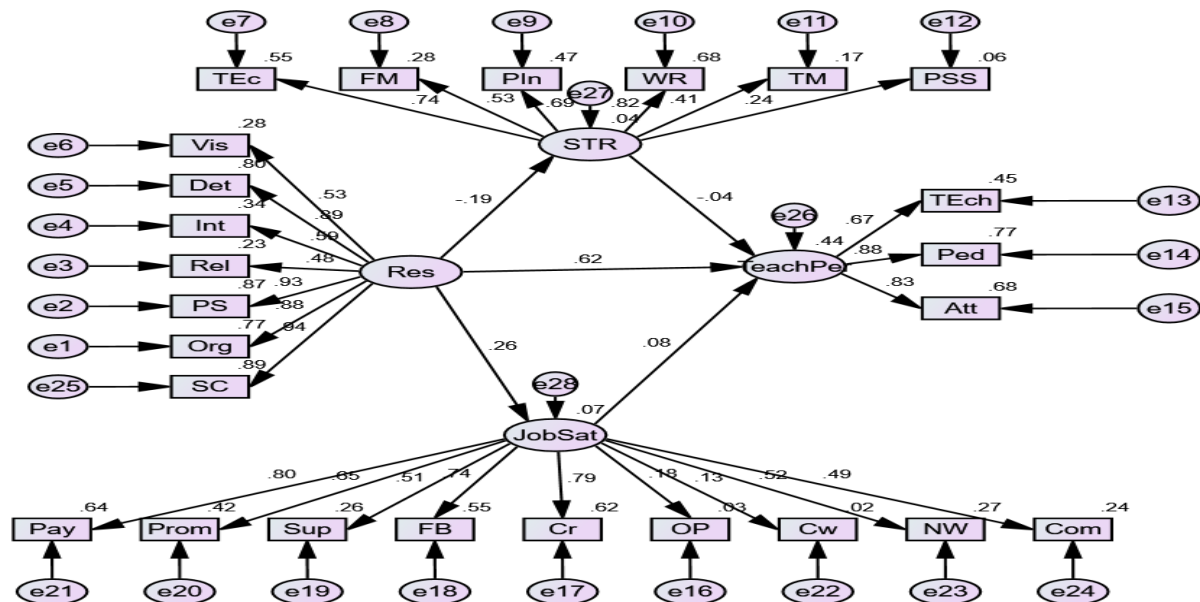


Figure 1: Proposed Hypothetical Model of Stress, Job Satisfaction, Resilience and Teaching Performance

Legend:

STR - Teacher's Stress
Int - Interaction
OP - Operating Procedures
PSS - Stress Due to Pandemic
Rel - Relationship
Cw - Coworkers
TM - Time Management
PS - Problem Solving
NW - Nature of Work
WR - Work-related Stress
Org - Organization
Com - Communication

Pin - Professional Investment
SC - Self Confidence
TeachPer - Teaching Performance
FM - Fatigue Manifestations
JobSat - Job Satisfaction
Tech - Technological Competence
Prom - Promotion
Ped - Pedagogical Competence
Res - Teacher's Resilience
Sup - Supervision
Att - Attitudinal Competence

Vis - Vision
FB - Fringe Benefits
Det - Determination
Cr - Contingent Rewards

Statement of The Problem

The purpose of this study was to propose a model of the relations between stress, job satisfaction, teacher's resilience, and teaching performance of high school mathematics teachers from the province of Negros Occidental in the A.Y. 2020 - 2021. The figure was developed by examining previous research in this area with some relationships demonstrating more consistency, and by predicting the relations between variables that have not previously been studied and those that have been found to be inconsistent.

Specifically, it sought to answer the following questions:

1. What is the level of stress, job satisfaction, teacher's resilience, and teaching performance in terms of technological competence, pedagogical competence and attitudinal competence of high school mathematics teachers?
2. Does teacher's job satisfaction and stress play a mediating role with regard to the contribution of teacher's resilience to teaching performance?
3. Is there a best fit model that influence the performance of the teachers?

Materials And Methods Research Design

In this study, the researcher utilized quantitative design research method. In the generation of the best fit model, structural equation model (SEM) was used. The research adopted the descriptive-correlational research method. Ritchie et al. [43] opined that by using the descriptive method the researcher will be able to observe a large mass of target population and make required conclusions about the variables. Since the researcher was trying to analyze the stress, job satisfaction, resilience and teaching performance of high school mathematics teachers hence the researcher used the descriptive method in order to statically analyze the data. Descriptive-correlational method of research in which this method is a measure of associations of variable with varying level of measurement. Descriptive-correlational studies provided understanding of what is in a specific situation with an identified population and examines the extent to which two or more variables relate to one another [49]. Correlational research is research designed to discover relationships among variables and to allow the prediction of future events from present knowledge [49]. This study used structural equation model (SEM) by Sewall Wright (1921), this method combines factor analysis with path analysis to test theoretical relations among latent variables [47]. Here, models can range from simple to complex in nature in that any number of variables of any type can be involved (i.e., observed, latent, independent, and/or dependent variables). The incorporation of factor analysis in structural equation modelling allows the researcher to use multiple measures of each latent variable instead of a single measure, thereby enabling better measurement conditions (i.e., reliability and validity) than with a single measure. This study proposed a theoretical causal model to measure the relationship of teaching performance between stress, job satisfaction, and resilience of high school mathematics teachers of selected schools in the province of Negros occidental.

Respondents of the Study

A widely accepted rule of thumb is 10 cases/observations per indicator variable in setting a lower bound of an adequate sample size [39]. Since, the instrument with the greatest number of items has

38 questions, the researcher gathered 380 Junior and Senior High School teachers from different public school under the province of Negros Occidental as respondents of the study. The respondents were selected using cluster sampling. Cluster sampling is a probability sampling technique in which all population elements are categorized into mutually exclusive and exhaustive groups called clusters. Clusters are selected for sampling, and all or some elements from selected clusters comprise the sample [55]. In this study, the researcher randomly selected at least three divisions in the province of Negros occidental to collect the desired sample size. The distribution of the participants are as follows:

Methodology

This research on the demographics and the early experiences of the male adolescent homosexuals was conducted in the 2nd semester of the academic year 2017-2018. Seven (7) participants from the different courses of a State College in Negros Occidental, Philippines gave significant insights into the study.

The researcher utilized both the nonprobability sampling methods of purposive sampling and snowball sampling, since the individual participants themselves provided information as to the other male adolescent homosexuals who have openly admitted their homosexuality.

Despite the many referrals, a few answered. The researcher communicated with fourteen (14) participants, yet a meagre 50% responded. This small response rate may be an indication that, despite their open admission of homosexuality, participants are not yet socially bold to face the possible implications of their homosexuality. Some of them agreed to meet with the researchers yet did not come during the assigned date and time, and terminated communicating with the researcher since then. This, the researcher understands, since the ethics of research declares that anybody should not be made to agree to involve in any research endeavour without their consent.

Table 1: Demographic Profile of the Respondents

Variable	f	%
Age		
Younger	204	53.7
Older	176	46.3
Sex		
Male	121	31.8
Female	259	68.2
Length of Service		
Shorter	244	64.2
Longer	136	35.8
Division		
San Carlos	47	12.4

Bacolod	102	26.8
Cadiz	52	13.7
Negros Occidental	142	37.4
Kabankalan	37	9.7
Total	380	100.0

Data Gathering Instruments

The teachers' stress was measured using The Teacher Stress Inventory (TSI) [15] and the Pandemic-Related Perceived Stress Scale of COVID-19 (COVID-PSS-10) [8]. Job Satisfaction was measured using Job Satisfaction Survey. The Job Satisfaction Survey, JSS is a 36 item, nine facet scale to assess employee attitudes about the job and aspects of the job [48]. The teacher resilience was measured using the Resilience Assessment Questionnaire (RAQ) by the Management Advisory Service [20]. Teaching performance was measured using the questionnaire of Fr. Rooney John Undar, SDB [52]. The questionnaire consisted of three areas: technological competencies, pedagogical competencies, and attitudinal competencies, including ten questions under each area.

Data Collection

Data from the respondents were gathered through the digital platform-google forms due to the strict observation of the Coronavirus disease protocols. The data were gathered following the hereunder procedures: The researcher submitted letters to the schools division superintendents then to school heads duly noted by my adviser, asking permission to conduct a survey among teachers in the province of Negros Occidental. Upon approval of the schools' division superintendents, they requested the research or mathematics supervisor to help facilitate the distribution and administration of the research instrument to the mathematics teachers. The survey was conducted on the from August to September of 2021. The data gathered by the researcher were tallied, tabulated, analyzed and interpreted based on the purpose of the study.

Results and Discussion

Level of Stress of High School Mathematics Teachers

The level of stress of mathematics teachers in the province of Negros Occidental ($M=2.91$, $SD=0.45$) is "moderate". It could be gleaned from the data that *Work Related Stress* ($M=3.37$, $SD=0.75$) is the indicator with the highest mean that is interpreted as "moderate". In contrast, the teachers are least affected by about the *Time Management* ($M=2.34$, $SD=0.89$) though still described as "moderate" stress. The rest of the indicators are organized from lowest to highest mean ratings with their respective descriptive interpretation. That is, *Pandemic-Related Stress* ($M=2.90$, $SD=0.53$), *Fatigue Manifestations* ($M=2.92$, $SD=0.73$), *Professional Investment* ($M=3.02$, $SD=0.76$), and *Using*

Technology ($M=3.04$, $SD=0.71$), all indicate "moderate" stress. The result concurs Oducado et. al [40], the results demonstrated that more than half of teachers experienced moderate COVID-19 stress. Similarly, Cahapay and Bangoc II [7], showed that teachers experience moderate level of stress amid COVID-19 crisis in the Philippines. In addition, the results of Klapproth et al., [25] that teachers experienced on average a medium-to-high amount of stress during the lockdown.

Level of Job Satisfaction High School Mathematics Teachers

The level of job satisfaction ($M=142.35$, $SD=17.65$) is "ambivalent", this means that the teachers are uncertain of their job satisfaction. In terms of subscales, the teachers are "satisfied" with the *Supervision* ($M=17.63$, $SD=3.52$), *Nature of Work* ($M=17.45$, $SD=3.55$), *Communication* ($M=17.38$, $SD=3.22$), and *Coworkers* ($M=16.51$, $SD=3.68$). Meanwhile, the teachers are "ambivalent" with *Pay* ($M=15.97$, $SD=2.99$), *Promotion* ($M=14.60$, $SD=2.74$), *Contingent Rewards* ($M=15.67$, $SD=3.13$), and *Fringe Benefits* ($M=14.61$, $SD=3.23$). Finally, teachers are "dissatisfied" with *Operation Procedures* ($M=12.53$, $SD=2.25$). This opposed the result of Bravo et. al [5] that amidst the covid-19 pandemic job satisfaction of public-school teachers in the Philippines is above average. Similarly, Meanwhile, results are in consonant to the study of Padagas [41] that the teachers are ambivalent with respect to their levels of job satisfaction. In addition, Zamarro et al. [57] asserting that the proportion of teachers, who are becoming less certain of whether they would continue the teaching profession, has escalated.

Level of Resilience of High School Mathematics Teachers

The level of resilience of high school mathematics teachers ($M=135.99$, $SD=18.20$) is "high". The teachers have high resilience in the subscale of *Vision* ($M=19.64$, $SD=3.21$) which means that the teachers have clear understanding of their vision. In addition, teachers have "high" level of *Determination* ($M=19.37$, $SD=2.72$), that is, they have considerable determination. Teachers also have "high" level of *Interaction* subscale ($M=19.12$, $SD=2.68$), meaning they can handle most interactions. Results also showed that teachers have "high" level of *Relationship* ($M=18.54$, $SD=3.44$) suggesting that teachers have some good relationship. Likewise, teachers have "high" level of

Problem Solving ($M=20.19$, $SD=3.21$) indicating that teachers are quite good at problem solving. The teachers have “high” level of *Organization* ($M=19.23$, $SD=3.93$), this means that the teachers have some organizing habits already. Lastly, teachers also have “high” *Self-confidence* ($M=19.89$, $SD=3.65$) suggesting that considerable self-confidence. Results are congruent to the findings of Ana et. al [3] showed a “high” level of resilience among teachers of Elementary School. In addition, Sanchez & Almagia [46], Hidalgo et al. [18], and De Vera & Gambarte [10], in their studies among faculty in Chile, Mexico, and Spain respectively, affirming that teachers are capable of medium-high resilience in coping with adverse situations. Moreover, Liu et al. [31] concluded that secondary teachers in China exhibit high level of optimism, confidence, and strength, which indicates their strong resilience in all aspect and therefore enables them to cope very well with difficulties specially those brought about by the pandemic. Finally, as exposed by Suryaratri et al. [50], a significant contributor of teachers’ resilience is the social support that they get from peers, loved ones, and significant others, while the other contributors are yet left undiscovered.

Teaching Performance of High School Mathematics Teachers

The teaching performance of the teaches ($M=3.30$, $SD=0.40$) is high. The teachers have “high” teaching performance in the Technological Competency ($M=3.40$, $SD=0.49$), Pedagogical Competency ($M=3.26$, $SD=0.44$), and Technological Competency ($M=3.25$, $SD=0.44$).

It is expected that there is a certain standard that can encourage teachers to act and behave in an ideal, noble, wise, and authoritative manners regardless of the ongoing pandemic. Cahapay et al [7] studied the techno stress, work performance, job satisfaction, and career commitment of teachers amid COVID-19 crisis in the Philippines. The results showed that the teachers experience very high levels of work performance. Mulyani [38]

argued that personality competence is the core of a teacher, despite of the adversity experienced this pandemic a teacher could provide character education, however to realize this, mental maturity and sensory intelligence (mind and heart) are needed. The same idea was stated by Pishghadam and Sahebjam [42], teachers for needed is being a real parent of students, thus a reason to remain a role model. Rusilowati & Wahyudi [45], posited that educational institutions must create a system supporting the development of teachers' professionalism, which is a system that encourages the development of the four basic competencies (pedagogic, personality, professional, social) in order to create effectiveness and efficiency which was shown in the result of this study.

Best Fit Model

The generated structural model in standardized solution is pictured out in Figure 3. Results denote that the latent variables resilience representing the measured variables determination and problem solving mediated by job satisfaction represented by the measured variables in terms of pay, contingent rewards, and nature of work has significant contribution to the latent variable teaching performance.

The best fit structural model exhibited in Figure 2. It could be viewed in Table 2 showing the direct and indirect effects of predictor variables to the dependent variable. The total effect of job satisfaction on teaching performance is 0.144, this means that when job satisfaction goes up by 1, teaching performance goes up by 0.144. The total (direct and indirect) effect of resilience on teaching performance is 0.681. That is, due to both direct (unmediated) and indirect (mediated) effects of resilience on teaching performance, when resilience goes up by 1, teaching performance goes up by 0.681.

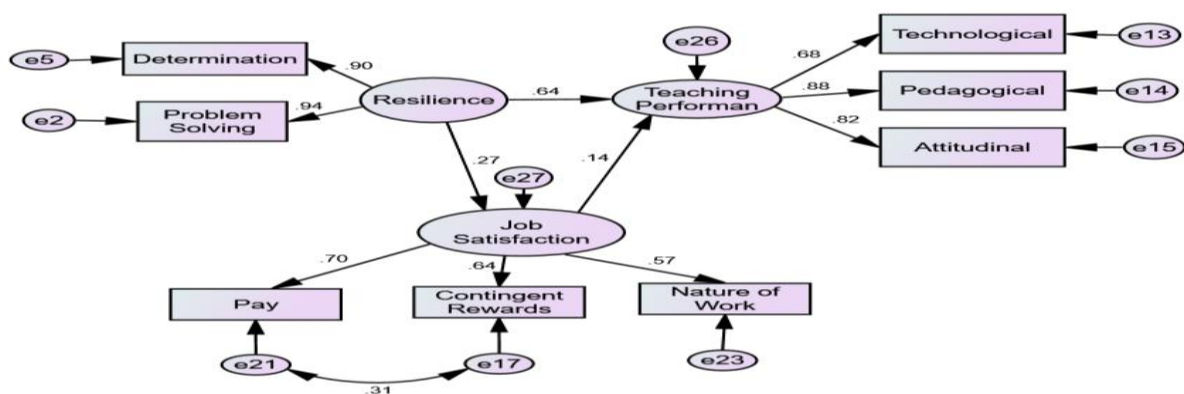


Figure 2: Best Fit Model that Influence the Teaching Performance of Math teachers

Table 2: Direct and Indirect Effect of the Independent Variables on the Dependent Variable

Variable	Direct Effect (Unmediated)	Indirect Effect (Mediated by Job Performance)	Total Effect
Resilience to Teaching Performance	0.642	0.039	0.681
Variable	Direct Effect (Unmediated)	Indirect Effect (No Mediating Variable)	Total Effect
Job Satisfaction to Teaching Performance	0.144	-	0.144

Revealed in Table 3 is the examination of hypothesized model using goodness of fit indices: The $\chi^2/df=2.010$ is less than 5 and RMSEA =0.052 is not less than 0.08. The rest of the indices like NFI=0.978, TLI=0.980, CFI=0.988, AGFI=0.953 and GFI=0.971 conformed the model fit value. These indices satisfied the requirement of the

goodness of fit measures. Moreover, this is an indication that generated model is a very good fit model. These indices satisfied the requirement of the goodness of fit measures. Moreover, this is an indication that generated model is a very good fit model.

Table 3: Statistical Values Related to the Fitting of the Hypothesized Model

Measure	Criterion	Fit Index Values of the Hypothesized Model
(χ^2/df)	< 5	2.010
RMSEA	< 0.08	0.052
GFI	> 0.90	0.979
AGFI	> 0.90	0.953
CFI	> 0.90	0.988
TLI	> 0.90	0.980
NFI	> 0.90	0.978

Regression weights were estimated to measure the effects between measured and latent variables. Depicted in Table 4, the model proposes that both resilience ($\beta=0.642$, C.R.=11.24, $p<0.001$) and job satisfaction ($\beta=0.144$, C.R.=2.18, $p=0.029$) forecasts teaching performance. Li et al [29] showed in their research the evidence of the mediating role of job satisfaction on teacher's job satisfaction. Numerous research attests to the importance of resilience in the workplace for employees' well-being and performance. Numerous studies have confirmed a weak to moderate relationship between resilience and job performance [26] [33] [32]. Moreover, a recent systematic review by Robertson et al [44] of studies monitoring the effects of resilience training in the workplace reveals that resilience training can improve personal resilience and is a useful means of developing not only mental

health and subjective well-being in employees but also improved performance. A meta-analysis by Judge et al., [22] has established a robust correlation between job satisfaction and job performance.

According to previous evidence, resilience attenuates the debilitating effects of stress on job satisfaction [26]. Resilient workers can effectively cope with stress and experience more positive emotions and thus are very likely to be more satisfied with their job than their less resilient peers [23]. Weak to moderate positive relationships between resilience and job satisfaction have been repeatedly reported [21] & [28] [35], and a longitudinal study by Lioussis, Shochet, Millier, and Biggs [30] reported that an intervention promoting resilience in the workplace led to a significant increase of job satisfaction.

Table 4: Estimates of Variable Regression Weights

			Standardized Estimates	Unstandardized Estimates	S.E.	C.R	p
Job Satisfaction	<---	Resilience	0.271	0.186	0.048	3.852	***
Teaching Performance	<---	Resilience	0.642	0.077	0.007	11.24	***
Teaching Performance	<---	Job Satisfaction	0.144	0.025	0.012	2.18	0.029
Problem Solving	<---	Resilience	0.942	1			

Determination	<---	Resilience	0.897	0.805	0.039	20.436	***
Technological	<---	Teaching Performance	0.677	0.917	0.067	13.598	***
Pedagogical	<---	Teaching Performance	0.884	1.075	0.062	17.451	***
Attitudinal	<---	Teaching Performance	0.817	1			
Contingent Rewards	<---	Job Satisfaction	0.645	0.973	0.108	9.047	***
Pay	<---	Job Satisfaction	0.696	1			
Nature of Work	<---	Job Satisfaction	0.567	0.968	0.275	3.526	***

Summary of Findings, Conclusion & Recommendations

The following are summary of findings:

The level of stress of mathematics teachers in the province of Negros Occidental is moderate. Also, teachers experience moderate stress in the areas of work-related stress, time management, pandemic-related stress, fatigue manifestations, professional investment, and using technology.

The level of job satisfaction high school mathematics teachers. The level of job satisfaction is ambivalent. In terms of subscales, the teachers are satisfied with the supervision, nature of work, communication, and coworkers. Meanwhile, the teachers are ambivalent with pay, promotion, contingent rewards, and fringe benefits. Finally, teachers are dissatisfied with operation procedures.

The level of resilience of high school mathematics teachers is high. The teachers have high level of resilience in the subscale of vision, determination, interaction, relationship, problem solving, organization, and self-confidence.

The teaching performance of the teaches high and in terms of their technological competency, pedagogical competency, and technological competency.

The generated structural model denotes that the latent variables resilience representing the measured variables determination and problem solving; job satisfaction represented by the measured variables in terms of pay, contingent rewards, and nature of work has significant contribution to the latent variable teaching performance. The total effect of job satisfaction on teaching performance is 0.144. The total (direct and indirect) effect of resilience on teaching performance is 0.681. The model further proposes that both resilience and job satisfaction are predictors of teaching performance.

Conclusion

Despite the hardship during this pandemic, the mathematics teachers experience moderate level of stress. Research has shown that we need a moderate

level of stress to enable us to perform better. A moderate level of stress can be optimal. In small doses, however, experts say stress can actually have some positive effects. Moderate levels of daily, manageable stress - also known as 'eustress' - may help protect against oxidative damage, which is linked to aging and disease.

Mathematics teachers are ambivalent with respect to their job satisfaction. This means that they are showing simultaneous and contradictory attitudes or feelings toward how they perceive their job satisfaction. This pandemic has resulted in changes in the work environment and employment uncertainty.

Resilience is a profoundly deep-rooted characteristic that makes up the Filipino personality. The word resilience has been thrown around to describe how the Filipinos are able to pick themselves up in the face of disaster. Calamities abound in the country, with the ongoing pandemic, natural disasters, and extreme inequality to name just a few, as the incapacitated suffer at the hands of an overwhelmed government. This is evident in the result that the level of resilience of high school mathematics teachers is high in spite of the struggles during the time of pandemic.

The COVID-19 pandemic caused a significant shift in education, this shift caused many teachers to face challenges in preparing and delivering quality content remotely during this pandemic. As teachers shifted their content delivery, they also shifted their pedagogical, technological and attitudinal competencies to support remote learning. The success of remote teaching and remote learning is impacted by the teachers' perceived teaching self-efficacy. The teaching performance of the teaches as is still high in terms of their technological competency, pedagogical competency, and technological competency.

The best fit model demonstrates that the latent variables resilience representing the measured variables determination and problem solving; job satisfaction represented by the measured variables in terms of pay, contingent rewards, and nature of work

has significant contribution to the latent variable teaching performance representing the measured variables pedagogical, technological, and technological competencies.

Recommendations

The results and findings latent variables resilience representing the measured variables determination and problem solving; job satisfaction represented by the measured variables in terms of pay, contingent rewards, and nature of work have significant contribution to the latent variable teaching performance.

This suggests that the policy makers may reorganize their incentive programs, policies need to be introduced to empower teachers through special capacity building programs and incentives. In addition, it is important that DepEd officials pay greater attention to strategies that nurture environment in supportive contexts, so teachers stay in the classroom longer, and improve at faster rates, than their peers in less-supportive environments.

On the other hand, school principals may consider the findings as benchmark data in revising policies, plans, and programs which will promote in sustaining higher level of teaching performance of classroom teachers.

It is recommended to continuously conduct supervision and evaluation, socialization and mentoring, education and training, and reciprocity. In other words, these four recommendations can be maximized if all elements collaborate with each other. It means that every teacher understands their professions as educators, so that they are not only demanded to be intelligent and fun, but they also can become a role model for the students.

The findings show that while the role of colleagues, students, family and friends is important in developing and sustaining resilience and job satisfaction. It is recommended that math teacher to continue and develop work environment that sustain resilience and job satisfaction within the school organization.

Further, future researchers may consider other predictor variables of teaching performance and shall conduct similar study across all private and public schools and higher education institutions (HEI) in the province.

Additionally, future researchers wish to utilize the adopted questionnaire in the present study may consider to validate the instrument using exploratory factor analysis (EFA) or confirmatory factor analysis (CFA).

Conflict of Interest

There is no conflict of interest between the authors in this manuscript.

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