PSYCHOLOGICAL CAPITAL, ACADEMIC JOB SATISFACTION AND EMOTIONAL INTELLIGENCE: A STRUCTURAL EQUATION MODEL ON WORK ENGAGEMENT AMONG PUBLIC SCHOOL TEACHERS

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Abstract:
The study attempted to find the best-fit model on work engagement as influenced by psychological capital, academic job satisfaction, and emotional intelligence in public schools using Structural Equation Modeling (SEM) to 402 teachers in Davao Region, Philippines. Findings revealed very high levels of psychological capital and a high level of academic job satisfaction, emotional intelligence, and work engagement. There were significant correlations between psychological capital, academic job satisfaction, emotional intelligence, and work engagement. Further, results showed that the best-fit model was model 3 showing the direct causal relationships of psychological capital, academic job satisfaction, and emotional intelligence on work engagement. Furthermore, structure modifications revealed that psychological capital was described by its domains: hope and optimism while academic job satisfaction was determined by its retained indicators, namely: my work itself and interpersonal relationships. On the other hand, emotional intelligence was measured by its domains: empathy and motivating oneself. Finally, work engagement was defined by its retained indicators, namely: absorption and dedication. The study’s findings could serve as an essential basis for teacher advancement programs, policies, and initiatives in educational organizations.

Keywords: education, psychological capital, academic job satisfaction, emotional intelligence, work engagement, public school teachers, SEM, Philippines

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1. Introduction

Maintaining work engagement is critical to ensuring minimum or even higher production and performance output. To sustain engagement, different approaches based on the preferences of each unit may be needed (David & Iliescu, 2020). According to an international database spanning multiple industries, 20% of workers have work engagement at its lowest point, and the remaining 60% have work engagement at an average level, meaning they keep working without really utilizing their resources (Hendrik, Fanggidae & Timuneno, 2021). Similarly, it was alarming that less than one out of every three teachers is interested, enthusiastic about, and dedicated to their work and school. More than half of teachers are disengaged. Worse, 13% of employees are practically withdrawn at work. They are actively acting out their despair and damaging the goals that their committed colleagues set out to achieve (Gallup, 2015; Hodges, 2018).

Institutional success was significantly influenced by employee work engagement (Decuypere & Schaufeli, 2020). It will close the gaps in an organization and boost productivity (Baldoz & Guhao Jr, 2020). Further, in the school context, work engagement is strongly and positively associated with teacher effectiveness (Kong & Li, 2018). Besides, its definition has transformed into a crucial indicator of teacher excellence, as well as influencing factors such as instructional effectiveness, problem-solving abilities, and devotion to the organization. It reflects a mentally satisfying and optimistic state of mind that is vital in setting school goals (Burić & Macuka, 2018). Thus, prediction models were developed to ascertain what variables which affect work engagement among public school teachers in the academic setting.

2. Literature Review

Multiple research demonstrates that psychological capital constructs, such as self-efficacy, optimism, hope, and resilience, have an impact on work engagement (Chhajer, Rose, & Joseph, 2018; Seger Handoyo, Zainuddin, and Priyatama, 2018; Wirawan, Jufri & Saman, 2020). The multiple regression analysis revealed that the subconstruct of hope independently predicted Work Engagement. Nevertheless, the study revealed that efficacy, resilience, and optimism do not serve as predictors of Work Engagement (Bryniak, 2020; Rotich, 2020). While Wardani and Anwar (2019) conducted studies that demonstrated a substantial correlation between psychological capital and work engagement.

Furthermore, Garg, Dar, and Mishra (2018) found out that there is a direct correlation between job satisfaction and work engagement. Also, a positive correlation between job satisfaction and work engagement was shown among nurse respondents (Giménez-Espert, Prado-Gascó & Soto-Rubio, 2020). Correspondingly, job satisfaction had a substantial positive influence on work engagement (Manalo, de Castro & Uy, 2020; Nwinyokpugi & Omunakwe, 2019 Zeng, Takada, Hara, Sugiyama, Ito, Nihei & Asakura,
2022). Additionally, according to Robianto and Masdupi (2020), job satisfaction has a significant impact on work engagement.

In the same vein, study findings show that emotional intelligence was a significant predictor of the work engagement of teachers (Sudibjo & Sutarji, 2020; Abiodullah & Aslam, 2020; Mukaihata, Fujimoto & Greiner, 2020). Hence, perceived emotional intelligence positively correlates with work engagement among Italian teachers (D’Amico, Geraci & Tarantino, 2020). Another study by Mérida-López and Extremera (2020) confirmed that emotional intelligence positively predicts work engagement and adds the idea that emotional intelligence abilities correlate with teachers' work engagement. However, in their study on nurses in private hospitals in Riyadh, Saudi Arabia, Alotaibi, Amin, and Winterton (2020) discovered that there was no significant correlation between emotional intelligence and work engagement.

This study is anchored on Work Engagement Theory by Kahn (1990) according to the presumed connection and causal connection depicted in the proposed models. This theory suggests that work engagement is the outcome of an individual's inclination towards professional responsibilities in order to establish a connection between oneself and the workplace. This connection can enhance job performance by investing mentally, emotionally, and physically in oneself. This suggests that work engagement is affected by personal aptitudes and surrounding factors such as psychological capital, emotional intelligence, and perception of job satisfaction of an employee.

Moreover, it is supported by the Conservation of Resource (COR) Theory of Hobfoll (1989). The argument posits that the psychological capital of a leader, a crucial asset in their role, is connected to the psychological capital of employees, which in turn is linked to their level of work engagement. It also stressed out that psychological resources and consequences will strive to obtain, retain, and protect resources such as possession and position at work.

Similarly, Motivator-Hygiene Theory by Herzberg (1966) implies that job satisfaction and discontent are two distinct and, at times, independent notions rather than two opposed ends of the same continuum. For an employee to be content with their work, motivating variables like compensation and perks, recognition, and achievement must be met. Thus, employees' work engagement depends on how they perceive the job, whether it is satisfying or dissatisfying.

It is also supported by the Psychological Theory of Emotional Intelligence by Goleman (1995). The employee with emotional intelligence (EQ) can attain objectivity using their self-awareness, so fostering productivity, motivation, and engagement in the job. Therefore, emotional intelligence can be utilized to achieve goals foster a more joyful and healthy work environment, and provide a possible impact on work engagement and school performance.

This study examined the conceptual framework and hypothesized models to determine their fit in explaining work engagement among public school teachers in Region XI. The first conceptual paradigm demonstrates the exogenous variables' direct influence: psychological capital, academic job satisfaction, and emotional intelligence.
towards the endogenous variable, work engagement, as supported by theories and studies. Because latent variables cannot be seen immediately, they cannot be directly described either. Each latent construct is linked to numerous measures or observed variables in this way. As a result, one of the study’s main concerns is the size of the regression paths between the unobserved and observed variables.

The first exogenous variable is psychological capital. Since psychological capital is thought to be one of the key components of any organization’s present competitive edge, numerous research studies have evaluated this variable’s impact on various work settings (Vilarino del Castillo & Lopez-Zafra, 2022). It is found to have a significant effect on individual innovation behavior (Asbari, Prasetya, Santoso, & Purwanto, 2021). In fact, psychological capital can be seen as a crucial instrument for managing the uncertain and erratic social and economic environment, which encompasses workplaces (Santisi, Lodi, Magnano, Zarbo, R., & Zammitti, 2020).

In addition, the researchers Yu, Li, Tsai, and Wang (2019) found a direct correlation between employee innovation and psychological capital. The data emphasized the significance of psychological resources, particularly psychological capital, as well as several beneficial behavioral, performance-related, and attitude-related results (Brennan & O’Grady, 2022). Thus, it manifested significant personal resources that has been shown to be advantageous to an individual’s performance in a wide range of work-related implications among various countries (Da, Zhu, Cen, Gong, Siu & Zhang, 2021).

The psychological capital is measured by work self-efficacy, optimism, hope, and resilience (Sapyaprapa, Tuicomepee & Watakakosol, 2013). Work self-efficacy refers to how confident teachers are in assessing a long-term problem, finding a solution, and working under pressure. According to Lin, Hong, Lin, Lu, Chen, and Lee (2018), it is confidence in their ability to meet employment objectives. Optimism is defined as a teacher’s belief that every problem has a solution and that the current effort will be successful in the future. They are enthusiastic about their future professional possibilities while concentrating on the objective (Prenger Poortman & Handelzalts, 2021).

Then there is the Hope, which manifests as teachers aggressively pursuing work goals, setting goals, and planning to work while focused on achieving them. Setting precise goals and being willing to work (Tang, 2020). Finally, teachers’ resilience is demonstrated by their ability to cope with stressful situations at work and manage issues somehow. They usually solve work problems in some form (Stoverink, Kirkman, Mistry & Rosen, 2020).

Likewise, the second latent variable is academic job satisfaction. Increased organizational commitment, improved work performance, lower job burnout, and decreased intention to leave are all dependent on how satisfied employees are with their jobs. However, not much study has been done on academics’ job satisfaction (Mgaiwa, 2021). Employee perceptions of their work, which are measured by efficacy, opportunity to apply resources and abilities, and sense of fulfillment from completed work, are indicators of their level of satisfaction with their jobs (Szromek & Wolniak, 2020).
In the Philippine context, the factors that had the utmost influence on the job satisfaction of public school teachers were the work environment, which was followed by organizational policy, supervisor-subordinate relationships, job characteristics, and coworker relationships (Bravo, Buenaflor, Baloloy, Guarte, Osinaga, Salartin & Tus, 2021). Further, the teachers’ job satisfaction was found to be quite high, and their work performance was deemed satisfactory. Teachers’ job happiness with job security and supervision from school heads has an opposite effect on their productivity (Baluyos, Rivera & Baluyos, 2019).

The academic job satisfaction, has authority, supervision, policies and facilities, my work itself, interpersonal relationships, commitment, salary, and workload as observed indicators (Al-Rubaish, Rahim, Abumadini & Wosornu, 2011). Authority refers to the sense of encouraging competitive spirit in performing a job. Supervision refers to how the immediate supervisor treats the teacher fairly, trusts, and lacks administrative tension. They can also rely on their immediate supervisor (Stouten, Rousseau & De Cremer, 2018). Policies and facilities are defined as the work area is comfortable and safe, and the number of employees is sufficient to run the work.

Subsequently, My work is well-defined as having the freedom to decide how to accomplish my assigned work. Job satisfaction can also be manifested by having the freedom to choose how to do their assigned task (Vuong, Tung, Tushar, Quan & Giao, 2021). Interpersonal relationships refer to a feeling of a strong bond of camaraderie and unity with coworkers and appreciated, as well as effective interpersonal communication and collaboration (Afsar & Badir, 2017).

In the same vein, Commitment is stated as the readiness to put extra effort into accomplishing work. Likewise, they were eager to go above and beyond to finish their assignment (Wang, Pollock & Hauseman, 2018). The salary is referred to as fair and sufficient (Chan, & Ao, 2019). Lastly, the workload refers to the capability to complete work. While additionally giving them the knowledge required to do their work (Lambert, Keena, Leone, May, & Haynes, 2020).

The third latent variable is emotional intelligence. It is defined as the capacity to keep a check on one’s own emotions as well as those of others, distinguish between them, and utilize this knowledge to inform one’s decisions and thoughts (Skordoulis, Liagkis, Sidiropoulos & Drosos, 2020). Emotional intelligence is vital in increasing organizational citizenship actions and decreasing unproductive attitudes at work (Dirican & Erdil, 2020). Hence, the finding of Tiwari (2023) shows a positive association between emotional intelligence and work-life balance.

Additionally, the findings revealed that emotional intelligence is essential for successful leadership, with self-awareness, self-control, and empathy being the most regularly employed skills/competencies (Gómez-Leal, Holzer, Bradley, Fernández-Berrocal & Patti, 2022). Go, Golbin Jr, Velos, and Bate (2020) stated that Filipino teachers exhibited high emotional intelligence The elements of job satisfaction that are related to the job are greatly impacted by emotional intelligence (Javed, Hock & Asif, 2020).
Supplementary studies stated that among physical educators, unpleasant emotions were inversely correlated with emotional intelligence (Lee, Kwon & Richards, 2019).

The emotional intelligence has five observed variables: self-awareness, managing emotion, motivating oneself, empathy, and social skill (Goleman, 2012). Self-awareness denotes the capability to detect emotions and recognize how emotions influence behavior and performance. Teachers should be taught ways to quickly let go of anger so that it no longer harms them (Aguilar, 2018). Managing emotion denotes staying focused and thinking even when experiencing persuasive emotion. Develop a habit that quickly reframes negative situations (Webb, 2019).

Likewise, motivating oneself is the ability to move and direct people toward their goals by channeling their deepest feelings. They might also inspire themselves to do tough work (Sonune & Ahuja, 2020). Empathy is characterized by detecting, comprehending, and responding to other people’s emotions and always looking at things from different angles (Hulburt, Colaianne & Roeser, 2020). At the same time, social skill is the ability to control, impact, and encourage others’ emotions and absorb about what makes them tick (Junge, Valkenburg, Deković & Branje, 2020).

The latent endogenous variable is work engagement. Various research has been done because work engagement has a significant potential to drive organizational success (Wood, Oh, Park & Kim, 2020). Individual’s level of engagement with their work is one of the key determinants of work performance. Organizational and personal factors both affect that level of engagement (Prieto-Díez, Postigo, Cuesta, & Muñiz, 2022). Employee engagement in their employment is measured by both individual traits and elements of the work environment (García-Arroyo & Segovia, 2021). When they create and utilize their own resources typically show higher levels of engagement at work (Barreiro, & Treglown, 2020). Basañes and Dagol (2021) stressed that teachers in public schools in the Philippines were very satisfactory.

The work engagement has three observed domains: vigor, dedication, and absorption (Hakanen, Bakker & Schaufeli, 2006). Vigor is the veritable definition of an engaged and proactive person who has not fair the willingness. Even when things did not go well, teachers showed perseverance in their job (Pandya, 2021; Riaz & Hussain, 2018). Dedication refers to the only apparent mode to work additional time, arriving before the scheduled time or remaining after the designated time period. It exhibited that devoting more personal time to work (Young, Glerum, Wang & Joseph, 2018). Dedicated workers constantly find significance and purpose in their jobs (Kwon & Kim, 2020). Finally, absorption means a transitory involvement described as being completely submerged and concentrated at work (Phillips, Ballard, Lewenstein & Bonney, 2019).

Moreover, Structural Equation Modeling (SEM) is essential to come to the best-fit model. The proposed model illustrates the following: the oval shapes represent the latent variables of the study; the rectangular figures connected to the ovals represent the measured variables of a latent construct, the single-headed arrow signifies a direct influence from one variable to another; while the double-headed arrow indicates a relationship.
The Hypothesized Model 1 illustrated in Figure 1 reflects the correlation of the three latent exogenous variables and their influence on the latent endogenous variable. The association is evident in the presence of a bidirectional arrow connecting three latent exogenous variables: psychological capital and academic job satisfaction, job satisfaction and emotional intelligence, and psychological capital and emotional intelligence. The single-headed arrow directing from the three-latent exogenous relates directly to work engagement.

![Diagram of the Hypothesized Model 1](image)

Figure 1. The study's conceptual framework shows the direct relationship of the latent exogenous variables towards the latent endogenous variables.

This is shown over a single-headed indicator linked after the latent exogenous variables to the latent endogenous variable. Furthermore, the rectangular forms symbolize the measured domains of the associated latent exogenous and endogenous variables.

In public organizations, it is crucial to understand the primary and contextual factors that affect work engagement (Khusanova, Kang & Choi, 2021). However, in the local setting, the researcher has not found a study that uses structural equation modeling (SEM) to explore the association between psychological capital, academic job satisfaction, and emotional intelligence in influencing work engagement within the group of
educators employed by public schools. Most studies made on work engagement deal with only two variables. In this milieu, the researcher opted to undertake a multivariate study focused on three variables as a construct of work engagement. The results of this research will create new concepts for education and could be used to develop a strategy for increasing work engagement among public-school teachers, which could lead to better teaching performance and student outcomes.

This study aimed to determine the best fit structural model on work engagement among teachers employed in public-school. More precisely, the objective of the research was to ascertain the level of psychological capital in terms of work self-efficacy, optimism; hope; and resilience. To measure the level of academic job satisfaction of teachers in terms of authority, supervision, policies, and facilities; my work itself; interpersonal relationships; commitment; salary; and workload. To evaluate the level of emotional intelligence of teachers in terms of self-awareness, managing emotions, motivating oneself, empathy, and social skills. Also, to ascertain the level of work engagement among teachers working in public-school in terms of vigor, dedication, and absorption. Furthermore, this study intended to establish the correlation between psychological capital and work engagement; academic job satisfaction and work engagement; and emotional intelligence and work engagement among teachers employed in public schools. Finally, to identify the best-fit model that predicts work engagement among teachers in the schools. Simultaneously, the null hypotheses listed below were examined at a significance threshold of 0.05. First, there is no significant association between psychological capital and work engagement; academic job satisfaction and work engagement; and emotional intelligence and work engagement. Lastly, no model best fits the work engagement of teachers employed in public schools.

This study is significant for education in various countries, as it will serve as the foundation for system implementation and enhancement. This will foster a better understanding of the teachers' work engagement being affected by its surrounding and internal personal factors in establishing better concepts in this regard. Hence, it may enlighten or even solve the prevalent issue of work disengagement that lowers performance outputs in schools and is vital in understanding basic education teachers’ work dynamics.

The study’s findings could serve as an essential basis for programs aimed at developing teachers at the university and other educational institutions. This could also provide helpful data to the authorities of the Department of Education in planning programs and activities that could be implemented to enhance any identified domains in the psychological capital, academic job satisfaction, and emotional intelligence that could affect the work engagement of the teachers. This study could also be a significant baseline for policymaking in the selection and hiring of teacher applicants. This would likewise be useful to the school administrator in directing, managing, and alleviating, teachers’ work engagement. Also, to develop a better possible improvement in teachers’ psychological capital, academic job satisfaction intervention, and emotional intelligence enhancement.
The results of this study can be used for further research or to assess the efficacy of psychological capital, academic job satisfaction, and emotional intelligence as variables in predicting work engagement. This analysis could provide researchers with a cross-reference, a basis, or a summary.

3. Material and Method

This section describes how the study was conducted, the study participant or research respondent, materials/instruments, design, and procedures as applicable.

The study was carried out in the Davao Region, which is often referred to as Region XI, a geographical region situated in the southern part of Mindanao, Philippines. The Philippine Sea forms the eastern and southern boundaries, while Bukidnon and SOCSARGEN Region define the western boundary, and the CARAGA Region marks the northern boundary. Davao Oriental, Davao de Oro, Davao del Norte, Davao del Sur, and Davao Occidental were the five provinces of the Davao Region, each containing three component cities and three other cities: Davao Oriental, Davao de Oro, Davao del Norte, Davao del Sur, and Davao Occidental. Mati City, Davao de Oro has no capital city, Tagum City, Digos City, Davao Occidental has no city, and Tagum City, Digos City, Davao Occidental has no city, respectively. Davao City, Island Garden City of Samal, and Panabo City are the other three cities. The study’s participants were public school teachers from Region XI’s eleven divisions in the location. In the areas mentioned above, survey questionnaires were distributed.

Moreover, the level of work engagement of the teachers in the region was generally good. Still, there were cases of teachers not engaging themselves in the disposition of duties all over the region. Some teachers were going to school just for attendance without minding oblivious to his purpose and calling. Further, the poor motivation to work and achieve the department goal among teachers was obvious. Henceforth, the need to assess teachers’ work engagement is indispensable.

The study’s respondents were chosen using a scientific method. For this study, 402 among teachers employed in public school in the various schools in Deped Region XI were polled to represent the 41,084 active teachers of the region. The number of respondents per division was determined via stratified random sampling. Adhering to the essential guideline for determining the suitable number of participants for Structural Equation Modeling (Savalei, 2021), which is between 200 and 400, the researcher attempted to work backward by using an appropriate quota sampling, (Smith & Dawber, 2019) at the .05 significance level.

Furthermore, specific criteria were set to determine the eligibility of participants as research respondents (inclusion). The individual must possess the position of a tenured public-school educator under the Department of Education covering kindergarten up to senior high school. They can be of any gender. The participants were asked to provide accurate data on psychological capital, academic job satisfaction, emotional intelligence, and work engagement. The researcher gave the questionnaire to
other interested participants through the Google Forms link https://bit.ly/AlutayaDissSurveyForm. Data gathering was conducted from March to May 2022.

This study employed a quantitative, descriptive-correlational research approach and utilized the structural equation modeling technique. Quantitative studies employ mathematical models and statistical analysis to examine data, producing numerical outcomes that are considered to be more objective. Quantitative research ascertains the causes and mechanisms behind changes in phenomena (Aspers & Corte, 2019). The objective of this study was to construct the best-fit model of work engagement among teachers in public schools.

More precisely, the study employed the descriptive-correlational methodology. A descriptive correlational study is a research method that focuses on explaining the associations between variables without establishing a causal relationship (Quaranta, 2017). Descriptive pertains to the measurement of psychological capital, academic job satisfaction, emotional intelligence, and work engagement of teachers employed in public schools. However, this research is correlational as it assesses the association between the exogenous and endogenous variables.

The best-fit model was shaped using Structural Equation Modeling (SEM). It was also utilized to examine hypothesized relationships, starting with a model that is grounded in theory and thereafter refining it to create a model that accurately represents the data. Structural equation modeling is an approach to statistics commonly employed in the field of social research. Despite its similarity to linear regression analysis, structural equation modeling offers multiple benefits. The following are some of the features that outperform structural equation modeling: Structural equation modeling uncovers latent structures that are not directly measured, while also considering potential measurement errors in observed variables. This method is highly valuable for analyzing intricate models with multiple variables, as it reveals both direct and indirect relationships between these variables. Consequently, it offers a significant advantage in displaying and analyzing complex models. Additionally, it is a favored method for analyzing graduate dissertations and academic studies (Civelek, 2018).

Four instruments were employed in this study to address the research problem. The study utilized primary data to collect information, including four components: psychological capital, academic job satisfaction, emotional intelligence, and work engagement. The survey questions used in the study were obtained from various relevant research sources. The restructuring has been carried out to enhance the instrument’s relevance to the present professional and contextual environment.

The instrument underwent validation by five internal expert validators, resulting in an overall rating of 4.48, indicating a high level of appropriateness and credibility. Pilot testing was undertaken following the validation process. The survey’s validity was assessed using Cronbach’s alpha. Adeniran (2019) states that as Cronbach’s alpha coefficient is closer to 1.0, the internal consistency of the items on the scale increases. Bonett and Wright (2015) stated that the acceptability of a reliability value is reliant upon
the specific application being considered. Moreover, it is essential to prioritize the reliability value of the entire population rather than solely relying on the reliability value of the sample.

The guideline, according to George and Mallery (2003), states that a result of 0.9 or higher is considered excellent, 0.8 or higher is good, 0.7 or higher is acceptable, 0.6 or higher is questionable, 0.5 or higher is poor, and anything below 0.5 is considered not acceptable. The Cronbach alpha of this survey instrument used is 0.968 for the endogenous variable and 0.955 average on the other three exogenous variables, indicating that the research tools are valid and reliable. The panel of examiners validated the four sets of questionnaires for approval. The overall rating of the instruments' construct validity was 4.48, which indicated a very good rating of the tools. The final version was edited to include the changes, comments, and suggestions provided by the experts before its implementation.

The questionnaire on psychological capital was adapted from the work of Sapyaprapa, Tuicomepee, and Watakakosol (2013). It comprises four indicators namely: work self-efficacy, optimism, hope, and resilience. The questionnaire on academic job satisfaction was adapted from the work of Al-Rubaish, Rahim, Abumadini, and Wosornu (2011). The tool had eight indicators namely: authority, supervision, policies and facilities, my work itself, interpersonal relationships, commitment, salary; and workload. The questionnaire on emotional intelligence was derived from the research conducted by Goleman (1995). The tool had five indicators namely: self-awareness, managing emotions, motivating oneself, empathy; and social skill. Furthermore, the questionnaire on teachers' work engagement is adapted from the study of Schaufeli, Bakker, and Salanova (2006). It comprises the following indicators, vigor, dedication, and absorption.

The scales employed for interpreting the means of psychological capital, academic job satisfaction, emotional intelligence, and work engagement are in the following ranges: 4.20 - 5.00 described as very high and interpreted always evident; 3.40 - 4.19 labelled as high and taken as oftentimes evident; 2.60 - 3.39 defined as moderate and taken as occasionally evident; 1.80 - 2.59 labeled as low and interpreted rarely; and lastly, 1.00 - 1.79 described as very low and defined as never evident among public school teachers.

In order to ascertain the best-fit model, the following indices were employed along with their respective criteria:
The initial step in gathering the information used in this research involved obtaining approval from the University of Mindanao Ethics Review Committee on March 12, 2022, to conduct the study. The creation of survey questionnaires in Google Forms was facilitated from March 12, 2022 to March 13, 2022. A request letter signed by the dean was sent to Deped Regional Director. The approved letter was attached to the letters addressed to different Superintendents of the eleven Deped divisions of Region XI. A schedule was established for the period of floating and retrieval of questionnaires, spanning from March 2022 to May 2022.

Specifically, the researcher started to administer on March 13, 2022, in the Division of Deped Davao Occidental, Deped Davao del Sur and Digos City, Deped Davao City, Davao Del Norte with Tagum City, Deped Davao De Oro, and Deped Davao Oriental schools simultaneously through sharing the questionnaires link to friends, colleagues, and acquaintances of the researcher. Then, the collected data were systematically organized, analyzed, and interpreted in a manner that ensured confidentiality.

The data has been analyzed and interpreted utilizing appropriate statistical tools. The Mean was used to determine the level of psychological capital, academic job satisfaction, emotional intelligence, and the level of work engagement of teachers. The Pearson r or Pearson Product–Moment Correlation. Usually, the Pearson correlation coefficient is used for naturally dispersed joint data following a normal bivariate distribution (Schober, Boer & Schwarte, 2018). This study was used to determine the interrelationship between the independent and the dependent variables. Lastly, Structural Equation Modeling (Maximum Likelihood). This multivariate process which incorporates the features of multiple regression and factor analysis was used to estimate a sequence of interrelated relationships of dependency simultaneously (Thakkar & Thakkar, 2020) test the hypothesized model, and determine the best fit model of work engagement of teachers.

The focus on ethical conduct has intensified and expanded due to society's demand for increased responsibility. In addition to the crucial nature of choosing the right research methodology and methods, the ethical considerations surrounding the research process, as outlined in UMERC Form 2.2, are also of utmost importance. Hence, this paper was subjected to an ethics review by the panel of experts from the University of Mindanao Ethics Review Committee (UMERC) and found to be in order and compliant with the minimum standards of the research ethics prescribed by the university and granted a certificate of approval with a UMERC Protocol Number 2022-057.

4. Results and Discussion

Presented here are the statistics and results based on the responses of the study respondents on the psychological capital, academic job satisfaction, emotional intelligence, and work engagement of teachers in public schools. The discussions are organized based on the subsequent subheadings: level of psychological capital, level of academic job satisfaction, level of emotional intelligence, and level of work engagement;
the relationship between psychological capital and work engagement, academic job satisfaction and work engagement, emotional intelligence and work engagement.

4.1 Level of Psychological Capital of Public-School Teachers

Table 1 displays the degree of psychological capital among public school teachers in Region XI. The mean score achieved on the psychological capital is 4.28, with a standard deviation of 0.491, indicating a very high level. Consequently, the attribute behaviors of psychological capital are always evident. Explicitly, the mean ratings of the domains of psychological capital are unveiled as follows: optimism attained a mean rating of 4.32 or very high; work self-efficacy obtained a mean rating of 4.20 or very high; hope has a mean rating of 4.35 or very high; resilience reaped a mean rating of 4.24 or very high.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>SD</th>
<th>Mean</th>
<th>D.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Self-Efficacy</td>
<td>0.575</td>
<td>4.20</td>
<td>Very High</td>
</tr>
<tr>
<td>Optimism</td>
<td>0.533</td>
<td>4.32</td>
<td>Very High</td>
</tr>
<tr>
<td>Hope</td>
<td>0.543</td>
<td>4.35</td>
<td>Very High</td>
</tr>
<tr>
<td>Resilience</td>
<td>0.521</td>
<td>4.24</td>
<td>Very High</td>
</tr>
<tr>
<td>Overall</td>
<td>0.491</td>
<td>4.28</td>
<td>Very High</td>
</tr>
</tbody>
</table>

The overall very high response of public-school teachers displayed that all domains of psychological capital were rated high also. This indicates that a feeling of confidence that they could accomplish their work goals was always evident among teachers. They harbored a positive outlook regarding their future prospects in relation to their professional endeavors while concentrating on achieving the goal when they set goals and made plans to work and managed difficulties at work in one way or another.

This finding is consistent with Lin et al.’s (2018) statement that teachers felt confident in their capacity to accomplish job objectives. Also, when they set specific goals and are prepared to work (Tang, 2020), and positive about their future career prospects while focusing on achieving the goal. Furthermore, teachers typically dealt with workplace issues in some ways (Stoverink et al., 2020).

4.2 Level of Academic Job Satisfaction of Public-School Teachers

A summary of the level of academic job satisfaction of teachers in public schools is presented in Table 2. The overall mean rating is 4.15 described as high with a standard deviation of 0.504, which means that academic job satisfaction is oftentimes evident. The mean ratings of the indicators of academic job satisfaction are unveiled as follows: commitment had a mean rating of 4.32 or very high; interpersonal relationship acquired a mean rating of 4.26 or high; supervision acquired a mean rating of 4.23 or very high; authority landed a mean rating of 4.20 or very high; my work itself rounded up a mean rating of 4.19 or high; policies and facilities accumulated a mean rating of 4.04 or high which similar to salary and workload reaped a mean of 3.92 or high.
Table 2: Level of Academic Job Satisfaction

<table>
<thead>
<tr>
<th>Indicators</th>
<th>SD</th>
<th>Mean</th>
<th>D.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>0.544</td>
<td>4.20</td>
<td>Very High</td>
</tr>
<tr>
<td>Supervision</td>
<td>0.601</td>
<td>4.23</td>
<td>Very High</td>
</tr>
<tr>
<td>Policies and Facilities</td>
<td>0.592</td>
<td>4.04</td>
<td>High</td>
</tr>
<tr>
<td>My Work Itself</td>
<td>0.572</td>
<td>4.19</td>
<td>High</td>
</tr>
<tr>
<td>Interpersonal Relationships</td>
<td>0.538</td>
<td>4.26</td>
<td>Very High</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.526</td>
<td>4.32</td>
<td>Very High</td>
</tr>
<tr>
<td>Salary</td>
<td>0.637</td>
<td>4.04</td>
<td>High</td>
</tr>
<tr>
<td>Workload</td>
<td>0.666</td>
<td>3.92</td>
<td>High</td>
</tr>
<tr>
<td>Overall</td>
<td>0.504</td>
<td>4.15</td>
<td>High</td>
</tr>
</tbody>
</table>

The mean rating of academic job satisfaction is due to the following four indicators: *policies and facilities, my work itself, salary, and workload*. This showed that the better interpersonal relationships of teachers were oftentimes evident and felt that their job provided good opportunities for promotion. Also, they are able to trust their immediate supervisor. The teachers were not overloaded because there was a sufficient number of personnel to run the work. Further, they enjoyed having freedom in how to accomplish their assigned task and good interpersonal communication and cooperation. Similarly, they were prepared to exert more effort to complete their task. This may be due to their perception that their salary was fair and sufficient, while also providing them with the necessary information to accomplish their work.

This is consistent with the claim that teachers had greater interpersonal relationships and prospects for advancement were offered by their jobs. They can also rely on their immediate supervisor (Stouten, et al., 2018). The teachers were not overburdened because there were enough personnel to complete the assignment. Furthermore, they valued having the freedom to choose how to do their assigned task (Vuong et al., 2021), as well as effective interpersonal communication and cooperation (Afsar et al., 2017). Similarly, they were willing to go above and beyond to complete their assignment (Wang et al., 2018). This could be accounted to their perception that remuneration was fair and sufficient (Chan et al., 2019), while they believe they also provided with the knowledge they needed to complete their work (Lambert et al., 2020).

4.3 Level of Emotional Intelligence of Public-School Teachers

Table 3 shows the level of emotional intelligence of public-school teachers. The overall mean score is 4.10 with a standard deviation of 0.494, defined as *high*, which means that emotional intelligence is oftentimes evident in the participants. The mean ratings of the domains of emotional intelligence are illustrated as follows: *self-awareness* obtained a mean rating of 4.16 or *high*; *motivating oneself* attained a mean rating of 4.13 or *high*; *social skill* accumulated a mean of 4.12 or *high*; *managing emotions* has a mean rating of 4.00 or *high*; and *empathy* garnered a mean rating of 4.10 or *high*.
This finding exhibited teachers displayed behaviors that allowed them to Effortlessly release anger to ensure it ceases to have an impact on them and reframe bad situations quickly. They could also motivate themselves to do complex tasks. As a result, always view things from a varied perspective. Also, they have a strong inclination towards meeting new individuals and understanding their motivations.

This validated the study results of Go et al. (2020), which stressed out that Filipino teachers exhibited high emotional intelligence. Teachers demonstrated strategies that allowed them to swiftly let go of anger such that it no longer affected them (Aguilar, 2018) and quickly reframe negative situations (Webb, 2019). They also motivate themselves to do difficult jobs (Sonune & Ahuja, 2020). As a result, always look at things from different angles (Hulburt et al., 2020). Additionally, conveyed a keen interest in meeting individuals and gaining insights into their motivations (Junge et al., 2020).

### Table 3: Level of Emotional Intelligence

<table>
<thead>
<tr>
<th>Indicators</th>
<th>SD</th>
<th>Mean</th>
<th>D.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-awareness</td>
<td>0.524</td>
<td>4.16</td>
<td>High</td>
</tr>
<tr>
<td>Managing Emotions</td>
<td>0.552</td>
<td>4.00</td>
<td>High</td>
</tr>
<tr>
<td>Motivating Oneself</td>
<td>0.545</td>
<td>4.13</td>
<td>High</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.563</td>
<td>4.10</td>
<td>High</td>
</tr>
<tr>
<td>Social Skill</td>
<td>0.555</td>
<td>4.12</td>
<td>High</td>
</tr>
<tr>
<td>Overall</td>
<td>0.494</td>
<td>4.10</td>
<td>High</td>
</tr>
</tbody>
</table>

4.4 Level of Work Engagement of Public-School Teachers

This brought to light the fact that educators in public schools met or even exceeded expectations. Because teachers who answered the survey always stuck with their work, even when things did not go as planned, they always saw their work as having a lot of meaning and purpose, and they were fully immersed in it.

This is similar to the study findings of Basañes and Dagol (2021) that teachers in public schools were very satisfactory. Thus, it aligns with the contention that the teacher respondents demonstrated perseverance in their work always, even when things did not go well (Riaz et al., 2018; Bakker et al., 2020; Pandya, 2021); always found the work that

### Table 4: Level of Work Engagement

<table>
<thead>
<tr>
<th>Indicators</th>
<th>SD</th>
<th>Mean</th>
<th>D.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigor</td>
<td>0.557</td>
<td>4.10</td>
<td>High</td>
</tr>
<tr>
<td>Dedication</td>
<td>0.538</td>
<td>4.27</td>
<td>Very High</td>
</tr>
<tr>
<td>Absorption</td>
<td>0.569</td>
<td>4.08</td>
<td>High</td>
</tr>
<tr>
<td>Overall</td>
<td>0.507</td>
<td>4.15</td>
<td>High</td>
</tr>
</tbody>
</table>
they did was meaningful and worthwhile (Kwon & Kim, 2020); and were immersed in their work (Phillips et al., 2019).

4.5 Correlation between Psychological Capital and Work Engagement
Table 5 presents the findings regarding the correlations between psychological capital and work engagement. The combined statistics yield an overall r-value of 0.687, with a p-value below 0.05, indicating statistical significance. Thus, refuting the null hypothesis that there is no significant association. Besides, it was detected that work self-efficacy, optimism, hope, and resilience as indicators of psychological capital when associated with work engagement, work self-efficacy shows an overall r-value is 0.616 with p<0.05 hence, significant. When indicator optimism is correlated to work engagement, the overall r-value is 0.592 with p<0.05 hence, significant. Also, after domain hope is correlated to work engagement, an overall r-value of 0.595 with p<0.05 hence, it is also significant. Lastly, as the indicators of psychological capital resilience are correlated to work engagement, the overall r-value of the data was 0.588, which indicates statistical significance with a p-value of less than 0.05.

Table 5: Significance of the Relationship between Levels of Psychological Capital and Work Engagement

<table>
<thead>
<tr>
<th>Psychological Capital</th>
<th>Vigor</th>
<th>Dedication</th>
<th>Absorption</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Self-Efficacy</td>
<td>.563* (0.000)</td>
<td>.612* (0.000)</td>
<td>.516* (0.000)</td>
<td>.616* (0.000)</td>
</tr>
<tr>
<td>Optimism</td>
<td>.512* (0.000)</td>
<td>.651* (0.000)</td>
<td>.464* (0.000)</td>
<td>.592* (0.000)</td>
</tr>
<tr>
<td>Hope</td>
<td>.533* (0.000)</td>
<td>.631* (0.000)</td>
<td>.470* (0.000)</td>
<td>.595* (0.000)</td>
</tr>
<tr>
<td>Resilience</td>
<td>.590* (0.000)</td>
<td>.699* (0.000)</td>
<td>.602* (0.000)</td>
<td>.688* (0.000)</td>
</tr>
<tr>
<td>Overall</td>
<td>.606* (0.000)</td>
<td>.715* (0.000)</td>
<td>.566* (0.000)</td>
<td>.687* (0.000)</td>
</tr>
</tbody>
</table>

*Significant at 0.05 significance level.

The analysis of the association between variables demonstrates a statistically significant correlation between psychological capital and work engagement, hence rejecting the null hypothesis of the study. This suggests further that psychological capital has something to do with the work engagement of teachers. All indicators of psychological capital were correlated to work engagement (Wardani, & Anwar, 2019). This consonance with the studies of Seger Handoyo et al. (2018) stated the relationship between psychological capital and work engagement.

4.6 Correlation between Academic Job Satisfaction and Work Engagement
Table 6 presents the findings on the correlations between academic job satisfaction and work engagement. The tests achieved an overall r-value of 0.798, with a p-value below
0.05, indicating significance. As a result, we reject the null hypothesis of no significant association. Further, when the indicator authority of academic job satisfaction correlated to work engagement, the overall r-value was 0.701 with p<0.05; the indicator supervision is correlated to work engagement, the overall r-value is 0.660 with p<0.05 hence, significant.

Next, indicator policies and facilities are correlated to work engagement, the overall r-value is 0.685 with p<0.05 hence, significant. Also, indicator my work itself is correlated to work engagement, the r-value is 0.714 with p<0.05 henceforth, significant. When the indicator’s interpersonal relationships are correlated to work engagement, the r-value is 0.704 with p<0.05 therefore, significant. Another indicator commitment is correlated to work engagement, the overall r-value is 0.733 with p<0.05 consequently, significant. When the indicator salary is correlated to work engagement, the r-value is 0.654 with p<0.05 thus, significant. Lastly, when the indicator workload is correlated to work engagement, the general r-value is 0.666 with p<0.05 hence, it is also significant.

Table 6: Significance on the Relationship between Levels of Academic Job Satisfaction and Work Engagement

<table>
<thead>
<tr>
<th>Academic Job Satisfaction</th>
<th>Work Engagement</th>
<th>Vigor</th>
<th>Dedication</th>
<th>Absorption</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td></td>
<td>.604*</td>
<td>.703*</td>
<td>.616*</td>
<td>.701*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td>.634*</td>
<td>.666*</td>
<td>.514*</td>
<td>.660*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Policies and Facilities</td>
<td></td>
<td>.702*</td>
<td>.646*</td>
<td>.532*</td>
<td>.685*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>My Work Itself</td>
<td></td>
<td>.720*</td>
<td>.681*</td>
<td>.560*</td>
<td>.714*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Interpersonal Relationships</td>
<td></td>
<td>.656*</td>
<td>.722*</td>
<td>.556*</td>
<td>.704*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Commitment</td>
<td></td>
<td>.687*</td>
<td>.740*</td>
<td>.585*</td>
<td>.733*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Salary</td>
<td></td>
<td>.610*</td>
<td>.626*</td>
<td>.558*</td>
<td>.654*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Workload</td>
<td></td>
<td>.670*</td>
<td>.601*</td>
<td>.556*</td>
<td>.666*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>.765*</td>
<td>.777*</td>
<td>.648*</td>
<td>.798*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
</tbody>
</table>

*Significant at 0.05 significance level.

The analysis of the relationship between variables demonstrates a significant relationship between academic job satisfaction and work engagement among teachers, so providing evidence to refute the null hypothesis of the study. This indicates that academic job satisfaction is associated with work engagement. Further, it suggests that work engagement is related to academic job satisfaction. All indicators of academic job...
satisfaction were correlated to work engagement. This result reinforced the study results of Giménez-Espert et al. (2020).

4.7 Correlation between Emotional Intelligence and Work Engagement
Table 7 displays the findings about the correlations between emotional intelligence and work engagement. The combined measures resulted in an overall r-value of 0.847, which is statistically significant with a p-value of less than 0.05. As a result, the null hypothesis, which suggests no significant relationship, was rejected. Moreover, when the indicator of self-awareness is correlated to work engagement, the overall r-value is 0.752 with p< 0.05 hence, significant; when the indicator managing emotions is correlated to work engagement, the overall r-value is 0.730 with p< 0.05 hence, significant; when indicator motivating oneself is correlated to work engagement, the overall r-value is 0.779 with p< 0.05 hence, significant; when indicator empathy is correlated to work engagement, the overall r-value is 0.746 with p< 0.05 hence, significant; and finally, when indicator social skills is correlated to work engagement, the overall r-value is 0.807 with p< 0.05 hence, it is also significant.

This indicates that academic job satisfaction is associated with work engagement. Further, it suggests that work engagement has something to do with emotional intelligence. All indicators of emotional intelligence were correlated to work engagement. This finding strengthened the study result of Alotaibi et al. (2020), D’Amico et al. (2020), and Mérida-López et al. (2020) that emotional intelligence was correlated to work engagement.
4.8 Best Fit Model on Work Engagement

Modifications are necessary to align the data with the original proposed model depicted in Figure 1. The study offered three generated models. When determining the most suitable model, all contained indices must constantly remain within their allowable ranges. The Chi-Square Value divided by the Degrees of Freedom should be between 0 and 2, and the corresponding P-value should be greater than 0.05. The Root Mean Square Error Approximation value should be below 0.05, while its related P-close value should be over 0.05. All other indices, including the Normed Fit Index, Tucker-Lewis Index, Comparative Fit Index, and the Goodness of Fit Index, must exceed a value of 0.95.

Figure 2: Structural Model 1 in Standardized Solution

Legend:
opt – Optimism
wse – Work Self-Efficacy
res – Resilience
hope – Hope
PC – Psychological Capital
EI – Emotional Intelligence
aut – Authority

sa – Self-Awareness
me – Managing Emotions
mo – Motivating oneself
emp – Empathy
ss – Social Skills
sup – Supervision  
pf – Policies and Facilities  
mwi – My Work Itself  
ir – Interpersonal Relationships  
comm – Commitment  
sal – Salary  
wI – Workload  
AJS – Academic Job Satisfaction

Figure 2 shows the generated structural model 1. It shows the interrelationships of the exogenous variables: psychological capital with its four indicators namely: work self-efficacy, optimism, hope, and resilience; academic job satisfaction with its eight domains specifically: authority, supervision, policies and facilities, my work itself, interpersonal relationships, commitment, salary, and workload; and emotional intelligence with self-awareness, managing emotions, motivating oneself, empathy; and social skill as its indicators; and their causal relationship on the endogenous variable work engagement having three indicators namely: vigor, dedication, and absorption. None of the indices met the allowed thresholds as shown in Table 8. Hence, a poor fit.

<table>
<thead>
<tr>
<th>Index</th>
<th>Criterion</th>
<th>Model Fit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-Close</td>
<td>&gt; 0.05</td>
<td>.000</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>0 &lt; value &lt; 2</td>
<td>4.510</td>
</tr>
<tr>
<td>P-value</td>
<td>&gt; 0.05</td>
<td>.000</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt; 0.95</td>
<td>.800</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt; 0.95</td>
<td>.913</td>
</tr>
<tr>
<td>NFI</td>
<td>&gt; 0.95</td>
<td>.891</td>
</tr>
<tr>
<td>TLI</td>
<td>&gt; 0.95</td>
<td>.899</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; 0.05</td>
<td>.108</td>
</tr>
</tbody>
</table>

Legend:
CMIN/DF - Chi-Square/Degrees of Freedom
NFI - Normed Fit Index
TLI - Tucker-Lewis Index
CFI - Comparative Fit Index
GFI - Goodness of Fit Index
RMSEA - Root Means Square of Error Approximation
P-Close - P of Close Fit
P-value - Probability Level

The generated model 2 is shown in Figure 3. It exhibits the interrelationships of the exogenous variables where Several indicators with low values were eliminated.
The psychological capital has two remaining indicators namely: hope and optimism. The eight indicators of academic job satisfaction were slashed into five specifically: policies and facilities, my work itself, interpersonal relationships, commitment, and salary. While emotional intelligence has three remaining domains explicitly: motivating oneself, empathy; and social
skill to manifest their causal connection on the endogenous variable which was the work engagement.

Further, the significant improvement among indexes was manifested in model 2 when compared to Model 1, such as: CFI form .913 to .960 which is acceptable; CMIN/DF, from 4.510 to 3.703; GFI, from .800 to .891; NFI, from .891 to .947; TLI, from .899 to 948; and RSMEA, from .108 to .095. While the P-value shows the same value of .000 in the two models. The model was deemed not fit despite the CFI meeting the specified criterion, as the other seven criteria did not achieve the acceptable value, as shown in Table 9. Therefore, model 2 was poor fit. In order for the model to be deemed the best match, it must satisfy every other criterion.

Table 9: Goodness of Fit Measures of Structural Model 2

<table>
<thead>
<tr>
<th>Index</th>
<th>Criterion</th>
<th>Model Fit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-Close</td>
<td>&gt; 0.05</td>
<td>.000</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>0 &lt; value &lt; 2</td>
<td>3.703</td>
</tr>
<tr>
<td>P-value</td>
<td>&gt; 0.05</td>
<td>.000</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt; 0.95</td>
<td>.891</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt; 0.95</td>
<td>.960</td>
</tr>
<tr>
<td>NFI</td>
<td>&gt; 0.95</td>
<td>.947</td>
</tr>
<tr>
<td>TLI</td>
<td>&gt; 0.95</td>
<td>.948</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; 0.05</td>
<td>.095</td>
</tr>
</tbody>
</table>

Legend:
CMIN/DF - Chi-Square/Degrees of Freedom
NFI - Normed Fit Index
TLI - Tucker-Lewis Index
CFI - Comparative Fit Index
GFI - Goodness of Fit Index
RMSEA - Root Means Square of Error Approximation
Pclose - P of Close Fit
P-value - Probability Level

Lastly, the generated Model 3 exhibited in Figure 4 showed the interrelationships of the exogenous variables: psychological capital, academic job satisfaction, and emotional intelligence, and its causal relationship on the endogenous variable work engagement was a revised iteration of Model 1 and 2 involved the exclusion of indicators with low values.

Furthermore, the substantial improvement among indexes was manifested in model 3 when compared to Model 2, such as: P-Close, from .000 to .848; CMIN/DF, from 3.703 to 1.146; P-value, .000 to .311; GFI, from .891 to.986; CFI form .960 to .999; NFI, from.947 to .992; TLI, from 948 to .998 RMSEA .095 to .022; and which are all fall within the acceptable ranges.

The structural modifications revealed that work engagement was well-defined by its reserved domains, namely: absorption and dedication. On the other hand, psychological capital was pronounced by its domains: hope and optimism while academic job satisfaction was determined by its retained domains, namely: my work itself and interpersonal relationship. Finally, emotional intelligence was measured by its domains: empathy and
motivating oneself. Model 3 was found to have indices that consistently direct a very good fit to the data because all the indices presented fall within each criterion as shown in Table 10. Hence, there was no necessity to seek an alternative model for testing as it had already been determined to be the best fit among all the models that were evaluated. Thus, the null hypothesis that there is no best-fit model was rejected.

It could be specified that there is a best-fit model that predicts the work engagement among teachers in the region. The model undoubtedly demonstrates the vitality of psychological capital, academic job satisfaction, and emotional intelligence as predictors of work engagement. However, the model suggests that among the four indicators of psychological capital, only two were shown to be significant predictors of work engagement, to wit: optimism and hope. This result supported the study of Chhajer et al.
The Interrelationship among Psychological Capital, Academic Job Satisfaction, and Emotional Intelligence and their Direct Causal Relationship towards Work Engagement with their final remaining indicators) with Seger et al. (2018) emphasizing optimism is a significant predictor of work engagement.

This implies teachers that who are optimistic and more engaged at work are healthier and more productive. However, negated the findings of Bryniak (2020) and Rotich (2020) stating that optimism was not a significant predictor of work engagement.

Apart from this study conformed with the findings of Bryniak (2020) and Wirawan et al. (2020) together with Seger et al. (2018) that the indicator hope has an influence on
work engagement. Likewise, findings showed that employees were more engaged at work and more hopeful. The role of hope in predicting work engagement was considerable (Rotich, 2020).

Further, the result of this study reinforced the findings that work engagement is predicted by an employee’s job satisfaction (Manalo et al., 2020). In academic job satisfaction only two out of eight domains were uncovered to affect work engagement namely: my work itself and interpersonal relationships. This consonance with Nwinyokpugi et al. (2019) statement that the most reliable predictor of organizational engagement and productivity is workplace interpersonal relationships. Also congruent with study findings of Robianto, et al. (2020) who proposed that job satisfaction, and satisfaction with work itself are the primary drivers of all dimensions of work engagement.

Subsequently, just two of the five measures of emotional intelligence namely: empathy and motivating oneself remain as predictors of work engagement. Employees that are more empathic are more engaged at work. Thus, to encourage work engagement, attention should be given to the development of empathy among personnel according to Cao and Chen (2020). Likewise, motivating oneself enhances work engagement (Mukaihata et al., 2020). This further supports the study results of Subijo et al. (2020) and Aboidullah et al. (2020).

On the part of work engagement, only two out of three indicators persisted to be a measure, these were dedication and absorption. It exhibited that devoting more personal time to work demonstrates dedication (Young et al., 2018). People feel important because of what they achieve, and this intrinsic fulfillment pushes them to do more (Kwon & Kim, 2020). Meanwhile, someone is absorbed in their task if they are immersed in it. Work gains a new level of attention as a result of intrinsic motivation or a natural desire to accomplish the activity (Phillips et al., 2019).

5. Recommendation

Based on the results of the study, as revealed by the best-fit model, for psychological capital, the Department of Education may introduce mindfulness, wellness programs, and meditation practices to sustain hope and optimism. A regular check-ins and surveys may also be done by the department and other researchers. In academic job satisfaction, as one of the exogenous variables that have a significant influence on work engagement, it is suggested that the school heads and department authorities institutionalize the Team-Building Exercises through frequent outdoor retreats, workshops on productive communication and conflict resolution skills to maintain high-level interpersonal relationship among teachers. While, school heads may also emphasize the clear job position, scope, and responsibilities among teachers to alleviate their positive feeling to work itself.

In emotional intelligence, the school heads are encouraged to enthusiastically initiate Empathy Mapping Techniques to help teachers understand the feelings and
emotions of their co-teachers. Also, include the Eisenhower Matrix in the workshop on professional development to nurture in the teachers how to prioritize tasks based on urgency and importance. Also, empowered motivate themselves by including them in setting long and short-term goals for the school and developing ownership of school activities.

Furthermore, it is recommended that work engagement among public school teachers of the institution by intensifying or Achievement of Great Instructional Leadership Award (AGILA) of Region XI. Together with the implementation of DO 9, s. 2002 of the Department of Education which is Program on Awards and Incentives for Service Excellence (PRAISE) that could promote work engagement specifically dedication and absorption among public-school teachers.

Moreover, it is recommended that the Department of Education, specifically in Southern Mindanao, Region XI, should carefully evaluate the most effective model for work involvement among teachers as established by this study to understand teacher work engagement dynamics and improve teacher engagement that will translate to high-performance output through the provision of the above-recommended activities.

Lastly, it is also recommended that researchers validate the results of this study with a broader scope of respondents or settings. They may also explore other variables, methods, and tools to increase social understanding of the undercurrents and mechanisms of work engagement in the workplace, which will become the strong basis for the development of educational policies and initiatives that foster the work engagement of teachers and surely enhance student learning.

6. Conclusion

Results revealed that the level of psychological capital is very high. Hence, the psychological capital among teachers is always evident. Also, the level of academic job satisfaction is high. Consequently, academic job satisfaction is oftentimes evident in public-school teachers. Similarly, the public-school teachers’ emotional intelligence is at a high level. Thus, it is oftentimes evident. Lastly, the level of work engagement of teachers employed in public schools is high. This means that the endogenous variable of work engagement is oftentimes evident.

Findings revealed a correlation between psychological capital and work engagement. Another, academic job satisfaction and work engagement were discovered to be associated. Finally, an association between emotional intelligence and work engagement was observed. Furthermore, the most sparing model (Model 3) conveyed a generalized new concept that the endogenous variable, work engagement of public-school teachers, was significantly best anchored to psychological capital, which was grounded in terms of hope and optimism, and was highly reinforced by academic job satisfaction defined by its indicators: my work itself and interpersonal relationship, and was further significantly strengthened by the third exogenous variable, emotional intelligence. Finally, the final model demonstrated direct causal links between
psychological capital, academic job satisfaction, and emotional intelligence, and was shown to be the best-fit model for work engagement among public-school teachers.

The result of the study supported the Work Engagement Theory of Khan (1990) that claimed that work engagement is affected by personal aptitudes and surrounding factors such as psychological capital, emotional intelligence, and perception of job satisfaction of an employee. It also confirmed the Conservation of Resource (COR) theory of Hobfoll (1989) which claimed that employee’s psychological capital is related to teachers’ work engagement. This holds that the teachers’ work engagement is greatly affected by their hope and optimism. Similarly, it reinforced the Motivator-Hygiene Theory of Herzberg (1966) which postulated that for employees to be contented with their work, motivating variables like compensation and perks, recognition, and achievement must be met. Lastly, it also maintained the Psychological Theory on Emotional Intelligence of Goleman (1995) which proposed that employees with emotional intelligence attain objectiveness through their self-awareness, which fosters motivation in the schools. Thus, the results of this study are also established.

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Conflict of Interest Statement
This study had no trace of conflict of interest as the researchers personally funded this undertaking, and the administration and interpretation of data were made independently.

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