Article

The effect of teacher self-efficacy, workplace stress, workplace environment, and teacher engagement to improve the teacher's job satisfaction: A study on public and private sector universities of Iraq

Amenah Muayad Abdullah
Al-Farahidi University/Iraq
amena.m.abdullah@uoalfarahidi.edu.iq

Nour Raheem Neamah
Al-Manara College For Medical Sciences/ (Maysan)/Iraq
nourraheem1@uomanara.edu.iq

Ahmed Jalil Kadhim
English Language and Literature Department, Al-Mustaqbal University College, Babylon, Iraq
ahmed.jalil@mustaqbal-college.edu.iq

Ayad Abas Hasan
College of media/ The Islamic university in Najaf, Iraq
alganabeeayad331@gmail.com

Aalaa Yaseen Hassan
English Department/ Al-Nisour University College/Baghdad/Iraq
aalaa.y.english@nuc.edu.iq

Shaker Holh Sabit
Scientific Research Center, Al-Ayen University, Thi-Qar, Iraq
dr.shaker@alayen.edu.iq

Nuha Ibrahim Hrejha
Mazaya University College/ Iraq
nuhaibrahim@mpu.edu.iq

Abstract

This study aims to analyze the impact of teacher self-efficacy, workplace stress, workplace environment, and teacher engagement on public and private universities in Iraq's professional teaching satisfaction. The research employed a self-administered survey questionnaire and collected data from 350 professors at public and private universities using a convenient sampling technique. Quantitative research methodology and cross-sectional research design were utilized. The Partial Least Square (PLS)-Structural Equation Modelling (SEM) regression results reveal that teacher workplace stress, self-efficacy, and engagement have a positive and significant effect on teaching job satisfaction. While teachers' workplace stress has a negative and substantial impact on their job happiness, This study demonstrates that instructors need a conducive work environment to achieve job satisfaction. This can be accomplished by providing them with the study's findings in an efficient manner. This study's findings could also contribute to the existing literature, thereby assisting researchers and academics.

Keywords

Correspondence to Amenah Muayad Abdullah, Al-Farahidi University/Iraq. Email: amena.m.abdullah@uoalfarahidi.edu.iq

The teaching profession greatly impacts cultural, social, and economic development initiatives (Hiebert, Gallimore, & Stigler, 2002). Consequently, teacher work satisfaction is a crucial factor that could enhance kids' academic performance (Judge, Zhang, & Glerum, 2020). When teachers are happy, they contribute more to their pupils and educational institutions and work more enthusiastically (Demirtas, 2010). Student job happiness is affected by various factors, including instructor self-efficacy, workplace stress, working climate, and teacher involvement (Elrayah, 2022; Probst, Baek, & Laditka, 2010). To increase teacher job satisfaction, it is necessary to develop new professional teaching plans that are aligned with the government's overall strategic plans and assist instructors in managing their self-efficacy, workplace stress, working environment, and teacher engagement (Elrayah, 2022; Probst et al., 2010; Raziq & Maulabakhsh, 2015). Therefore, this study aimed to examine the primary factors influencing teacher job satisfaction, such as self-efficacy, workplace stress, work environment, and teacher engagement.

Teachers are seen as dominant assets in educational institutions such as universities (Ma & MacMillan, 1999). The administration must communicate effective tactics and programs to increase teacher satisfaction (Shann, 1998). The administration must build and maintain a supportive atmosphere for teaching to aid teachers and other parties in increasing the effectiveness of instruction through engagement, anxiety reduction, and self-efficacy enhancement. According to the research of MacBeath (2012), teaching is a highly regarded profession, yet teachers often feel uneasy due to a lack of self-efficacy. According to another study, the workplace is one of the most influential factors in employee satisfaction and motivation (Hafeez et al., 2019). Therefore, if the working environment of the institution is not acceptable to the teachers, their contribution to the students and university could be diminished (Probst et al., 2010; Raziq & Maulabakhsh, 2015) since they are dissatisfied with their work (Hafeez et al., 2019). In addition, working stress increases the risk of errors, which decreases employee job satisfaction (Fairbrother & Warn, 2003; Padmanabhan, 2021). Previous research has demonstrated that self-efficacy, workplace stress, workplace atmosphere, and teacher engagement are significant indicators of teachers' job satisfaction.

Despite the significance of indicators, the existing literature contains several gaps that could aid in developing the current study framework. Prior studies have focused mostly on the direct effect of workplace engagement, workplace stress, and workplace self-efficacy on teachers' job satisfaction (Elrayah, 2022). While little attention has been paid to the impact of the office environment on teachers' job satisfaction, engagement in the workplace, the stress in the workplace, and self-efficacy in the workplace have been studied. Previous studies have demonstrated that the office environment is a crucial indication that positively and significantly influences job satisfaction (Agbozo et al., 2017; Kretzschmer et al., 2017; Probst et al., 2010; Raziq & Maulabakhsh, 2015). Therefore, these factors for job satisfaction cannot be disregarded. In addition, past research has primarily focused on schools or colleges (Aldridge & Fraser, 2016; Demirdag, 2015; Elrayah, 2022; Türkoglu, Cansoy, & Parlar, 2017), while universities, particularly in Iraq, have received scant attention. In addition, previous research has produced mixed results, including positive, negative, and significant findings (Ahsan et al., 2009; Caprara et al., 2006; Demirdag, 2015; Kretzschmer et al., 2017; Padmanabhan, 2021; Prabhakar, 2016; Probst et al., 2010; Xiang et al., 2014) and Consequently, based on previously identified research gaps, the purpose of this study is to explore the impact of teacher self-efficacy, workplace stress, workplace environment, and teacher engagement on teacher job satisfaction.

This study has greater significance since robust evidence is employed to analyze the dependent variables to achieve the study's true objectives. This study aims to provide strategic plans and recommendations to the governing bodies of educational institutions, schools, and colleges to increase job happiness among teaching professionals through engagement, self-efficacy, and stress management utilizing practical counsel, optimal management practices, and research-based information. Because this is the first study to analyze the effect of teacher stress and working environment on job satisfaction, this research has larger theoretical ramifications than previous research. Because past research has primarily focused on teachers' self-efficacy and involvement, from a theoretical standpoint, this work is regarded as a pioneering effort; as such, its findings are valuable and will be useful for future research. Background of the study, literature review from a theoretical and empirical perspective, research technique about an appropriate research design and population, etc., data analysis and interpretation section are basic parts of research. The conversation and future directions are mentioned as a conclusion.

Literature Review

Teachers Job Satisfaction

Job satisfaction and learning objectives are directly related. A study by Skaalvik and Skaalvik (2011) defined job satisfaction as a passionate reaction to the teaching role, responsibilities, and workings. It combines the environmental, physiological, and psychological factors responsible for job satisfaction (Hoppock, 1936). According to Elrayah (2022), job satisfaction is defined as the affective orientation-informed effective roles of employees. Therefore, job design is crucial for teacher happiness. Different elements, such as cooperation and instructors' perceptions, influence teachers' job satisfaction levels in their work environment determine it (Toropova, Myrberg, & Johansson, 2021). According to Herzberg (1974) motivation-hygiene theory, job satisfaction and dissatisfaction are caused by various circumstances (hygiene and motivation factors) . The variables that boost motivation are known as motivators, while those that reduce satisfaction are known as hygiene factors.

Interactions, relationships with others, and participation in chances for societal or individual improvement all contribute to the pleasure or discontent of a teacher's work environment (Zembylas & Papanastasiou, 2006). To foster an atmosphere conducive to innovation among teachers, the administration must be thoroughly aware of all these elements. Self-efficacy is essential for teacher professionals since it provides a better grasp of a situation to address a specific issue. As a result of increased job desirability and work experience, teachers are more willing to operate in an organizational setting. In this approach, empirical research demonstrates that instructors need a higher level of self-efficacy to comprehend workplace conditions, achieve job satisfaction, and give high-quality education.

Teachers' Self-efficacy and Job satisfaction

Professional teaching competencies are contingent on a variety of factors. In past studies, researchers analyzed the interaction of variables; during the COVID-19 pandemic, empirical investigations are required to determine how COVID affects the interaction of variables. According to Pajares and Johnson (1996) study, self-efficacy is one of these characteristics. The phrase self-efficacy relates to the conviction that professionals can accomplish anything in their career (Pajares & Johnson, 1996) and their responses to various conditions (Skaalvik & Skaalvik, 2010). Self-efficacy encompasses many aspects of the teaching profession, including skills, decisions, obligations, and responsibilities—inclusion of education, capacities, skills, and experience among the elements that promote instructors' self-efficacy. Regular training provided to all education professionals increases their self-efficacy without question.

Two fundamental factors influence the self-efficacy of teaching professionals. The first factor is the personality of teachers, which is directly connected to their values, perceptions, personality, and attitude. The administration can monitor these factors during personnel selection. "right person for the right task at the right time" is a key accommodating aspect in the selection process for enhancing self-efficacy and mitigating the effects of personal factors. According to Elrayah (2022), the intrinsic elements and working environments, such as procedures, the working system, and policies, can also influence self-efficacy. The primary obligation of upper management is to foster a supportive environment for teachers. Systematic reviews and development can improve the current working environment (Kowalski, 2003; Noorossana, Delshad, & Nayebpour, 2021), and it will aid in meeting the real needs of the stakeholders, as well as enhancing the instructors' self-efficacy.

It is the job of the administration at educational institutions to implement self-efficacy enhancement strategies. The ability of teachers to plan, organize, and manage the learning process significantly impacts the educational objectives of schools and universities. According to Perrig and Grob (2013), self-efficacy is derived from various factors, including skills, work experience, and task characteristics. Previous teaching experience is the most influential source of self-efficacy among professionals engaged in the current activity) (Skaalvik & Skaalvik, 2016). This demonstrates how prior experience contributes to current and future teaching effectiveness. Teachers' knowledge of good administration and control of the learning process contributes to enhancing their employment value.

Moreover, according to Perrig and Grob (2013), this significantly contributes to the enhancement of social as well as individual advantages. Numerous prior studies have examined the relationship between self-efficacy and job happiness. Most investigations (Brouwers & Tomic, 2000; Burić & Moe, 2020; Klassen & Chiu, 2011) have discovered positive associations.

Self-efficacy has significantly impacted the teaching profession for many years, as teachers choose their study techniques based on their satisfaction and behavior. For teachers to work with greater contentment (Regier, 2021) and to offer comprehensive knowledge to many pupils in a single class, they must agree to work effectively and appropriately. On the other side, those teachers who were unsuccessful in acquiring self-efficacy could not work with satisfaction due to different limits. Encouraging teachers' self-efficacy in their teaching approaches is crucial for increasing teacher satisfaction. Self-efficacy is a human-related behavior; therefore, it ensures job happiness. In everyday life, individuals perceive things based on their perceptions. For decision-making, their judgments are influenced by their cognitive associations and emotions. Self-efficacy provides teachers with a high level of satisfaction. According to Bush et al. (2022), the administration is responsible for providing teachers with job satisfaction. According to job discontent is prevalent in the teaching profession, but job satisfaction is closely related to perception and observation, cognitive association, situational comprehension, and responsiveness Duyar, Gumus, and Bellibas (2013) If teaching professionals are supplied with higher self-efficacy and a supportive environment, their work could be more fulfilling. Consequently, we advanced the following hypothesis:

H1: Teachers' Self-efficacy positively increases job satisfaction.

Teachers' Engagement and Job satisfaction

Various management studies introduced the concept of involvement decades ago. It examined how employees' attitudes are related to performance outcomes like productivity, absenteeism, and turnover in relation to employee engagement (Macey & Schneider, 2008). According to Kahn (1990), job engagement links oneself to the job in the company's context and responsibilities. According to Saks and Gruman (2010) study on job engagement, this idea moderated the level of personal commitment that benefited the organization by enhancing job performance. According to Saks and Gruman (2014), elements contributing to employee engagement include valued work, providing aid to the workplace community, justice and fairness, rewards and recognition, sustainability, and workload. Numerous academics have investigated the relationship between employee involvement and work happiness. In research on the teaching profession, individual teacher traits, institutional and organizational characteristics, and school demographics are examined (Rutter & Jacobson, 1986). The performance of instructors reflects their level of job satisfaction and engagement; engagement activities include learning activities, inspiring pupils, facilitating, and designing (Al-Shammari, 2021; Borup, Graham, & Drysdale, 2014).

An ideal engagement plan must be designed to address organizational commitment, identification, and motivation. The administration should foster an environment where personnel are committed to their work and feel a sense of belonging to their firm. This is made possible by an administration-developed strategy that aligns with the school or college's strategy. Teachers' and professionals' performance will be enhanced with the support of their sentiments of engagement. Multiple studies have discovered a correlation, including (Granziera & Perera, 2019; Han et al., 2021; Perera, Granziera, & McIlveen, 2018) between job engagement and job satisfaction. A study by Fiorilli et al. (2019) discusses the significance of engagement; it describes emotional and mental attachment, workplace behavior, and pattern adoption.

For this reason, teachers who are engaged with their work (Mårtensson, 2020) and who are immersed in the workings and situation can experience job satisfaction and enjoyment. The level of job engagement enhanced teacher satisfaction (Elrayah, 2022). According to another research, teachers who are disinterested in their employment are less engaged because they are not emotionally or mentally devoted to the work environment and are less successful at their occupations. Moreover, to expand the sustainable work environment and boost job satisfaction to give teachers comprehensive job engagement (Alshuaybat, 2021). In this regard, we have developed the following second hypothesis:

H2: Teachers' engagement positively increases job satisfaction.

Teachers' Workplace Stress and Job Satisfaction

Stress has direct effects on both mental and physical health. The behavior of employees and their performance are also directly related. Teachers' mental health is affected by acute stress through tension, anxiety, and physical sickness. This form of stress impacts teachers' mental and physical abilities, resulting in long-term absenteeism. In several studies of education, the topic of stress has been examined. According to research, teacher stress is characterized as the teachers' hostile emotions resulting from aggressive events in the organizational environment. According to most studies (Kokkinos, 2007; Kyriacou & Sutcliffe, 1979), teaching is highly stressful.

Consequently, it is vital to do empirical research to determine the impact of occupational stress on the teaching profession during the COVID-19 pandemic. In the past, numerous causes of stress have been described. In the teaching profession, empirical research is required to examine additional stress-related effects.

The administration must develop a dressed-up workplace to eliminate negative stressors and provide a pleasant environment for interaction. The participation of all individuals in proactive job participation is crucial for evaluating the essential components of the working environment. Depending on the environment, the stresses may fluctuate over time. Therefore, examining the link between these variables during the COVID-19 pandemic is necessary. It is feasible that another stressor will influence the destiny of this field during a pandemic. The school administration can use a variety of stress management measures for instructors; if they fail, the teaching profession will be adversely affected. The administration must establish a work-life balance to alleviate pressures. Different causes contribute to stress. One of these elements is the job's workload. Occasionally, corporations fail to divide responsibilities evenly among personnel. Fair and equal distribution is essential for reducing stress and increasing feelings of contentment. Other factors, such as the administration's management style, can also contribute to increased stress levels. The democratic style is regarded as useful for enhancing job satisfaction and dedication.

The research revealed a correlation between stressors and self-efficacy (Kyriacou & Sutcliffe, 1979). Considerable research suggests that environmental stresses can be reduced to increase job engagement, performance, and job satisfaction (Kyriacou, 1987). Most studies on the teaching profession have established a correlation between stress and job satisfaction (Borg & Falzon, 1989; Kyriacou & Sutcliffe, 1979). According to Ogbuanya and Yekinni (2021), increasing the work performance of people experiencing stressors is extremely challenging. This approach suggests that instructors' stress and anxiety determine their pleasure (Hiep et al., 2021). Teachers with high emotional stability have a high level of job satisfaction.

In contrast, teachers with a low level of emotional stability have a lower level of job satisfaction. This is because teachers with low emotional stability face mentally distinct crises to survive in different situations (Melhe, Salah, & Hayajneh, 2021). Humans cannot eradicate emotions, yet it is vital to avoid stressors for optimal performance (Taylor et al., 2019). We, therefore, suggest the third hypothesis:

H3: Teachers' workplace stress negatively increased impacts job satisfaction.

Workplace environment and Job satisfaction

The most important feature of any organization, according to Buhai, Cottini, and Westergaard-Nielsen (2017), is the firm's work environment or internal climate for its employees. Regardless of the form of organization, this holds. They evaluated how the working environment and organizational culture affected the number of work employees could do in various enterprises. According to the results of their analysis, they concluded that the company's output could be increased by enhancing both the external working environment and the internal workplace atmosphere. According to Dartey-Baah and Amoako (2021), the aspects that contribute to an individual's motivation include the nature of the work, a sense of accomplishment received from the work, responsibility, promotion, recognition, and opportunities for personal growth. They noticed that these factors contribute to employees' enthusiasm for their work and the organization, which benefits both sides. Due to the organization's ability to positively influence all of these elements of employee motivation, it can acquire the most input from its employees, which can result in the most output. According to Bakotic and Babic (2013), one factor stands out as the most significant and is highly associated with job satisfaction. They undertake a study on the working conditions aspect. They noticed that working conditions differ from employee to employee, but this substantially impacts the job satisfaction level among employees.

In addition, Khattak, Zolin, and Muhammad (2020) outlined the elements of an ideal working environment for their readers. He noted that various factors contribute to forming a more favorable work environment for the employees. These features include the possibility for progression, industry-competitive remuneration, a safe working environment, professional development opportunities, and a relationship of trust between employees and management. All of these factors enhance the work environment in any particular company. He explained that organizations that do not value these attributes would experience a reduction in employee performance due to falling short of the criteria set by the employees themselves. In his research, he highlighted the significance of topics such as employee safety, employment stability, and coworker relationships. Pitaloka and Sofia (2014) explained the effect of several variables on an employee's job satisfaction. They noted

that factors such as the amount of work and time spent on the job have also affected job satisfaction. Suppose a corporation expects its employees to perform more than they are capable. In that case, those employees are more likely to face health issues such as apathy, weakness, and worry, according to their research. In turn, these issues make employees less content with their positions, which increases the turnover rate. The bulk of employee turnover contributors is unsatisfied with their work. In companies with a larger employee turnover rate, job happiness has been observed to be lower, but job satisfaction has been documented to be extraordinarily high in companies with a low turnover ratio. The preceding section demonstrated that the work environment is a key indicator of job satisfaction. Consequently, the following study hypothesis is stated:

H4: Workplace environment has a positive association with job satisfaction.

Research Framework Development

Several deficiencies in the prior literature could aid in developing the current research framework. Previous studies have focused mostly on the direct effect of workplace engagement, stress, and self-efficacy on teachers' job satisfaction (Elrayah, 2022). While little attention has been paid to the impact of the office environment on teachers' job satisfaction, engagement in the workplace, the stress in the workplace, and self-efficacy in the workplace have been studied. In addition, prior studies have primarily focused on schools or colleges, but universities, particularly in Iraq, have received little attention. Based on these deficiencies, the current research framework is presented in Figure 1.
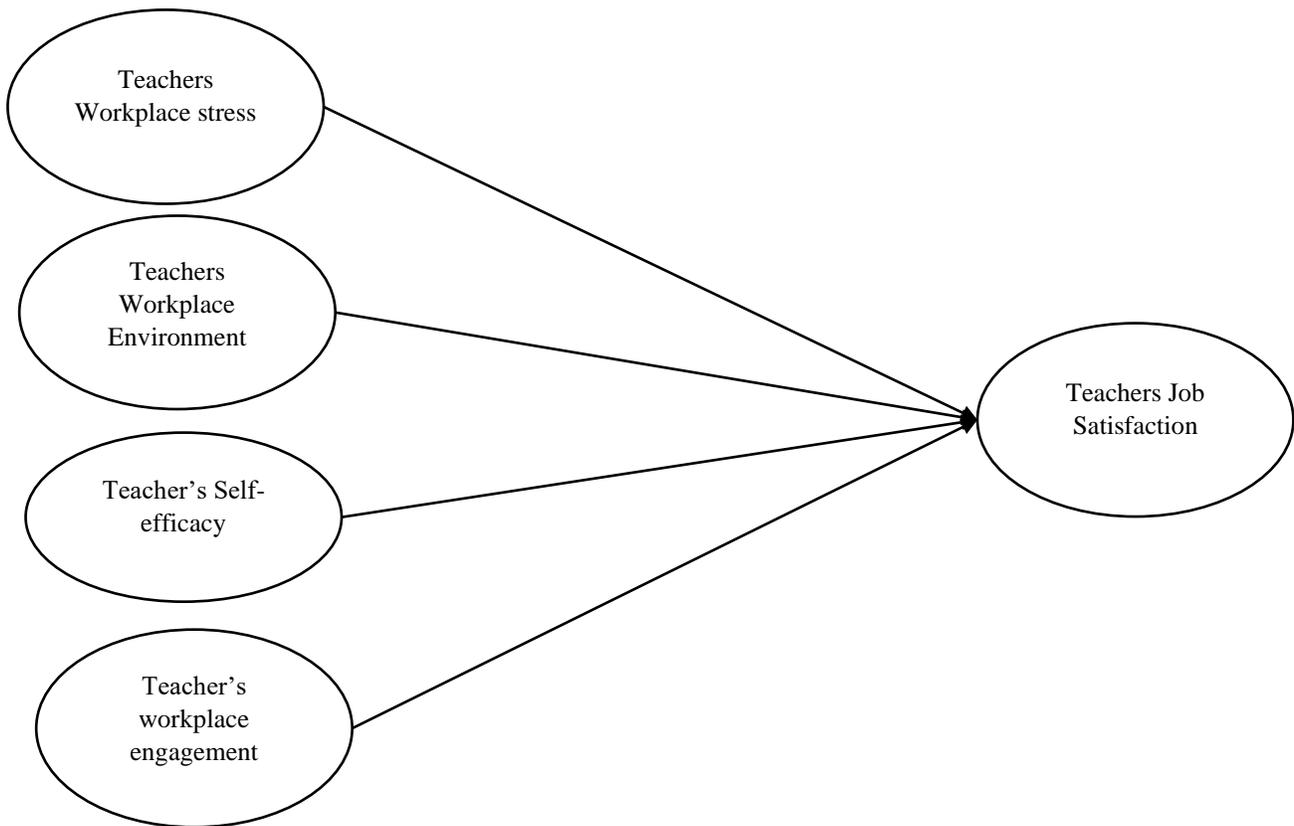

Figure.1: *Conceptual Framework*

Research Methods and Data collection

Deductive and inductive methods are employed. For a deductive approach, the quantitative research method is used, which focuses on numbers and statistics while gathering and analyzing data. In contrast, qualitative research concerns words and their meanings (Winter, 2000). Both methodologies collect and analyze data. Both are required to gather many forms of knowledge (Winter, 2000). Establishing generalizable facts about a topic is one of the objectives that quantitative research can help achieve (Arghode, 2012).

On the other hand, qualitative research makes it possible to obtain in-depth information on unfamiliar themes (Hara, 1995). Therefore, quantitative research methodology was employed for this study. The cross-sectional research strategy was used to collect data acquired at a single time. The data was obtained from both public and private colleges in Iraq, which are large educational institutions that contribute significantly from a social and economic standpoint. Self-administered, structured questionnaires have been deployed to collect quantitative data. The data was acquired from professors at private and public colleges using a technique of easy sampling. For the sake of data gathering, a questionnaire-style survey has been modified. The questionnaire was originally developed in English, then translated into Arabic, and finally translated back into English by three unique professional translators working independently. This was performed to ensure that all translations were accurate (Hui & Triandis, 1985). To obtain as many responses as possible, we employed a method known as personally distributed questionnaires.

The data was collected using both self-administered and printed questionnaires distributed to a sample of teachers and their principals. This study's sample size is 500 teachers from private and public colleges, 350 of whom returned questionnaires. Teachers' job satisfaction (TJS) was measured with five items, teachers' self-efficacy (TSE) was measured with seven items, teachers' engagement (TEN) was measured with six items, Workplace environment (WPE) was measured with five items, and teachers' workplace stress (TWS) was measured with eight items. All the variable items were modified from earlier research using these indicators (Elrayah, 2022). These items were scored on a five-point Likert Scale, with 1 representing strong disagreement and 5 representing strong agreement.

Assessment of measurement model

First, the measurement model is examined by measuring the latent variable to assess the outcomes of validity and reliability for each indicator using convergent and discriminant validity tests. The loading factor and the "average variance extracted" (AVE) value could be utilized to determine convergent validity. A loading factor greater than 0.5 is advised (Hair et al., 2007). This stated that the construction could be explained if it exceeds fifty percent of the "indicator variance," indicating that the indicator's dependability might be accepted (reliable). The initial PLS-SEM model chart's total loading factor from the convergent validity test is more than 0.5, suggesting that it met and satisfied the conditions of the convergent validity test. In addition, at the stage of convergent validity, the value of AVE in terms of reliability and construct validity must be examined. In reliability and construct validity outcomes, the AVE variable value must be more than 0.5. (Hair Jr et al., 2016). Considering the construct and reliability validity of the AVE data value, each variable has an AVE value larger than 0.5, suggesting that the convergence stage validity has been met. The third phase is to build reliability, which may be quantified in the following ways: by considering the Cronbach Alpha value or the Composite Reliability value, which is the sum of the Cronbach Alpha value and the Composite Reliability value (CR). The recommended CR value must be more than 0.7. (Aguirre-Urreta, Marakas, & Ellis, 2013). According to Table.1's anticipated values, CR values are more than 0.70. In addition, the indicator is considered dependable if its Cronbach Alpha value is greater than 0.6, but it is appropriate if it is greater than 0.7. (Tavakol & Dennick, 2011). The Cronbach alpha values for each variable in this study are already greater than 0.7, as shown in Table 1. Alpha Cronbach was utilized in this investigation because the data was inconsistent regarding the number of pieces. If the measurement error is reduced, the dependability coefficient will increase, resulting in the employment of more reliable measuring instruments. The expected convergent validity results are shown in Table.1 below.

Table.1: *Construct Validity and Reliability*

	Cronbach's Alpha	**rho_A**	**Composite Reliability**	**Average Variance Extracted**
TEN	0.770	0.799	0.802	0.51
TSE	0.881	0.897	0.918	0.736
TWS	0.812	0.815	0.888	0.726
WPE	0.869	0.873	0.91	0.718
TJS	0.795	0.862	0.857	0.603

Acronyms: TSE-Teachers self-efficacy, TEN-Teacher workplace engagement, TWS-Teacher workplace stress, WPE-workplace environment, TJS-teachers job satisfaction.
Source: Research own illustration

Discriminant Validity Test

This is followed by discriminant validity, which can be determined by examining the correlation between two variables. For the Fornell-Lacker approach to be regarded credible, the correlation between a variable and its value must be much larger than the correlation between the variable and any other variables. As can be seen from the results presented above, the comparative variables' value with the variable mentioned above (shown in green) is more significant than the comparative value of a single variable with other variables. The positive score suggests that Fornell and Lacker's performance in this study was satisfactory. However, discriminant validity exists if the value of the Fornell lacker criterion on each variable is more significant than the value of subsequent variables and if the average variance extracted value (AVE) is greater than 0.5, as well as if the value of the Fornell lacker criterion is more significant than the value of subsequent variables (Ahmad et al., 2020; Ahmad, Bin Mohammad, & Nordin, 2019; Harapan et al., 2018). Table.2 presents the findings of Fornell and Lacker.

Table.2: *Fornell & Lacker*

	TEN	TSE	TWS	WPE	TJS
TEN	0.714				
TSE	0.32	0.858			
TWS	0.303	0.593	0.852		
WPE	0.585	0.484	0.375	0.847	
TJS	0.49	0.519	0.369	0.69	0.777

Acronyms: TSE-Teachers self-efficacy, TEN-Teacher workplace engagement; TWS-Teacher workplace stress, WPE-workplace environment, TJS-teachers job satisfaction
Source: Research own illustration

The subsequent criterion for discriminant validity is that cross-loadings must equal factor loadings (Hair, Ringle, & Sarstedt, 2012). According to the results of the analysis, all of the factor loadings were equal. The third criterion for the construct's discriminant validity is the association between heterotraits and monotraits (HTMT). The HTMT is a measure of similarity between latent variables. Comparing the HTMT to a predefined threshold serves as a criterion. If the HTMT value surpasses this threshold, discriminant validity is likely inadequate. Some authors offer a threshold of 0.85 or 0.90 (Henseler, Ringle, & Sarstedt, 2015). The Desk. Three predicted values indicate that the construct meets the HTMT criteria for discriminant validity.

Table.3: *HTMT criteria*

	TEN	TSE	TWS	WPE	TJS
TEN					
TSE	0.412				
TWS	0.404	0.701			
WPE	0.758	0.547	0.446		
TJS	0.596	0.595	0.444	0.758	

Acronyms: TSE-Teachers self-efficacy, TEN-Teacher workplace engagement, TWS-Teacher workplace stress, WPE-workplace environment, TJS-teachers job satisfaction.
Source: Research own illustration

Regression Results

In addition, the structural model explains the relationships between latent variables using mathematical equations. The values of squared (R^2) for relative endogenous latent variables must be evaluated, among other values, to assess the structural predictive capacity of a model (Yusif et al., 2020). Exogenous latent factors can influence endogenous latent variables by modifying the value of R2 (Latan & Ramli, 2013). The R^2 score for teacher satisfaction is 0.60, indicating that it is statistically significant. R2 on teacher satisfaction explains sixty percent of the variance in variables, with the remaining forty percent explained by factors not included in this model. The next stage for structural models is to examine the predictive applicability of Q2, which validates the model's predictive significance. Q^2 values greater than 0 show that the model is predictive, which is a positive indicator. The following formula is used to calculate Q^2

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2) \dots (1 - R_n^2)$$

The model's Q2 value, which was calculated following the methodology mentioned previously, indicates the predictive significance of the exogenous variable for the impacted endogenous variable. This conclusion can be drawn from Q^2's value of 0.54. The model can explain 54% of the data's information, while other elements not included in the model can explain 46% of the data's information. The second factor to consider is the model's adequacy. In this inquiry, a value of 80.5% was awarded to the fitted model, indicating that the model was 80.5% accurate.

After validating the model, the study's research hypothesis was examined using the bootstrap 500 resampling technique. The regression findings are depicted in Table.3 and Figure.2 as expected outcomes. The findings indicate a positive relationship between teacher self-efficacy (TSE) and job satisfaction (TJS). Numerous researchers support our findings (Adebomi, Olufunke, & Bamidele, 2012; Caprara et al., 2006; Klassen & Chiu, 2010). Therefore, university administrations must develop ways to enhance teachers' self-efficacy to increase performance. Teachers' beliefs, values, and positive outlook on their obligations, tasks, and duties can be improved through professional training courses designed to enhance their self-efficacy. In addition, the administration might employ various incentives to achieve self-efficacy. The self-efficacy of educational professionals can be improved through direct rewards and teacher participation in development committees. Utilizing these practical tips helps improve teachers' beliefs and values in the decision-making process about administrative and educational operations. Most schools and educational institutions nowadays use participative management to enhance overall performance. Teachers with a high level of efficacy attain superior performance and compensation.

Table.1: *Hypothesis Results*

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
TEN -> TJS	0.930	0.936	0.224	4.144	0.000
TSE -> TJS	0.143	0.140	0.023	6.26	0.000
TWS -> TJS	0.124	0.126	0.03	4.156	0.000
WPE -> TJS	0.760	0.766	0.043	17.649	0.000

Acronyms: TSE-Teachers self-efficacy, TEN-Teacher workplace engagement, TWS-Teacher workplace stress, WPE-workplace environment, TJS-teachers job satisfaction.
Source: Research own illustration

The study's findings also indicate that teacher involvement has a positive and substantial relationship with teacher job satisfaction (TJS). Multiple studies support this conclusion (Høigaard, Giske, & Sundsli, 2012; Klassen, Perry, & Frenzel, 2012). Based on these findings, it is suggested that the administration should apply successful policies, strategies, and procedures in administrative responsibilities such as staff selection, training, and compensation. Engagement will assist in enhancing workplace decision-making. By offering awards for participation in a competition, teachers will experience a high degree of job satisfaction, and as a result, they will remain with the organization for longer. To increase employee involvement and loyalty, the administration should create meaningful jobs.

In contrast, this study discovered a negative relationship between teachers' stress control (TTC) and job happiness (TJS). Numerous research also supports these results (Borg & Falzon, 1989; Chaplain, 1995; Collie, Shapka, & Perry, 2012; Kyriacou & Sutcliffe, 1979). The University administration's role is to implement socially beneficial working conditions for all faculty members. This will aid in eliminating the negative impacts of stress, such as illness, higher turnover, and discontentment. In addition, the administration should pay close attention to job design, setting performance criteria, career development, performance monitoring, training, and counseling programs. This information could help you effectively control your stress level. Teachers should feel that they are working in a healthy and safe environment and are protected from any dangers, diseases, or illnesses. This could lessen the overall stress of educators and increase their job happiness.

In contrast, to design and implement an effective work technique, the administration should equip instructors with effective logical empowerment to achieve the greatest results. However, it should be explicitly circumscribed, and administration oversight should be retained. It is also observed that professors frequently abuse their authority, failing. But at the same time, the logical power can be structured effectively. Teachers' expertise will improve due to better planning and scheduling, resulting in more effective information transmission. Teachers must efficiently provide rational empowerment to strengthen their teaching abilities and job happiness.
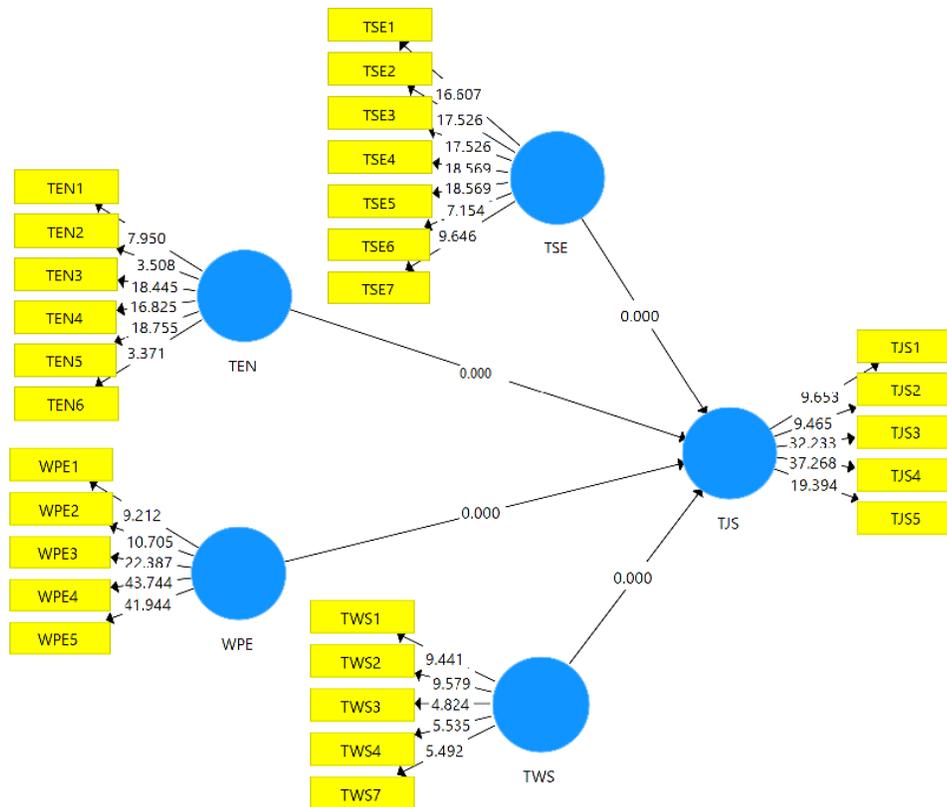
Figure.2: *Regression Model*

The working environment (WPE) has a good and significant association with teachers' job satisfaction. These results suggested that teacher satisfaction increases when the work environment is favorable. As it is argued in the existing literature that the workplace environment is one of the most important factors in determining the degree to which employees are satisfied with their jobs and how motivated they are to do their jobs (Hajiali et al., 2022) because social, organizational, and physical elements are the motivation for task and activity, which consequently affect the performance of workers (Winkelhaus, Grosse, & Glock, 2022). Based on the research findings about the four characteristics listed above, it can be stated that all four variables are considered key elements for teacher work satisfaction. Therefore, universities should focus on these study metrics to boost their growth, which is only achievable owing to the happiness of its teachers, who are the institutions' main players.

Implications and Future Recommendations

Because this is the first study to analyze the effect of teacher stress and working environment on job satisfaction, this research has larger theoretical ramifications than previous research. Prior research has mostly focused on teacher self-efficacy and teacher engagement. This study is considered a pioneering study, and its findings regarding the relationships between different variables will be useful for future research. In addition to theoretical ramifications, this study has practical applications that contribute to the body of knowledge. Providing proper resources, the administration cab plays a significant role in boosting job satisfaction.

Additionally, the role of management leads to positive behavior by reducing mental stress levels. Another result of the current research is that management and administration should foster a productive and self-efficacy-developing work environment. This study also included student engagement with teachers and work activities in education administration. The administration should ensure that instructors' working conditions are conducive to productivity and comfort. Those educational institutions that have failed to apply all of these measures could enhance the effectiveness of their teachers by creating a suitable work environment. Teachers must present students with opportunities for improvement.

The careful consideration of the implications of this work has shown certain flaws. The first constraint is that the sample data collected pertain to university teachers in Iraq. Therefore, the results cannot be applied to instructors in other nations, nor can the data be generalized to different working environments or settings, such as schools. Future research can be undertaken on instructors from other countries and in diverse contexts, such as elementary and secondary schools, considering the various demographic groupings. The second drawback is that the study is based on a cross-sectional data survey. However, we only compared the mean values of self-efficacy and satisfaction among the profiles of teachers. Therefore, it would not be accurate to argue that teacher profiles and their opinions are connected. In the future, experimental and longitudinal data sets can reveal pertinent information regarding the causal relationship between exogenous and endogenous variables using a comprehensive framework that includes any exogenous variable in addition to the four variables examined in this study.

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