Exploring the relationship between teacher job satisfaction and professional development in urban schools during a pandemic

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Article Info

ABSTRACT

Job satisfaction and professional development are the talks of teachers in facing the challenges of 21st-century learning, where they must be able to adapt to the progress and development of information and communication in technology. Therefore, this article aims to analyze teacher job satisfaction, professional development, and the interaction between the two during the pandemic. A total of 232 public and private school teachers in urban areas were used as research samples. The sampling technique used a random technique. The research used an instrument developed and validated, then distributed through the principal and school supervisor, and the data were analyzed using the correlation technique. During the pandemic, the results revealed a high level of job satisfaction for state Islamic school teachers and a low level of job satisfaction for private Islamic school teachers, as well as a high level of professional development in both public and private Islamic schools and a moderate positive correlation between teacher job satisfaction and professional development in urban schools. Therefore, teachers should develop and carry out professional development in facing the challenges of 21st-century learning.

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1. INTRODUCTION

The COVID-19 epidemic that has ravaged the country has had a tremendous influence on human civilization, especially schooling [1]–[3]. It prevents and spreads the COVID-19 virus and is challenging in conducting 21st-century learning. Education and teaching that previously took place in classrooms must now be done online [4]–[7] via Zoom, Google Meet [8], Google Class [9], YouTube [10], WhatsApp group [11], Edmodo [12], and other platforms. This change in education and teaching patterns must be balanced with the ability of adaptive human resources (teachers) and easy access to the internet network. However, some schools experience problems in conducting online learning. However, in some schools, there are obstacles to conducting online learning. Kerimbayev, Akramova, and Suleimenova [13] reported that school unpreparedness causes problems in online learning. The availability of computer equipment, difficulties in accessing the internet, the high cost of internet quotas, the low ability of teachers to apply information and

communication in technology (ICT)-based media, and the unpreparedness of teachers in online teaching are other reasons. Therefore, mastery of ICT is essential for teachers to narrow the digital divide in developing countries [14], [15].

To overcome the problems that plagued the world of education –especially in the aspects of education and teaching– the government made breakthroughs and concrete steps in teacher professional development through various platforms "Merdeka Mengajar" [16], [17], "Guru Berbagi", "Guru Penggerak", and "Madrasah Reform" [18]. Moreover, curriculum simplification was accomplished by adopting an emergency curriculum [19]–[21] so that schools may decide subject content based on the requirements of pupils. It indicates that the learning procedure implemented by instructors throughout the epidemic becomes more adaptable. This flexibility, however, poses a dilemma in that instructors who have not participated in professional development activities would be restricted and left behind, negatively impacting their learning process. Furthermore, this issue is suspected of contributing to low work satisfaction at school. Although some research reports on factors that cause job satisfaction, such as intrinsic motivation [22], entrepreneurial behavior [23], and teacher performance [24], no research has been found that explores the interaction of professional development with job satisfaction. This research is significant because the teacher's profession must continue to be developed based on the needs that lead to job satisfaction.

Numerous additional studies have found a link between teacher job satisfaction and principal leadership [25], competency [26], engagement [27], and teaching performance [28]. In addition, job satisfaction also interacts with work motivation [28]. A person's job satisfaction is related to work motivation in an organization, including at school. Research results from Iwu *et al.* [29], [30] on 547 teachers in 23 schools in Nigeria revealed that teacher salaries, growth opportunities, and responsibilities contribute to teacher job satisfaction. Prior research discovered a direct relationship between teacher job satisfaction and the principal's leadership, competency, engagement, teaching performance, work motivation, compensation, growth possibilities, and responsibility. Based on these findings, no research reveals the interaction between teacher job satisfaction and professional development. In theory and previous research, teacher professional development is significant because it is related to the quality of education where quality education is formed. There will be job satisfaction for teachers who teach in a school.

A high degree of work satisfaction among teachers leads to better education since their performance improves [30]–[33]. Therefore, efforts to increase teacher job satisfaction must always be carried out by the principal as a leader in the school because it has been empirically proven to impact the quality of education in schools. However, based on the results of previous studies, no relationship has been found between teacher job satisfaction and professional development. Currently, efforts to develop teacher professionalism are being carried out by the government of the Republic of Indonesia through various programs, such as the "Teacher Motivator" program initiated by the Ministry of Education and Culture and the "Madrasah Reform" program initiated by the Ministry of Religion. Based on these issues, the purpose of this paper is to examine the degree of teacher job satisfaction, professional growth, and their relationship in urban schools during the pandemic.

2. RESEARCH METHOD

This study employed a survey method. The sampling technique used was random. The instruments used were developed and validated, then distributed to school principals and school supervisors—analysis of research data using correlation techniques.

2.1. Respondent

The study included 404 instructors from 20 public and private high schools dispersed over seven sub-districts in South Tangerang City, Indonesia. Simple random sampling was utilized in the sample process. Questionnaires were distributed to teachers with the assistance of school principals and supervisors over two weeks, and 232 teachers (57%) filled out the research questionnaire. In Slovin's opinion, the sample size of this study is representative and can be used as a quantitative research sample.

2.2. Research instruments

The research instrument used a Likert Scale questionnaire with five answer choices. The questionnaire development was based on a study of the theories that support the research variables, and then the indicators were determined. Teacher job satisfaction was developed based on Herzberg's theory [34], which found that job satisfaction was influenced by motivation and hygiene factors. In developing research instruments, the authors add three indicators of patience, gratitude, and sincerity as new indicators that need to be measured and refer to job satisfaction from an Islamic perspective. Therefore, the variable indicators of teacher job satisfaction in the research include salary, work, exemplary behavior, collaboration with

colleagues, promotions, patience, gratitude, and sincerity. The professional development instrument was created using Gilley, Eggland, and Gilley's hypothesis [35]. Indicators of professional development variables include teaching activities, curriculum preparation, use of learning media, technology, giving examples, and personality. The conceptual framework used in this research is illustrated in Figure 1.
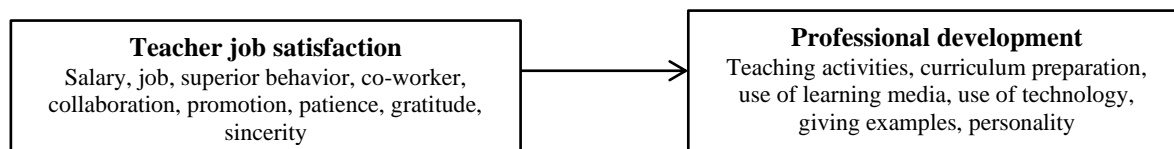
Teacher job satisfaction	Professional development
Salary, job, superior behavior, co-worker, collaboration, promotion, patience, gratitude, sincerity	Teaching activities, curriculum preparation, use of learning media, use of technology, giving examples, personality

Figure 1. Conceptual framework of teacher job satisfaction and professional development

A total of 30 items of validated statements were determined based on the indicators in each research variable. The instrument validity test uses content validity and criteria, while reliability uses Cronbach's alpha based on Allen and Yen [36]. Table 1 shows the results of the validity and reliability tests.

The findings of the investigation of the validity and reliability of the research instruments employed in this study are shown in Table 1. According to the table, the instruments utilized in the variables and indicators of this study are valid and trustworthy. As a consequence of the aforesaid test findings, this instrument can be utilized.

Table 1. Test results of the research instrument

Variable	Indicators	Item	Pearson correlation	Cronbach's alpha	Decision
Techer's job satisfaction	Salary	1-4	0.730	0.822	V, R
	Job	5-8	0.739	0.799	V, R
	Superior behavior	9-12	0.746	0.788	V, R
	Co-worker collaboration	13-16	0.776	0.758	V, R
	Promotion	17-20	0.775	0.711	V, R
	Patience	21-24	0.774	0.738	V, R
	Gratitude	25-27	0.773	0.899	V, R
	Sincerity	28-30	0.832	0.726	V, R
Professional development	Teaching activities	1-5	0.718	0.756	V, R
	Curriculum preparation	6-10	0.794	0.763	V, R
	Use of learning media	11-15	0.757	0.766	V, R
	Use of technology	16-20	0.711	0.869	V, R
	Giving examples	21-25	0.725	0.766	V, R
	Personality	26-30	0.704	0.790	V, R

Description: V=Valid; R=Reliable

2.3. Data analysis

The Product Moment correlation approach is used to analyze data in order to determine the strength and direction of the association between two linear variables. Prior to doing the data analysis test, the study data was subjected to preparatory tests such as normality, homogeneity, and linearity. The latent variables in this study were then predicted and explained using SEM analysis in SmartPLS 3.2.9.

3. RESULTS AND DISCUSSION
3.1. Results

Table 2 displays demographic information from 232 public and private school teachers in metropolitan regions. Gender (male and female) and age (21 years, 21-25 years, 26-30 years, 31-35 years, 36-40 years, 41-45 years, 46-50 years, and >50 years) were used to categorize respondents. According to Table 2, the responses were dominated by women, with as many as 133 instructors (57.33%), followed by 99 male teachers (42.67%). Additionally, the chart reveals that female teachers had higher levels of work satisfaction than male instructors. There were 150 female instructors extremely satisfied with their jobs and 24 are very satisfied with their jobs. However, 74 male instructors are extremely satisfied with their jobs and 18 are very satisfied with their jobs. As a result, this study discovered that women had a very high degree of job satisfaction. Furthermore, the employment satisfaction of teachers in urban schools varies substantially depending on their age.

Table 2. Demographics of respondents

Demographics		Teacher job satisfaction					Freq (%)
		Very low (%)	Low (%)	Normal (%)	High (%)	Very high (%)	
Gender	Man	0 (0.00%)	2 (0.86%)	5 (2.16%)	74 (31.90%)	18 (7.76%)	99 (42.67%)
	Women	0 (0.00%)	0 (0.00%)	4 (1.72%)	105 (45.26%)	24 (10.34%)	133 (57.33%)
Age	<21 years	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.43%)	0 (0.00%)	1 (0.43%)
	21-25 years	0 (0.00%)	0 (0.00%)	2 (0.86%)	31 (13.36%)	4 (1.72%)	37 (15.95%)
	26-30 years	0 (0.00%)	0 (0.00%)	2 (0.86%)	17 (7.33%)	8 (3.45%)	27 (11.64%)
	31-35 years	0 (0.00%)	0 (0.00%)	0 (0.00%)	30 (12.93%)	6 (2.59%)	36 (15.52%)
	36-40 years	0 (0.00%)	1 (0.43%)	1 (0.43%)	20 (8.62%)	7 (3.02%)	29 (12.50%)
	41-45 years	0 (0.00%)	0 (0.00%)	3 (1.36%)	27 (11.64%)	6 (2.59%)	36 (15.52%)
	46-50 years	0 (0.00%)	1 (0.43%)	0 (0.00%)	22 (9.48%)	6 (2.59%)	29 (12.50%)
	>50 years	0 (0.00%)	0 (0.00%)	1 (0.43%)	31 (13.36%)	5 (2.16%)	37 (15.95%)

Nevertheless, teacher work satisfaction throughout the epidemic was high or extremely high. It indicates that, despite the fact that the COVID-19 epidemic has reached the country, teacher job satisfaction in urban schools remains high. Table 3 shows the degree of teacher job satisfaction and professional growth among urban teachers.

Table 3. Level of teacher job satisfaction and professional development

Variable and indicators	Mean	Std. Deviation	Criteria
Techer's job satisfaction	110.30	14.16	High
Salary	13.12	3.21	High
Job	14.53	2.31	High
Superior behavior	14.06	2.62	High
Co-worker collaboration	14.48	2.51	High
Promotion	13.50	2.77	High
Patience	15.17	2.47	Very high
Gratitude	12.94	2.02	Very high
Sincerity	12.50	1.90	Very high
Professional development	106.11	11.58	High
Teaching activities	18.79	2.55	High
Curriculum preparation	17.82	2.68	High
Use of learning media	16.78	2.99	High
Use of technology	19.04	2.84	Very high
Giving examples	17.17	2.41	High
Personality	16.51	2.27	High

Based on Table 3, it can be seen that the average job satisfaction variable for public and private school teachers in urban areas is 110.30 and the standard deviation is 14.16 in the high category. Likewise, the professional development variable, which obtained an average of 106.11 and a standard deviation of 11.58, was categorized as high. In the teacher job satisfaction variable, three indicators are categorized as very high: patience, gratitude, and sincerity. Meanwhile, only technical indicators are categorized as very high in the professional development variable. Empirically, it can be concluded that the job satisfaction of urban school teachers and professional development are both in the high category. The interaction of teacher job satisfaction and professional development variables and the indicators that support it can be seen in Figure 2.

The variable of teacher job satisfaction is influenced by eight factors: salary, job, superior behavior, co-worker collaboration, promotion, patience, gratitude, and sincerity. Based on Figure 2, the indicator interaction is obtained for each variable. A robust correlation is shown by the honesty indicator of 0.832. In contrast, the other seven indicators, salary, job, superior behavior, co-worker collaboration, promotion, patience, and gratitude, show a strong correlation. Meanwhile, six indicators interact with professional development variables: teaching activities, curriculum preparation, use of learning media, technology, giving examples, and personality. The interaction of the six indicators shows a strong interaction. In addition, the teacher job satisfaction variable also correlates to the professional development variable of 0.382 with an R Square of 0.146. The interaction level of the teacher's job satisfaction variable with the professional development variable is low.
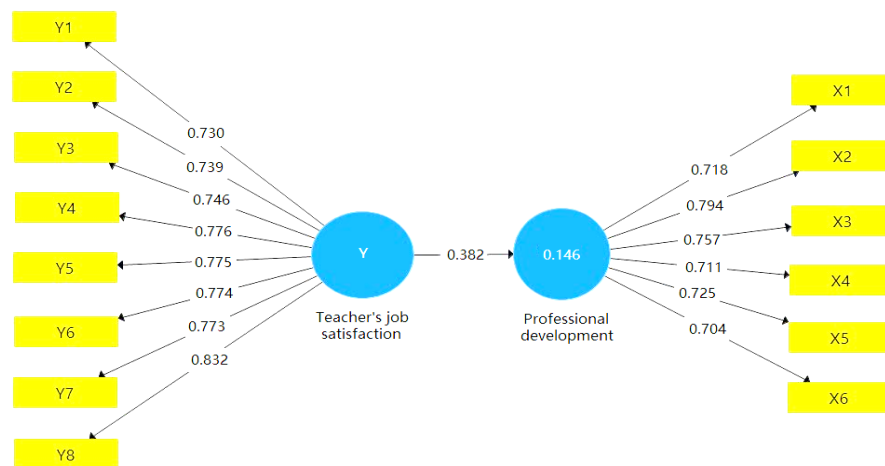
Figure 2. Partial least squares-structural equation modeling on the interaction between relationship between teacher job satisfaction and professional development

3.2. Discussion

According to this study, women are more satisfied with their jobs than males. This conclusion supports Yu and Choe's finding [37] that males cannot explain higher work satisfaction than women. Kaiser [38] also revealed that women's high level of job satisfaction is due to the fast access and labor market processes. However, Aydin, Uysal, and Sarier [39] studied 11 theses and found that teacher job satisfaction in Turkey favors males. Sloane and Williams [40] also refute the concept that women are more satisfied with their jobs than males. In summary, men have higher job satisfaction levels than women [39], [40]. This difference is very likely to occur because the sample of this study is dominated by female teachers (57%), meaning that women dominate in a research sample and may dominate the results given. Gender differences are reduced among highly educated workers [37], thus allowing for more g ender disparities in job satisfaction.

The COVID-19 epidemic has had a significant influence on education, particularly in Indonesia. To break the chain of viral dissemination, the large-scale social restriction regulations need instructors to be allowed to teach from home online. It affects their job satisfaction. This survey found that teachers were quite satisfied with their jobs during the epidemic. This finding strengthens the research of Hashim et al. [41] that employees who work at home have a high level of satisfaction (87.1%). However, this is different from Namli and Yücekaya [42], which stated that most physical education teachers did not get job satisfaction. Furthermore, according to Suganya and Sankareshwari [43], studies on teacher work satisfaction during the COVID-19 epidemic show that teacher satisfaction is low. It is logical given that teachers are used to face-to-face instruction with their students. This difference reinforces the theory that online learning by teachers detracts from their job satisfaction [43]–[45].

Teacher job satisfaction in urban areas shows a high level. It is due to the readiness of teachers in urban areas to face online learning, which has implications for their satisfaction. Piaget's theory [46] follows the teacher's task to understand how students understand intellectual development and determine their cognitive activities. According to Piaget, there were three elements affect readiness: i) Physical readiness, including nerves and muscles; ii) Psychological, among others, free from emotional conflicts; and iii) Experience, relating to previously learned skills. As a result, instructors are required to be better prepared when it comes to arranging the learning process. This finding is reinforced by the study of Green and Muñoz [47] that teacher job satisfaction is influenced by readiness, leadership, independence, time, and benefits. Other factors that influence teacher job satisfaction are motivation [22], [26], [28], [48], the principal's transformational leadership [49]–[52], and the principal's support [53]–[55].

In addition, the professional development of teachers in urban areas also shows a high level. It suggests that instructors in cities have been able to adjust to changing conditions. The existence of an online learning community has supported the professional development process of today's teachers [56]. According to Tanang and Abu [57], the professional development of teachers must be supported by policies, finances, infrastructure, and morals. The high level of professional development of teachers in urban areas is because the income (salary) received each month differs from those in rural areas. Financial factors can make it easier for teachers to access and develop their profession. It agrees with Harjanto et al. [58] that professional improvement can be made through privately sponsored programs.

The interaction of professional development with teacher job satisfaction is also significant, although the interaction is in a low category. The honesty aspect shows a robust correlation so that the principal can consider this aspect in building teacher job satisfaction. According to Arifin [26], honesty is one aspect that must be prepared in building a school culture. In addition, there are aspects of integrity, identity, and discipline that can create teacher job satisfaction. Sopova [59] demonstrated that academic honesty is a moral and ethical concept that all educators should cultivate in the academic environment in order to rejuvenate the education system. Thus, it can be stated that honesty is an aspect of teacher job satisfaction with a very high level of correlation, so it is believed to increase job satisfaction.

4. CONCLUSION

The study concluded that teacher job satisfaction at Islamic state schools was higher than at private Islamic schools during the pandemic. Levels of professional development and teacher job satisfaction are high in public and private Islamic schools. In addition, a significant positive interaction is formed between teacher job satisfaction and professional development. Professional development should continue to be developed periodically and carried out by teachers in facing the challenges of 21st-century learning. The study results indicate an interaction between aspects and the variables that form them. It was also found that honesty is one aspect that needs to be considered in building teacher job satisfaction. The research suggests that principals reinforce honesty which is empirically proven to affect teacher job satisfaction.

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