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Measuring Self-Efficacy and Job Satisfaction of Full-Time Art Teachers in Chengdu, China

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Abstract

Purpose: Job satisfaction can nurture the teaching efficiency of teachers. Therefore, this study aims to investigate the factors influencing the self-efficacy and job satisfaction of full-time art teachers in Chengdu, China. The research model is built upon key variables which are stressors, principal leadership, supportive school culture, teacher collaboration, teacher self-efficacy, emotional exhaustion, and job satisfaction. **Research Design, Data, and Methodology:** A quantitative approach was employed, utilizing a questionnaire survey to collect data from the 450 full-time teachers. Prior to distribution, the questionnaire underwent validity and reliability testing through Item-Objective Congruence and Cronbach's Alpha pilot tests (n=50). The collected data was analyzed using Confirmatory Factor Analysis and Structural Equation Modeling to assess the model's goodness of fit, confirm causal relationships between variables, and test hypotheses. **Results:** The study reveals that stressors and principal leadership significantly impact teacher self-efficacy. Teacher self-efficacy has a significant impact on emotional exhaustion. Furthermore, principal leadership, supportive school culture, teacher collaboration, teacher self-efficacy, and emotional exhaustion significantly impact job satisfaction. **Conclusions:** The study recommends that administrators prioritize enhancing the quality factors of teacher self-efficacy to foster a sense of usefulness in job satisfaction, thereby cultivating positive attitudes and behavioral intentions towards job satisfaction among teachers.

Keywords : Principal Leadership, Supportive School Culture, Teacher Collaboration, Teacher Self-Efficacy, Job Satisfaction

JEL Classification Code: E44, F31, F37, G15

1. Introduction

Given the current technical and economic competition state, the idea of international rivalry for talent and education is crucial. From focusing on how well people know things, attention has evolved to encompass how well people are all around. A well-rounded educational system is thought to include arts instruction as a crucial component. In the nation's educational system, art teachers are essential. This study aims to examine the variables that affect art instructors' job satisfaction. This analysis will also provide important information for the future professional development of art teachers.

Job satisfaction is a type of psychological response that employees have to their work. According to Ewen et al. (1976), job satisfaction is a positive emotional state generated by employees' evaluation of their work experience. The concept of job satisfaction was first explored by Hoppock (1935). As a psychological concept, teachers' job satisfaction refers to teachers' overall feelings and views on their occupation, working conditions, and environmental conditions, which is closely related to teachers' work enthusiasm and mental health (Coladarci, 1992; Imants & Zoelen, 1995).

According to Bandura's social learning theory, self-efficacy refers to people's ability to manage their interactions with others. This concept is commonly used to describe how one's professional skills can affect their students' behavior. Due to the nature of self-efficacy, it can change with the different situations that teachers encounter. Teachers must

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develop their self-efficacy to help them improve their professional skills. As a psychological experience, self-efficacy helps teachers evaluate their teaching abilities. Believing that their teaching ability can influence a student's behavior or achievement, teachers can develop a deeper understanding of themselves through self-efficacy. It can also help them manage their teaching process and improve their confidence (Bandura, 1997).

Self-efficacy teachers are more likely to feel that school operations are being conducted in a way that benefits them and their students. They also think the school's principal, teachers, and other staff members follow their responsibilities properly (Caprara et al., 2003). Studies also suggest that teachers' perceived effectiveness is influenced by their satisfaction with their careers and their students' perceptions of their abilities (Trentham et al., 1985). Studies have shown that teachers' self-efficacy can impact their job satisfaction and commitment to the school (Caprara et al., 2003).

This study aims to provide a research opportunity for art teachers from the self-efficacy perspective. Researchers can gain a deeper understanding of art teachers' satisfaction and performance with their work and their feelings about the events they experience in their daily jobs. By analyzing the subjective aspects of their self-efficacy, they can improve their positive perceptions of independent development. Through this paper, the author aims to help teachers develop a positive attribution style and improve their cognition about their educational activities. The author encourages teachers to practice self-reflective techniques and helps them improve their ability to self-assess their performance. Through the process, their teaching activities are constantly reflected in their cognitive processing (Hong, 2008).

For the first time, this study aims to analyze the factors that influence the job satisfaction of art instructors in a city such as Chengdu to improve the happiness of most art teachers at an important level in their work and, more importantly, to provide evidence for the necessity of improving the job satisfaction of teachers. The study aims to establish a model of the link between stress, job satisfaction, and social support among art instructors. It also analyzed the factors that influence school culture and teacher cooperation.

2. Literature Review

2.1 Stressors

Some research reports show that, among the stressors of teachers, the teaching profession is considered to have more and more work tasks, and the speed of teachers' work is also accelerating (Buchanan, 2010; Hargreaves, 2003; Lindqvist & Nordanger, 2006; Smithers & Robinson, 2003). According to a study by Skaalvik and Skaalvik (2010), job burnout was linked to school stressors. It was also associated with a reduction in teachers' job satisfaction. Job burnout is a condition that typically involves depersonalization and exhaustion (Maslach et al., 1996). It is used as an indicator of stress among teachers. Researchers use different terms to describe the various kinds of stress teachers experience. They then use the intensity of these stressors to measure teachers' job stress. (Collie et al., 2012; Gilbert et al., 2014; Klassen & Chiu, 2011; Klassen et al., 2013). Numerous studies have examined the link between stress and self-efficacy among teachers. The results of the TSES showed that teachers' self-perceptions are negatively affected by stress (Betoret, 2009; Collie et al., 2012). From these supported studies, the following hypothesis has been formulated:

H1: Stressors has a significant impact on teacher self-efficacy.

2.2 Principal Leadership

Some studies have found that some aspects of PL and teacher-professional cooperation can affect teachers' self-efficacy (Duyar et al., 2013). The cognitive evaluation theory also points out that positive feedback on principal leadership can positively affect teachers' intrinsic motivation and cognition of their ability and increase teachers' self-efficacy (Gagné & Deci, 2005). Barber and Meyerson (2007) noted that increasing teacher self-efficacy can improve school performance when competent school leaders interact with teachers. According to studies, organizational culture is vital to employee self-efficacy (Ngang, 2011). School leaders are also highly involved in shaping the culture of their schools (Leithwood, 2005). From these supported studies, the following hypothesis has been formulated:

H2: Principal leadership has a significant impact on teacher self-efficacy.

2.3 Supportive School Culture

According to studies, the main goal of a supportive school culture is to create a conducive environment wherein leadership is distributed. (Carpenter, 2015; Khourey-Bowers, 2005) Moreover, teaching leadership (Ahin, 2011) can play a decisive role. Scholars believe that improving teachers' job satisfaction and self-efficacy can be attributed to their school's supportive environment and cooperative culture. (Chong & Kong, 2012; Duyar et al., 2013; Shachar & Shmuelevitz, 1997). While some principals can influence teachers' job satisfaction, others can promote the creation of SSCs and teacher cooperation. These two factors can help improve the self-efficacy of teachers. (Liu & Bellibas, 2018). According to the study, a supportive school culture can boost

the satisfaction of teachers. It encourages them to share their successes and difficulties and respect each other's ideas. School administrators should create a supportive environment (Rahmi & Mustafa, 2022). In such a working environment, it will increase teachers' satisfaction with the working environment. From these supported studies, the following hypothesis has been formulated:

H3: Supportive school culture has a significant impact on job satisfaction.

2.4 Teacher Collaboration

Some studies have found that teacher cooperation and principal leadership can reflect teachers' self-efficacy in some aspects (Duyar et al., 2013; Jackson & Bruegmann, 2009). Gagné and Deci (2005) The cognitive evaluation theory also points out that positive feedback is needed to make teachers' perception of competence and intrinsic motivation have a positive impact. Teacher collaboration is one of the sources of such feedback. As a result, positive feedback from peers can change a teacher's perception of his or her abilities and work (Garavan, 2010). In the study of school development, it is recommended that schools establish a collaborative culture and avoid isolation among teachers to develop a more effective learning environment (Goddard et al., 2015). In a sense, Liu and Bellibas (2018) found that when teaching leaders support a positive school environment of teacher cooperation and mutual respect, it is conducive to improving TJS and TSE. Goddard et al. (2007) Have a similar point of view. They think school teachers are an important factor in the development of cooperation because it allows teachers to show open classroom communication, discuss the teaching according to teaching practice, share the teaching idea, and make efforts to improve the mutual help and improve the teaching results of students.

H4: Teacher collaboration has a significant impact on job satisfaction.

2.5 Teacher Self-efficacy

The experiences that people had with self-efficacy during their previous mastery are the most vital sources of this concept. This concept is derived from the social cognitive theory (Bandura, 1997, 2006). According to Bandura (1997), Self-efficacy refers to the belief that a person has the ability and means to achieve the desired outcome. This belief helps determine an individual's level of persistence in facing obstacles. The experiences that people had with self-efficacy during their previous mastery are the most vital sources of this concept. It can also be used to describe how effective they are at bringing about the results of their work (Megan Megan Tschannen-Moran & Woolfolk Hoy, 2001).

According to research, burnout is positively correlated with intentions to leave the teaching profession (Leung & Lee, 2006) but negatively correlated with teacher self-efficacy (Brouwers & Tomic, 2000; Skaalvik & Skaalvik, 2007), subjective health (Hakanen et al., 2006), and job satisfaction (Skaalvik & Skaalvik, 2010). In addition, according to Skaalvik and Skaalvik (2010, 2011), time constraints and workload were significant predictors of the emotional fatigue component of burnout (see also Betoret & Artiga, 2010; Fernet et al., 2012). The relationship between workload or time constraints and exhaustion is particularly significant because numerous studies have found that teachers are working faster and receiving more work assignments than ever before (Buchanan, 2010; Hargreaves, 2003; Lindqvist & Nordanger, 2006; Smithers & Robinson, 2003).

In addition, according to the results of relevant researchers, TSE is associated with job-related stress and job satisfaction (Bandura, 1997; Betoret, 2009; Caprara et al., 2003, 2006; Lee et al., 2019) is associated with the mastery of teaching performance and the use of teaching strategies (Allinder, 1994). There is also evidence that TSE is associated with a teacher's likelihood of staying in teaching (Glickman & Tamashiro, 1982). Previous research has indicated that the self-efficacy of teachers could affect job satisfaction. From these supported studies, the following hypothesis has been formulated:

H5: Teacher self-efficacy has a significant impact on emotional exhaustion.

H7: Teacher self-efficacy has significant impact on job satisfaction.

2.6 Emotional exhaustion

Emotional exhaustion may occur in conjunction with psychological stress when employees are stressed because of threats to their work or performance (Devine & Hunter, 2016). Conformity can lead to emotional exhaustion among employees, as the conflict between internal and external emotions can affect their behavior. Workplace events can also negatively or positively affect the reactions of staff members. (Weiss & Cropanzano, 1996).

Additionally, according to Xu et al. (2016), of all the variables influencing employees' job satisfaction, the employees' emotions and emotional state have the most influence. When an employee is emotionally exhausted, it is because of various work-related factors. Because emotional exhaustion causes employees to feel like their emotional reserves are depleted, it significantly lowers job satisfaction (Brackett et al., 2010; Chen & Chen, 2018). Employees' emotional weariness and decreased job satisfaction may result from bad workplace events, including employees' façade of conformity (Grandey, 2003; Hülsheger et al., 2013; Lee et al., 2019; Simha et al., 2014). From these supported

studies, the following hypothesis has been formulated:
H6: Emotional exhaustion has significant impact on job satisfaction.

2.7 Job satisfaction

Teachers play an important role in the success of children. They can help develop a conducive learning environment by providing a safe and encouraging atmosphere. Various factors can influence the work attitude of teachers. According to Wiley and Evans (1997), the concept of JS refers to a person's state of being satisfied with how her or his work-related needs are met. Two main components of JS are job accomplishment and job comfort. The former refers to a person's satisfaction with the quality of their work, while the latter is about their comfort level with the working environment.

3. Research Methods and Materials

3.1 Research Framework

The researchers developed a conceptual framework based on four major studies and three core research theories. The model for job satisfaction was developed (Ewen et al., 1976). Herzberg et al. (1959) introduced the two-factor theory. Bandura (1997) proposed the self-efficacy theory. Herzberg's theory aims to explain how motivation and satisfaction are related in the workplace.

This study combines relevant literature and research theories. It draws on the three theoretical frameworks of previous studies to construct the conceptual framework of art teachers' job satisfaction and self-efficacy. The first theoretical framework was put forward by Skaalvik and Skaalvik (2017), who studied the literature on teacher stress and self-efficacy in the past ten years. It points out that the higher the pressure on teachers, the lower their self-efficacy, which is a negative correlation. According to Skaalvik and Skaalvik (2017), this paper aims to determine the effect of stress on self-efficacy. In the second theoretical framework, Sehgal et al. (2017) studied the influence of teacher self-efficacy and teacher effectiveness, studied how these factors determine teacher self-efficacy and teacher effectiveness, and discussed the role of teacher cooperation and principal leadership in explaining the above relationship. The results show that principal leadership affects teacher self-efficacy, and the two positively correlate. The study's findings revealed that schools should prioritize developing and improving their teachers' self-efficacy. They also need to give importance to the collaboration between their principals and teachers to improve their operations' efficiency. The third literature was provided by Skaalvik and Skaalvik (2017), which studied the relationship between teachers' self-efficacy, job satisfaction, and emotional exhaustion. The higher the self-efficacy, the higher the job satisfaction, and the lower the job burnout and resignation impulse level. Self-efficacy also affected emotional exhaustion, which was associated with lower job satisfaction. Therefore, teachers' self-efficacy and emotional exhaustion are important influencing factors. The research conceptual framework is proposed as follows in Figure 1.

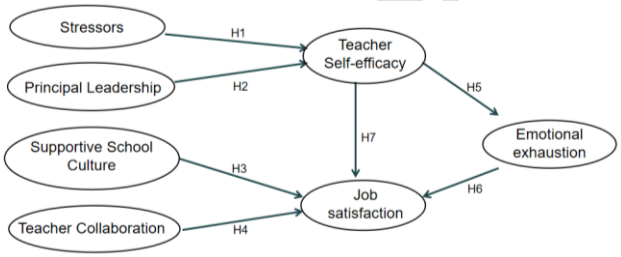

Figure 1: Conceptual Framework

H1: Stressors has a significant impact on teacher self-efficacy.
H2: Principal leadership has a significant impact on teacher self-efficacy.
H3: Supportive school culture has a significant impact on job satisfaction.
H4: Teacher collaboration has a significant impact on job satisfaction.
H5: Teacher self-efficacy has a significant impact on emotional exhaustion.
H6: Emotional exhaustion has significant impact on job satisfaction.
H7: Teacher self-efficacy has significant impact on job satisfaction.

3.2 Research Methodology

This study employed a quantitative approach and empirical analysis. A questionnaire was utilized to gather sample data from the target audience, following a confirmation of content validity and reliability through the Item-Objective Congruence (IOC) test and a pilot Cronbach's Alpha analysis. Once the questionnaire's reliability was established, it was distributed online to full-time art teachers in five districts of Chengdu.

The assessment of Item-Objective Congruence (IOC) was carried out by a panel of three experts, and all the items exceeded the acceptable threshold of 0.6. In the pilot test involving 50 participants, Cronbach's alpha reliability was employed. According to Tavakol and Dennick (2011), a measurement tool is considered suitable for use when the Alpha coefficient is greater than or equal to 0.60, indicating

an acceptable structure. A higher Alpha coefficient signifies increased reliability in the structure.

To analyze the collected data, the study adopted the two-step Structural Equation Model (SEM) method proposed by Anderson and Gerbing (1988). In the first step, Confirmatory Factor Analysis (CFA) was conducted using SPSS and AMOS to assess convergent validity. The second step involved SEM to examine the causal relationships between all constructs in the conceptual model and test the significance of influences and proposed hypotheses. SEM offers the advantage of exploring various dependencies simultaneously, particularly when the model includes both direct and indirect influences between structures (Hair et al., 2010).

3.3 Population and Sample Size

This study's target population is art teachers from five districts of Chengdu, all part-time primary and secondary school art teachers. Based on Soper (2006) A-priori Sample Size Calculator for SEM, the recommended minimum sample size for the parameters of 7 potential variables and 30 observed variables is 425 at the probability level 0.05. Therefore, questionnaires were distributed, and 450 valid responses were screened.

3.4 Sampling Technique

The sample techniques are purposive, stratified random and convenience sampling. Purposive sampling is employed by targeting art teachers from five districts of Chengdu, all part-time primary and secondary school art teachers. The proportional sample size was conducted per stratified random approach, as shown in Table 1. Convenience sampling is directed to access the reachable individuals, using questionnaire as a tool.

Table 1: Sample Units and Sample Size

Group Name	Population Size	Proportional Sample Size
Tianfu New District	112	80
Qingyang District	128	90
High-tech District	108	76
Wuhou District	132	94
Jinniu District	156	110
Total	**636**	**450**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

Table 2 presents the demographic profiles of the total 450 respondents. Among them, 100 were male, accounting for 22.2%, and 350 were female, accounting for 77.8%. Among the professional titles of full-time art teachers, 11.8% were about no title, 54.4% about First level, 20.2% about Advanced level, and 13.6% about Professor level.

Table 2: Demographic Profile

Demographic and General Data (N=450)		Frequency	Percentage
Gender	Male	100	22.2%
	Female	350	77.8%
Professional title	No title	53	11.8%
	First level	245	54.4%
	Advanced	91	20.2%
	Professor	61	13.6%

Source: Constructed by author

4.2 Confirmatory Factor Analysis (CFA)

Hair et al. (2010) state that Confirmatory Factor Analysis (CFA) is a suitable starting point when utilizing SEM. According to Byrne (2010), CFA can be used to assess the reliability and validity of variables. Fornell and Larcker (1981) suggest that convergent validity can be statistically evaluated through Cronbach's Alpha reliability, factor loading, average variance extracted (AVE), and composite reliability (CR). Hair et al. (1998) emphasizes the importance of factor loadings above 0.50. In this study, all individual items exhibited factor loadings ranging from 0.697 to 0.935, all greater than 0.50 and frequently above 0.70.

As per recommendations from Fornell and Larcker (1981) and Hair et al. (1998), the AVE should be equal to or greater than 0.4, and the CR should be 0.70 or higher. Table 3 demonstrates that all estimates are significant when the CR value exceeds 0.7 and the AVE value exceeds 0.5. To assess the internal consistency of items within the construct, Cronbach's alpha was employed (Killingsworth et al., 2016). According to George and Mallery (2003) and Hair et al. (2010), a Cronbach's alpha value of 0.7 or above indicates valid measurement. In this study, every Cronbach's Alpha value exceeded 0.7, as shown in Table 3.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Teacher Self-efficacy (TS)	Park et al. (2016)	5	0.885	0.760-0.800	0.886	0.608
Job satisfaction (JS)	Skaalvik and Skaalvik (2017)	4	0.874	0.788-0.822	0.875	0.637
Streesors (ST)	Borg and Riding (1991)	4	0.875	0.773-0.857	0.876	0.639
Principal Leadership (PL)	Sehgal et al. (2017)	4	0.877	0.754-0.841	0.878	0.643
Supportive School Culture (SSC)	Sehgal et al. (2017)	4	0.876	0.778-0.820	0.876	0.638
Teacher Collaboration (TC)	Sehgal et al. (2017)	4	0.869	0.758-0.817	0.869	0.625
Emotional exhaustion (EE)	Etikan (2016)	4	0.872	0.769-0.827	0.873	0.632

Table 4 presents the metrics used to assess the indicators of good fit. The measurement indices used were CMIN/DF, GFI, AGFI, NFI, CFI, TLI, and RMSEA. All of these indices yielded statistical values from the CFA that exceeded the acceptable limits, indicating a satisfactory model fit.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/ DF	< 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012)	1.414
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.930
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.914
NFI	≥ 0.80 (Wu & Wang, 2006)	0.934
CFI	≥ 0.80 (Bentler, 1990)	0.980
TLI	≥ 0.80 (Sharma et al., 2005)	0.977
RMSEA	< 0.08 (Pedroso et al., 2016)	0.030
Model Summary		**In harmony with empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index, and RMSEA = Root mean square error of approximation.

Table 5 shows good discriminant validity. Compared to the factor correlations, the bigger value of AVE square roots indicated that all variables were significant.

Table 5: Discriminant Validity

	TS	JS	ST	PL	SSC	TC	EE
TS	**0.779**						
JS	0.541	**0.798**					
ST	0.365	0.321	**0.799**				
PL	0.439	0.372	0.215	**0.801**			
SSC	0.374	0.396	0.170	0.276	**0.798**		
TC	0.296	0.354	0.167	0.181	0.187	**0.790**	
EE	0.441	0.556	0.333	0.393	0.358	0.316	**0.794**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

This study used a structural Equation Model (SEM) to assess the data gathered. The benefits of SEM come in many forms. First, dependent connections might be investigated using SEM (Hair et al., 2010). Second, SEM looked at the haphazard connections between latent and observable variables. Third, random error in the observed variables was applied to get more precise measurement findings. Fourthly, it measured the hidden variable using a variety of indicators. Finally, rather than just testing hypotheses at the item level, it might also test them at the construct level (Hoyle, 2011).

Table 6 measures and illustrates the structural model's goodness of fit. CMIN/DF = 1.940, GFI = 0.901, AGFI = 0.884, NFI = 0.906, CFI = 0.925, TLI = 0.947, and RMSEA = 0.016 were the statistical results. All fit indices' values confirmed the model's fitness above the threshold for acceptability.

Table 6: Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values
CMIN/DF	< 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012)	1.940
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.901
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.884
NFI	≥ 0.80 (Wu & Wang, 2006)	0.906
CFI	≥ 0.80 (Bentler, 1990)	0.952
TLI	≥ 0.80 (Sharma et al., 2005)	0.947
RMSEA	< 0.08 (Pedroso et al., 2016)	0.046
Model Summary		**In harmony with Empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index, and RMSEA = Root mean square error of approximation.

4.4 Research Hypothesis Testing Result

Regression or normalized path coefficients quantify the strength of the relationship between the independent and dependent variables proposed in the hypothesis.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: ST→TS	0.281	7.133*	Supported
H2: PL→TS	0.411	8.886*	Supported

Hypothesis	(β)	t-Value	Result
H3: SSC→JS	0.156	3.857*	Supported
H4: TC→JS	0.143	3.529*	Supported
H5: TS→EE	0.352	6.324*	Supported
H6: EE→JS	0.332	6.754*	Supported
H7: TS→JS	0.143	3.529*	Supported

Note: * p<0.05
Source: Created by the author

As shown in Table 7, seven proposed hypotheses were supported. Teacher Self-efficacy was significantly driven by Streesors and Principal Leadership, respectively, and the path relationship to Teacher self-efficacy that had the greatest impact in **H2** was Principal Leadership. Principal Leadership had a standardized path coefficient of 0.411 with a t-value of 8.886* for Teacher Self-efficacy. This supports previous studies by Duyar et al. (2013), Gagné and Deci (2005), and Barber and Meyerson (2007).

Another important factor of teacher self-efficacy is Streesors, with a standardized path coefficient of 0.281 and a t-value of 7.133* in **H1.** Therefore, job satisfaction is influenced by the stress generated by teachers at work. This is consistent with the findings of Betoret (2009), Collie et al. (2012), and Skaalvik and Skaalvik (2010) that teacher self-efficacy is negatively affected by Streesors.

Regarding teachers' job satisfaction, it is strongly influenced by emotional exhaustion, followed by supportive school culture, Teacher self-efficacy, and teacher collaboration. The path relationship on job satisfaction is standardized path coefficient in **H6** is 0.332, t-value is 6.754*. Teachers' emotional exhaustion affects teachers' job satisfaction. This also supports previous studies by Devine and Hunter (2016), Xu et al. (2016), Brackett et al. (2010), Chen and Chen (2018), Lee et al. (2019), Hülsheger et al. (2013) and others.

Emotional exhaustion is directly affected by Teacher Self-efficacy. The standardized path coefficient of **H5** is 0.352, t-value is 6.324*. Emotional exhaustion is related to teachers' self-efficacy, which aligns with Brouwers and Tomic (2000), and Ilker et al. (2019) study.

The direct effect of Supportive school culture on job satisfaction is significant, with a standardized path coefficient of 0.156 and t-value of 3.857* for **H3,** which is in line with the findings of Chong and Kong (2012), Duyar et al. (2013), Shachar and Shmuelevitz (1997), Liu and Bellibas (2018), Rahmi and Mustafa (2022) that the stronger teachers perceive supportive school culture, the higher the job satisfaction.

Teacher Self-efficacy also significantly affected job satisfaction, with a standardized path coefficient of 0.143 and a t-value of 3.529* for **H7.** This is consistent with Betoret (2009), Skaalvik and Skaalvik (2010, 2011) studies.

Teacher collaboration directly affects job satisfaction, with a standardized path coefficient of 0.143 and a t-value of 3.529* for **H4.** This is in line with Garavan (2010), Goddard et al. (2015), and Liu and Bellibas (2018) studies. A culture of teacher collaboration is recommended in schools to create a more effective work environment conducive to improving teachers' job satisfaction.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

To the best of the knowledge of the findings of this study, this is the first study to investigate the self-efficacy and job satisfaction of primary and secondary school art teachers in China. This study aimed to synthesize and analyze the important factors affecting the self-efficacy and job satisfaction of primary and secondary school art teachers in Chengdu. The researcher proposed seven hypotheses in the conceptual framework to examine the factors affecting job satisfaction. After the questionnaire was developed and validated for reliability, it was distributed online to full-time art teachers in five districts of Chengdu City. Using the collected data, CFA was used to measure and test the validity and reliability of the research conceptual model. Scanning electron microscopy was used to analyze the factors affecting behavior and to explore the job satisfaction of full-time art teachers in Chengdu City. All seven hypotheses proposed were supported and proved to fulfill the research objectives.

The findings of this study can be summarized as follows：

Emotional exhaustion is the strongest predictor of teachers' job satisfaction, and the study by Xu et al. (2016) showed that emotional exhaustion has the greatest impact on all the variables that affect employees' job satisfaction. When an employee is emotionally exhausted, this is due to various work-related factors. Emotional exhaustion can make employees feel like their emotional reserves are depleted, significantly reducing job satisfaction. In addition, Emotional exhaustion, in turn, is strongly influenced by teacher self-efficacy, Brouwers and Tomic (2000) argued that in order to improve the teacher's emotional exhaustion in the workplace, one can try to improve the teacher's self-efficacy. The factors seen in the study that affect teacher self-efficacy are streesors and principal Leadership. Skaalvik and Skaalvik (2010) state that job burnout is related to school stressors. It is also associated with decreased teacher job satisfaction. Barber and Meyerson (2007) stated that increased teacher self-efficacy improves performance when competent school leaders interact with teachers. Therefore, establishing schools to create mechanisms and policies that enhance teacher self-efficacy can alleviate teachers' emotional exhaustion and thus increase teachers' job satisfaction.

Secondly, the antecedents that have a significant effect on the usefulness of job satisfaction are ranked as supportive school culture, teacher self-efficacy, and teacher collaboration are ranked. According to this study, a supportive school culture increases teacher satisfaction. It encourages them to share successes and difficulties and to respect each other's ideas. That is why school administrators should create such a supportive environment (Rahmi & Mustafa, 2022). Making teachers work in a better environment will make them feel that their work is more valuable and meaningful, thus having higher job satisfaction.

5.2 Recommendation

Streesors (ST), Principal Leadership (PL), and Supportive School Culture (SSC) were studied, Teacher Collaboration (TC), Teacher Self-efficacies (TS), and Emotional exhaustion (EE) on job satisfaction (JS) of elementary and middle school art teachers in five districts of Chengdu City. To obtain a picture of the job satisfaction of in-service elementary and middle school teachers in Chengdu city, all of the above key factors should be developed and promoted. This study found that teacher self-efficacies were the strongest predictor of teacher job satisfaction and emotional exhaustion. Teacher self-efficacy beliefs were moderately positively related to teacher job satisfaction. These results are consistent with social cognitive theory, which posits that self-efficacy is dominant in driving one's behavior by setting effortful goals and putting in extra effort to achieve them. Here, the two-way link is equally valid, as positive affective dispositions may produce a higher assessment of one's abilities (Bandura, 1997). Therefore, it is important to emphasize the moderating role of teachers' self-efficacy. This means that if teachers intentionally focus on regulating self-efficacy in their work, learn to find the stressors in their work to dissolve or transform them, and seek help from their key leaders to solve problems, and this can greatly enhance their self-efficacy. The higher their self-efficacy, the higher their job satisfaction. School principals and senior managers in the management of school operations should ensure that a supportive school culture is created in the workplace, building a work atmosphere of solidarity and cooperation among teachers, lowering their emotional exhaustion, and increasing their self-efficacy, which can improve their motivation and even enhance their job satisfaction.

This study explains the factors influencing teachers' job satisfaction in primary and secondary schools. It provides school and higher-level administrators with variables for identifying teachers' job satisfaction. It can then be applied to specify school management strategies, talent selection, and campus construction and development to build a more optimal work environment and cultivate more talents.

5.3 Limitation and Further Study

This study has some limitations that need to be noted, and the following are suggestions for further research. First, this study was conducted only with full-time art teachers in primary and secondary schools in Chengdu City, and teachers in five districts in Chengdu City were selected as the research subjects, which resulted in a limited scope and sample size. Second, the topic of this study is job satisfaction, and the multidimensionality of teachers' job satisfaction is related. The researcher used a scale with six dimensions, but other aspects of teachers' job satisfaction could be investigated. For example, factors include structure of learning goals, adequacy of resources, staff freedom, and experience as a school teacher. Exploring different influences may lead to different findings, improve the generalizability of the research model, and obtain more generalized results. Third, the survey was limited to teachers.

Further research could include students, parents, or management staff as respondents to understand their perceptions of teacher job satisfaction. In future studies, researchers can use experimental methods to control for other variables that may confound causality, such as defining a specific quality factor to observe the effect of this independent variable on causality-dependent behavioral intention. In addition, qualitative research can be added to understand better the job satisfaction of primary and secondary art teachers in Chengdu.

References

Ahin, U. (2011). The Effect of Instructional Leadership and Distributed Leadership on Teacher Self- efficacy and Job Satisfaction: Mediating Roles of Supportive School Culture and Teacher Collaboration. *Educational Management Administration & Leadership, 1*(2), 1-10.

Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education, 17*, 86-95. https://doi.org/10.1177/088840649401700203

Al-Mamary, Y. H., & Shamsuddin, A. (2015). Testing of the technology acceptance model in context of yemen. *Mediterranean Journal of Social Sciences, 6*(4), 268-273. https://doi.org/10.5901/mjss.2015.v6n4s1p268

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411-423. https://doi.org/10.1037/0033-2909.103.3.411

Awang, Z. (2012). *Structural equation modeling using AMOS graphic* (1st ed.). Penerbit Universiti Teknologi MARA.

Bandura, A. (1997). *Self-efficacy: The exercise of control* (1st ed.). Freeman.

Bandura, A. (2006). *Adolescent development from an agentic perspective. In F. Pajares, & T. Urdan (Eds.), Self-efficacy beliefs of adolescents* (pp. 1e43). Information Age Publishing.

Barber, M. E., & Meyerson, D. (2007). The gendering of school leadership: reconstructing the principalship. School leadership study: developing successful principals. *The Annual Meeting of the American Educational Research Association, Stanford Educational Leadership Institute, 1*(2), 9-13.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246. https://doi.org/10.1037/0033-2909.107.2.238

Betoret, F. D. (2009). Self-efficacy, school resources, job stressors and burnout among Spanish primary and secondary school teachers: A structural equation approach. *Educational Psychology*, *29*, 45-68.

Betoret, F. D., & Artiga, A. G. (2010). Barriers perceived by teachers at work, copingstrategies, self-efficacy and burnout. *The Spanish Journal of Psychology, 13*, 637-654. http://dx.doi.org/10.1017/S1138741600002316.

Borg, M. G., & Riding, R. J. (1991). Occupational Stress and Satisfaction in Teaching. *British Educational Research Journal, 17,* 263-281. http://dx.doi.org/10.1080/0141192910170306

Brackett, M., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools, 47*(4), 406-417. https://doi.org/10.1002/pits.20478

Brouwers, A., & Tomic, W. (2000). A longitudinal shttps://doi.org/10.1002/pits.20478tudy of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, *16*(2), 239-253. http://dx.doi.org/10.1016/S0742-051X(99)00057-8.

Buchanan, J. (2010). May I be excused? Why teachers leave the profession. *Asia Pacific Journal of Education*, *30*, 199-211. http://dx.doi.org/10.1080/02188791003721952.

Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Routledge Taylor & Francis Group.

Caprara, G. V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy Beliefs as Determinants of Teachers' Job Satisfaction. *Journal of Educational Psychology*, *95*(4), 821-832. https://doi.org/10.1037/0022-0663.95.4.821

Caprara, G. V., Barbaranelli, C., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, *44*(6), 473-490. https://doi.org/10.1016/j.jsp.2006.09.001

Carpenter, D. (2015). School culture and leadership of professional learning communities. *International Journal of Educational Management, 29*(5), 682-694.

Chen, S.-C., & Chen, C.-F. (2018). Antecedents and consequences of nurses' burnout leadership effectiveness and emotional intelligence as moderators. *Management Decision, 56*(4), 777-792.

Chong, W. H., & Kong, C. A. (2012). Teacher collaborative learning and teacher self-efficacy: The case of lesson study. *The Journal of Experimental Education. 80*(3), 263-283. https://doi.org/10.1080/00220973.2011.596854

Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *The Journal of Experimental Education, 60*(4), 323-337. https://doi.org/10.1080/00220973.1992.9943869

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, *104*, 1189-1204. http://dx.doi.org/10.1037/a0029356.

Devine, K., & Hunter, K. (2016). PhD student emotional exhaustion: the role of supportive supervision and self-presentation behaviors. *Innovations in Education and Teaching International, 54*(4), 335-344. https://doi.org/10.1080/14703297.2016.1174143

Duyar, I., Gumus, S., & Bellibas, M. S. (2013). Multilevel analysis of teacher work attitudes. *International Journal of Educational Management*, *27*(7), 700-719. https://doi.org/10.1108/ijem-09-2012-0107

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Ewen, R. B., Smith, P. C., Hulin, C. L., & Locke, E. A. (1976). An empirical test of the Herzberg two-factor theory. *Job Satisfaction-A Reader*, *1*(2) 56-66. https://doi.org/10.1007/978-1-349-02701-9_4

Fernet, C., Guay, F., & Austin, S. (2012). Predicting intraindividual changes in teacher burnout: The role of perceived school environment and motivational factors. *Teaching and Teacher Education*, *28*, 514-525. http://dx.doi.org/10.1016/j.tate.2011.11.013.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331-362. https://doi.org/10.1002/job.322

Garavan, T. N. (2010). Human Resource Development: Theory and Practice. *Journal of European Industrial Training*, *34*(6), 579-581. https://doi.org/10.1108/03090591011061257

George, D., & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference. 11.0 Update* (4th ed.). Allyn & Bacon.

Gilbert, R. B., Adesope, O. O., & Schroeder, N. L. (2014). Efficacy Beliefs, Job Satisfaction, Stress and Their Influence on the Occupational Commitment of English-Medium Content Teachers in the Dominican Republic. *Educational Psychology, 34,* 876-899. http://dx.doi.org/10.1080/01443410.2013.814193

Glickman, C. D., & Tamashiro, R. T. (1982). A comparison of first-year, fifth-year, and former teachers on efficacy, ego-development, and problem-solving. *Psychology in the Schools*, *19,* 558-562. https://doi.org/10.1002/1520-6807(198210)19:4<558::aid-pits2310190426>3.0.co;2-f

Goddard, R., Goddard, Y., & Miller, R. (2015). A Theoretical and Empirical Analysis of the Roles of Instructional Leadership, Teacher Collaboration, and Collective Efficacy Beliefs in Support of Student Learning. *American Journal of Education*, *6*(8), 501-530. https://doi.org/10.1086/681925

Goddard, Y., Goddard, R., & Tschannen-Moran, M. (2007). A Theoretical and Empirical Investigation of Teacher Collaboration for School Improvement and Student Achievement in Public Elementary Schools. *Teachers College Record, 109*(4),877-896. 10.1177/016146810710900401.

Grandey, A. A. (2003). When 'the show must go on': surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Journal of Management*, *46*(1), 86-96. https://doi.org/10.2307/30040678

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis* (1st ed.). Prentice-Hall.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). *Multivariate Data Analysis* (6th ed.). Prentice Hall.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*, 495-513. http://dx.doi.org/10.1016/j.jsp.2005.11.001.

Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity* (1st ed.). Teachers College Press.

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work* (1st ed.). John Wiley.

Hong, X. M. (2008). Focus on and contribute to teachers' self-belief--the inspiration from self-efficacy. *Educational science, 3*(1), 79-82.

Hoppock, R. (1935). Starting a guidance program. *The Vocational Guidance Magazine*, *13*(4), 344-347. https://doi.org/10.1002/j.2164-5884.1935.tb00669.x

Hoyle, R. H. (2011). *Structural equation modeling for social and personality psychology* (1st ed.). Sage.

Hülsheger, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of mindfulness at work: the role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology, 98*(2), 310-325. https://doi.org/10.1037/a0031313

Ilker, D., Mustafa, A.-S., & Saad, A. J. (2019). Female doctors are more emotionally exhausted than their male counterparts in Iraq, *Journal of Ideas in Health, 2*(1), 75-79.

Imants, J., & Zoelen, A. V. (1995). Teachers' sickness absence in primary schools, school climate and teachers' sense of efficacy. *School Organization*, *15*(1), 77-86. https://doi.org/10.1080/0260136950150109

Jackson, C. K., & Bruegmann, E. (2009). Teaching Students and Teaching Each Other: The Importance of Peer Learning for Teachers. *American Economic Journal: Applied Economics, 1*(4), 85-108. https://doi.org/10.1257/app.1.4.85

Khourey-Bowers, C. (2005). Emergent Reflective Dialogue among Preservice Teachers Mediated through a Virtual Learning Environment. *Journal of Computing in Teacher Education, 2*(1), 1-10.

Killingsworth, B., Xue, Y., & Liu, Y. (2016). Factors influencing knowledge sharing among global virtual teams. *Team Performance Management, 22*(5/6), 284-300. https://doi.org/10.1108/TPM-10-2015-0042

Klassen, R., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context. *Contemporary Educational Psychology*, *36*, 114-129. https://doi:10.1016/j.cedpsych.2011.01.002.

Klassen, R., Wilson, E., & Wongsri, N. (2013). Preservice teachers' work stress, self-efficacy, and occupational commitment in four countries. *European Journal of Psychology of Education, 28,* 1289-1309. https:// doi:10.1007/s10212-012-0166-x.

Lee, Y. H., Lee, S. H. B., & Chung, J. Y. (2019). Research on how emotional expressions of emotional labor workers and perception of customer feedbacks affect turnover intentions: emphasis on moderating effects of emotional intelligence. *Frontier In Psychology, 9,* 2526-2547. https://doi.org/10.3389/fpsyg.2018.02526

Leithwood, K. (2005). *Educational Leadership A Review of the Research. Laboratory for Student Success (LSS*) (1st ed.). The Mid-Atlantic Regional Educational Laboratory.

Leung, D. Y. P., & Lee, W. W. S. (2006). Predicting intention to quit among Chinese teachers: Differential predictability of the component of burnout. *Anxiety, Stress, & Coping*, *19*, 129-141. http://dx.doi.org/10.1080/10615800600565476.

Lindqvist, P., & Nordanger, U. K. (2006). Who dares to disconnect in the age of uncertainty? Teachers' recesses and "off-the-clock' work. *Teachers and Teaching: Theory and Practice*, *12*, 623-637. http://dx.doi.org/10.1080/13540600601029637.

Liu, Y., & Bellibas, M. S. (2018). School factors that are related to school principals' job satisfaction and organizational commitment. *International Journal of Educational Research*, *90*, 1-19. https://doi.org/10.1016/j.ijer.2018.04.002

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual* (3ed). Mountain View.

Megan Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*, 783-805.

Ngang, T. K. (2011). The effect of transformational leadership on school culture in Male' primary schools Maldives. *Procedia – Social and Behavioral Sciences*, *30*, 2575-2580.

Park, M.-H., Dimitrov, D. M., Das, A., & Gichuru, M. (2016). The teacher efficacy for inclusive practices (TEIP) scale: Dimensionality and factor structure. *Journal of Research in Special Educational Needs, 16*(1), 2-12. https://doi.org/10.1111/1471-3802.12047

Pedroso, C. B., Silva, S. L., & Tate, W. L. (2016). Sales and Operations Planning (S&OP): insights from a multi-case study of Brazilian organizations. *International Journal of Production Economics, 182,* 213-229. http://dx.doi.org/10.1016/j.ijpe.2016.08.035

Rahmi, B., & Mustafa, E. (2022). *The Impact of a Supportive School Culture and of Teachers' Professional Collaboration, Work Environment Satisfaction, and Professional Satisfaction on Student Motivation* (1st ed.). Akademisyen Yayınevi

Sehgal, P., Nambudiri, R., & Mishra, S. K. (2017). Teacher effectiveness through self-efficacy, collaboration, and principal leadership. *International Journal of Educational Management, 31*(4), 505-517. https://doi.org/10.1108/ijem-05-2016-0090

Shachar, H., & Shmuelevitz, H. (1997). Implementing cooperative learning, teacher collaboration and teachers' sense of efficacy in heterogeneous junior high schools. *Contemporary Educational Psychology, 22*(1), 53-72. https://doi.org/10.1006/ceps.1997.0924

Sharma, G. P., Verma, R. C., & Pathare, P. (2005). Mathematical modeling of infrared radiation thin layer drying of onion slices. *Journal of Food Engineering, 71*(3), 282-286. https://doi.org/10.1016/j.jfoodeng.2005.02.010

Sica, C., & Ghisi, M. (2007). The Italian versions of the Beck Anxiety Inventory and the Beck Depression Inventory-II: Psychometric properties and discriminant power. In M.A. Lange (Ed.), *Leading - Edge Psychological Tests and Testing Research* (pp. 27-50). Nova.

Simha, A., Elloy, D. F., & Huang, H.-C. (2014). The moderated relationship between job burnout and organizational cynicism. *Management Decision, 52*(3), 482-504. https://doi.org/10.1108/md-08-2013-0422

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, *99*, 611-625. http://dx.doi.org/10.1037/0022-0663.99.3.611.

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, *26*, 1059-1069. http://dx.doi.org/10.1016/j.tate.2009.11.001.

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, *27*, 1029-1038. http://dx.doi.org/10.1016/j.tate.2011.04.001.

Skaalvik, E. M., & Skaalvik, S. (2017). Teacher Stress and Teacher Self-Efficacy: Relations and Consequences. In T. M. McIntyre, S. E. McIntyre, & D. J. Francis (Eds.), *Educator Stress: An Occupational Health Perspective* (pp. 101-125). Springer. https://doi.org/10.1007/978-3-319-53053-6_5

Smithers, A., & Robinson, P. (2003). *Factors affecting teachers' decisions to leave the profession.* http://dera.ioe.ac.uk/4759/1/RR430.pdf.

Soper, D. (2006). *Calculator: A-priori Sample Size for Structural Equation Models.* Daniel Soper. https://www.danielsoper.com/statcalc/calculator.aspx?id=89

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2,* 53-55. https://doi.org/10.5116/ijme.4dfb.8dfd

Trentham, L., Silvern, S., & Brogdon, R. (1985). Teacher efficacy and teacher competency ratings. *Psychology in the Schools*, *22*(3), 343-352. https://doi.org/10.1002/1520-6807 (198507)22:3<343::aid-pits2310220317>3.0.co;2-0

Weiss, H., & Cropanzano, R. (1996). *Affective Events Theory: A Theoretical Discussion of The Structure, Cause and Consequences of Affective Experiences at Work* (1st ed.). *Research in Organizational Behavior*.

Wiley, S., & Evans, L. (1997). Addressing problems of conceptualization and construct validity in researching teachers' job satisfaction. *Educational Research*, *39*(3), 319-331. https://doi.org/10.1080/0013188970390307

Wu, J. H., & Wang, Y. M. (2006). Measuring KMS success: A respecification of the DeLone and McLean's model. *Information and Management, 43*(6), 728-739. https://doi.org/10.1016/j.im.2006.05.002

Xu, S., Martinez, L. R., Hoof, H. V., Eljuri, M. I., & Arciniegas, L. (2016). Fluctuating emotions: relating emotional variability and job satisfaction. *Journal of Applied Social Psychology*, *46*(11), 617-626. https://doi.org/10.1111/jasp.12390