



## The Relationship Between Job Satisfaction and Work Stress Among Teachers

Khaerun Nisa Febriyanti<sup>1</sup>, Arum Ernanti Mulyaningtyas<sup>1</sup>, Astrid Widajati Sulistomo<sup>1</sup>

<sup>1</sup>Program Studi Pendidikan Dokter, Fakultas Kedokteran, Universitas Muhammadiyah Prof. Dr. Hamka, Indonesia

\*Corresponding Author: Khaerun Nisa Febriyanti  
E-mail: [icakhaerun546@gmail.com](mailto:icakhaerun546@gmail.com)



### Article Info

#### Article history:

Received 20 August 2026

Received in revised form 17 September 2026

Accepted 10 October 2026

#### Keywords:

Job Satisfaction

Work Stress

Teachers

Job Satisfaction Survey

Occupational Health

### Abstract

Work stress is a common occupational health problem among teachers and may affect psychological well-being and the quality of teaching. One factor suspected to be associated with work stress is job satisfaction. This study aimed to analyze the relationship between job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City. This study employed a quantitative design with a cross-sectional approach. The study population consisted of 96 active teachers from both schools, with 93 teachers meeting the study criteria and participating through total sampling. Data were collected using a respondent characteristics questionnaire, the Job Satisfaction Survey (JSS) to measure job satisfaction, and the Job Stress Scale to measure work stress. Data analysis included univariate and bivariate analyses using the Chi-Square test at a 95% significance level. The results showed that 39.8% of respondents had low job satisfaction, 25.8% were categorized as ambivalent, and 34.4% had high job satisfaction. Most respondents (65.6%) experienced low work stress, while 34.4% experienced high work stress. Bivariate analysis revealed a significant relationship between job satisfaction and work stress ( $p < 0.001$ ; OR = 8.27; 95% CI: 3.06–22.39), indicating that teachers with low job satisfaction had a higher risk of experiencing work stress than those with high job satisfaction. In addition, age, gender, and teaching workload were significantly associated with work stress. The study concludes that improving job satisfaction through improvements in the work environment, reward systems, organizational communication, and workload management is an important strategy for reducing work stress and enhancing teachers' well-being.

## Introduction

Work stress is one of the most common occupational health problems experienced by professional workers, including teachers (de Aguiar Bandeira et al., 2026; Cornejo et al., 2026; Hasnafiah et al., 2026). The World Health Organization (WHO) recognizes work-related stress as one of the major risk factors for mental health problems that can affect productivity, quality of life, and individual performance. Teachers are among the occupational groups at high risk of experiencing stress because they face complex job demands, ranging from teaching and learning activities, administrative tasks, and assessment to responsibilities for supporting students' social and emotional development (Falebita et al., 2026; Mu et al., 2026; Chen et al., 2025). Various studies have reported that the global prevalence of work stress among teachers ranges from 20% to 30%, with a tendency to increase as professional demands and changes in

the education system intensify (Metrailler & Clark, 2024; WHO, 2022; Creagh et al., 2025; Hatfield, 2025).

In Indonesia, work stress among teachers has become an increasingly important issue in line with growing administrative workloads, curriculum changes, the use of educational technology, and demands to achieve educational performance indicators. The Indonesian Mental Health Status Survey conducted by the Ministry of Health indicates that educators are among the occupational groups vulnerable to psychological problems arising from work-related pressures. In addition, Ma et al. (2023) reported that approximately 45% of teachers in Indonesia experienced mild to moderate work stress, while approximately 18% experienced severe work stress. These findings indicate that work stress among teachers is an occupational health problem that requires attention because it may affect the quality of teaching, teachers' psychological health, and the overall quality of education (Ma et al., 2023; Sha & Chang, 2025; Ghasemi, 2025).

Junior high school (SMP) teachers have distinct occupational characteristics compared with teachers at other educational levels. Junior high school students are in a transitional stage from childhood to adolescence, characterized by considerable biological, psychological, emotional, and social changes (Sari et al., 2026; de Carvalho et al., 2025; Uktamovna, 2025). During this developmental phase, teachers are not only responsible for delivering instructional content but also face various challenges in managing student behavior, resolving conflicts among students, providing psychosocial support, and maintaining a conducive learning environment. The complexity of these responsibilities may result in relatively greater emotional demands, making junior high school teachers more vulnerable to work stress than teachers at other educational levels (Iskandar & Priyana, 2024; Mohamad Zaki Hardi et al., 2025).

Various studies have shown that work stress among teachers is influenced by both organizational and individual factors (Marcedula et al., 2026; Chen et al., 2023; Roloff et al., 2022). One of the psychosocial factors most consistently associated with work stress is job satisfaction. Job satisfaction reflects the extent to which individuals experience positive feelings toward their work, influenced by aspects such as the work itself, rewards, relationships with colleagues, career development opportunities, working conditions, and organizational leadership systems. Teachers with low levels of job satisfaction tend to perceive job demands as excessive pressures, making them more susceptible to work stress. Conversely, teachers with high levels of job satisfaction generally have better adaptive capacity when dealing with various work-related pressures (Rissa Syabrina, 2025; Akturan et al., 2025; Chen et al., 2026).

Low teacher job satisfaction in Indonesia is influenced by various factors, including high administrative workloads, limited opportunities for career advancement, unclear reward systems, increased workloads resulting from changes in educational policies, and perceptions of welfare that are not commensurate with professional responsibilities. These conditions may trigger emotional exhaustion, reduce work motivation, increase intentions to leave the profession, and heighten the risk of prolonged work stress (Chan et al., 2024; Rissa Syabrina, 2025).

When work stress persists without adequate control measures, it may develop into burnout syndrome, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment (Edú-Valsania et al., 2022; Budayová et al., 2023; Khammissa et al., 2022). Burnout among teachers not only affects individual health but may also reduce the quality of the teaching and learning process, increase absenteeism, and influence students' learning outcomes. Unfortunately, the implementation of occupational health promotion programs in school settings, such as stress management, psychological counseling, workload assessment, and organizational support, remains relatively limited. Consequently, efforts to prevent work

stress have not yet been implemented optimally (Ade & Panduwal, 2025; Saputra, 2026; Amri et al., 2022).

South Tangerang City is an urban area experiencing considerable growth in the education sector. Increasing competition in educational quality, demands to achieve national education standards, the implementation of various educational policies, and growing public expectations regarding the quality of educational services may contribute to increased work pressure among teachers, particularly in public schools. Teachers in public junior high schools are required to meet academic targets, complete various instructional administrative tasks, and continuously adapt to changes in educational policies. These conditions place public junior high school teachers at potential risk of experiencing work stress arising from the interaction between job demands and their satisfaction with their work.

Although numerous studies have examined work stress and job satisfaction among teachers, research specifically analyzing the relationship between job satisfaction and work stress among public junior high school teachers in South Tangerang City remains relatively limited. In addition, sociodemographic characteristics such as age, gender, educational level, length of service, and income may also influence the level of work stress and therefore need to be analyzed as factors that may strengthen or weaken this relationship.

Based on the above considerations, this study was conducted to analyze the relationship between job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City. The findings are expected to provide scientific evidence regarding psychosocial factors affecting teachers' occupational health and serve as a basis for schools and policymakers in developing programs to improve teacher well-being through efforts to enhance job satisfaction and prevent work stress.

## **Methods**

### **Research Design and Setting**

This study employed a quantitative research design with a cross-sectional approach, in which the relationship between job satisfaction and work stress among teachers was examined by measuring the independent and dependent variables at the same point in time. This approach was selected because it provides an overview of teachers' job satisfaction and work stress levels while allowing the relationship between the two variables to be analyzed at the time of the study.

The study was conducted at SMP Negeri 14 South Tangerang City and SMP Negeri 18 South Tangerang City. The selection of these two schools was based on the institutions' willingness to participate as research sites and their characteristics being consistent with the objectives of the study. Data collection was conducted from December 2025 to June 2026, covering the stages of research preparation, obtaining research permission, questionnaire distribution, data collection, data processing, and analysis of the research findings.

### **Population and Sample**

The target population of this study comprised all teachers at public junior high schools in South Tangerang City, while the accessible population consisted of all teachers actively teaching at SMP Negeri 14 and SMP Negeri 18 South Tangerang City during the study period. The total population at the two schools was 96 teachers. The minimum sample size was initially calculated using Slovin's formula with a 5% margin of error, resulting in a minimum sample requirement of 77 respondents. However, this study employed a total sampling technique, whereby all teachers who met the inclusion criteria were included as research respondents. Total sampling was used to obtain a more comprehensive representation of job satisfaction and work stress among the entire available population and to minimize potential bias arising from sample selection.

The inclusion criteria were teachers who were actively teaching at SMP Negeri 14 and SMP Negeri 18 South Tangerang City, had more than one year of work experience, were willing to participate by signing an informed consent form, and completed the questionnaire in full. The exclusion criteria included teachers who were absent during the data collection period and teachers with a history of severe chronic diseases, such as heart disease, diabetes mellitus, kidney failure, stroke, or hypertension, as identified through the questionnaire, because these conditions could potentially influence stress levels independently of occupational factors.

### **Data Collection and Research Instruments**

The data used in this study were primary data obtained directly through paper-based questionnaires. The research instrument consisted of three sections: a respondent characteristics questionnaire, a job satisfaction questionnaire, and a work stress questionnaire. Respondent characteristics included age, gender, educational level, teaching experience, employment status, income, working hours per week, and teaching workload.

Job satisfaction was measured using the Job Satisfaction Survey (JSS) developed by Spector, which has been widely used in studies of job satisfaction. Work stress was measured using the Job Stress Scale (JSS) developed by Parker and DeCotiis, which has been widely used to identify work stress across various occupational groups. All instruments used in this study were standardized instruments with established validity and reliability.

### **Data Processing and Analysis**

Data processing was conducted in several stages, beginning with editing, which involved checking the completeness and consistency of respondents' answers. This was followed by coding, in which numerical codes were assigned to each response to facilitate statistical analysis. The coded data were then entered into the Statistical Package for the Social Sciences (SPSS) software. After data entry was completed, data cleaning was performed to identify input errors, duplicate data, and incomplete responses. The final stage was tabulation, in which the data were organized into frequency distribution tables for subsequent analysis.

Data analysis consisted of univariate and bivariate analyses. Univariate analysis was used to describe the frequency distribution of respondent characteristics, job satisfaction levels, and work stress levels, presented as frequencies and percentages. Bivariate analysis was conducted to examine the relationship between job satisfaction and work stress, as well as the relationships between respondent characteristics and work stress. Job satisfaction and work stress variables were first categorized according to the respective instrument scoring criteria. Associations between variables were analyzed using the Chi-Square ( $\chi^2$ ) test at a 95% confidence level, with statistical significance set at  $p < 0.05$ . The results were presented as *p*-values, *odds ratios* (OR), and *95% confidence intervals* (CI), where applicable and when the assumptions for the analysis were met.

### **Variables and Operational Definitions**

The dependent variable in this study was work stress, defined as a condition involving physical, psychological, and behavioral changes resulting from work demands perceived as exceeding an individual's ability to cope. The independent variable was job satisfaction, defined as teachers' positive or negative emotional state toward their work, influenced by various aspects of the job and work environment. In addition, several respondent characteristics were analyzed as supporting variables, including school, age, gender, educational level, teaching experience, employment status, income, working hours, and teaching workload.

### **Ethical Considerations**

This study received ethical approval from the Medical and Health Research Ethics Committee of Universitas Prof. Dr. Hamka (KEPKK UHAMKA), under approval number

024/FK/KEPKK/II/2026. All research procedures were conducted in accordance with the ethical principles of beneficence, non-maleficence, autonomy, and justice. Each respondent was provided with an explanation of the study objectives and procedures, assured that their identity would remain confidential, and given the freedom to participate in or withdraw from the study at any time without any consequences. The data obtained were used solely for scientific purposes and presented in aggregate form to ensure that individual respondents could not be identified.

## Result and Discussion

### Respondent Characteristics

The characteristics of respondents in this study included the school where they taught, age, gender, teaching experience, educational level, employment status, income level, working hours per week, and teaching workload. All respondents were active teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, who met the study criteria. A total of 93 teachers participated in the study. The distribution of respondent characteristics is presented in Table 1.

Table 1. Frequency Distribution of Respondent Characteristics among Teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, 2026

| Variable            | Category                                             | n  | %    |
|---------------------|------------------------------------------------------|----|------|
| School              | SMP Negeri 14                                        | 52 | 55.9 |
|                     | SMP Negeri 18                                        | 41 | 44.1 |
| Age                 | 26–44 years                                          | 50 | 53.8 |
|                     | >45 years                                            | 43 | 46.2 |
| Gender              | Male                                                 | 36 | 38.7 |
|                     | Female                                               | 57 | 61.3 |
| Teaching Experience | <15 years                                            | 45 | 48.4 |
|                     | ≥15 years                                            | 48 | 51.6 |
| Education           | Bachelor's degree (S1)                               | 74 | 79.6 |
|                     | Master's degree (S2)                                 | 19 | 20.4 |
| Employment Status   | Civil Servant (PNS)                                  | 39 | 41.9 |
|                     | Government Employee with Employment Agreement (PPPK) | 54 | 58.1 |
| Income              | < IDR 5,000,000                                      | 49 | 52.7 |
|                     | ≥ IDR 5,000,000                                      | 44 | 47.3 |
| Working Hours       | ≤40 hours/week                                       | 60 | 64.5 |
|                     | >40 hours/week                                       | 33 | 35.5 |
| Teaching Workload   | <24 hours/week                                       | 42 | 45.2 |
|                     | ≥24 hours/week                                       | 51 | 54.8 |

Based on Table 1, most respondents were teachers from SMP Negeri 14 South Tangerang City, comprising 52 respondents (55.9%), while 41 respondents (44.1%) were from SMP Negeri 18. Regarding age, the majority of respondents were aged 26–44 years, accounting for 50 respondents (53.8%), while 43 respondents (46.2%) were aged over 45 years. In terms of gender, most respondents were female, with 57 respondents (61.3%), while 36 respondents (38.7%) were male.

Based on teaching experience, respondents with ≥15 years of teaching experience were slightly more numerous, totaling 48 respondents (51.6%), compared with 45 respondents (48.4%) with less than 15 years of teaching experience. Regarding educational attainment, the majority of teachers held a Bachelor's degree (S1), comprising 74 respondents (79.6%), while 19 respondents (20.4%) held a Master's degree (S2). In terms of employment status, most

respondents were Government Employees with Employment Agreements (PPPK), totaling 54 respondents (58.1%), while 39 respondents (41.9%) were civil servants (PNS).

From an economic perspective, most respondents had a monthly income of less than IDR 5,000,000, accounting for 49 respondents (52.7%), while 44 respondents (47.3%) had a monthly income of IDR 5,000,000 or more. Regarding working hours, the majority of teachers worked  $\leq 40$  hours per week, totaling 60 respondents (64.5%), whereas 33 respondents (35.5%) worked more than 40 hours per week. Furthermore, in terms of teaching workload, most respondents had a teaching workload of  $\geq 24$  hours per week, comprising 51 respondents (54.8%), while 42 respondents (45.2%) had a teaching workload of less than 24 hours per week.

Overall, the respondent characteristics indicate that the participating teachers were predominantly female, of productive age, had relatively extensive teaching experience, held a Bachelor's degree, were mostly PPPK employees, had a monthly income of less than IDR 5,000,000, worked within the standard working-hour requirement, and had a relatively high teaching workload. These characteristics indicate that the respondents were professional educators with adequate teaching experience, making them relevant for examining the relationship between job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City.

### Univariate Analysis

Univariate analysis was conducted to describe the frequency distribution of each study variable, namely job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City. This analysis aimed to provide an overall description of the respondents' conditions before examining the relationships between variables.

### Distribution of Job Satisfaction

The distribution of respondents' job satisfaction levels is presented in Table 2.

Table 2. Distribution of Job Satisfaction Levels among Teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, 2026 (n = 93)

| Job Satisfaction | n         | %          |
|------------------|-----------|------------|
| Low              | 37        | 39.8       |
| Ambivalent       | 24        | 25.8       |
| High             | 32        | 34.4       |
| <b>Total</b>     | <b>93</b> | <b>100</b> |

Based on Table 2, most respondents had a low level of job satisfaction, totaling 37 teachers (39.8%). A total of 24 teachers (25.8%) were categorized as ambivalent, while 32 teachers (34.4%) had a high level of job satisfaction. These findings indicate that the proportion of teachers who were not fully satisfied with their jobs was greater than that of teachers who reported a high level of job satisfaction.

Based on the analysis of individual indicators of the Job Satisfaction Survey (JSS), the aspects that contributed most to low job satisfaction were clarity of organizational goals and communication, compensation, supervisors' attention to subordinates, and the rewards received by teachers. These findings indicate that organizational factors remain the primary sources of job dissatisfaction and therefore require attention from school management and policymakers. Efforts to improve organizational communication, establish a fairer reward system, enhance teacher welfare, and strengthen managerial support are expected to increase teachers' job satisfaction and create a more conducive work environment.

### Distribution of Work Stress

The distribution of respondents' work stress levels is presented in Table 3.

Table 3. Distribution of Work Stress Levels among Teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, 2026

| Work Stress  | n         | %          |
|--------------|-----------|------------|
| Very Low     | 18        | 19.4       |
| Low          | 43        | 46.2       |
| High         | 24        | 25.8       |
| Very High    | 8         | 8.6        |
| <b>Total</b> | <b>93</b> | <b>100</b> |

Based on Table 3, most respondents were categorized as having low work stress, totaling 43 teachers (46.2%), followed by those with high work stress, totaling 24 teachers (25.8%), very low work stress, totaling 18 teachers (19.4%), and very high work stress, totaling 8 teachers (8.6%). These findings indicate that although the majority of teachers had work stress levels within the low category, approximately 34.4% of respondents experienced high to very high work stress. This condition suggests that some teachers continue to face considerable work-related pressures that may potentially affect their psychological well-being, work motivation, and the quality of instruction provided to students.

Based on the item-level analysis of the Job Stress Scale (JSS), relatively high levels of stress were primarily associated with high job demands, time pressure in completing administrative tasks, heavy teaching workloads, and responsibility for achieving learning targets. These findings indicate that although most teachers are able to manage work-related pressures relatively well, promotive and preventive measures remain necessary, including workload management, organizational support, and mental health promotion programs within the school environment, to prevent work stress from developing into burnout.

### Bivariate Analysis

Bivariate analysis was conducted to examine the relationship between job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City. Prior to the analysis, the categories of job satisfaction and work stress were consolidated into two categories to meet the assumptions of the Chi-Square test. Job satisfaction was categorized into low job satisfaction, combining the low and ambivalent categories, and high job satisfaction. Work stress was categorized into low work stress, combining the very low and low categories, and high work stress, combining the high and very high categories. The categories were consolidated to ensure that no more than 20% of the cells had an *expected count* of less than 5, thereby ensuring that the results of the analysis could be interpreted validly.

### Relationship Between Job Satisfaction and Work Stress

The relationship between job satisfaction and work stress is presented in Table 4.

Table 4. Relationship Between Job Satisfaction and Work Stress among Teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, 2026 (n = 93)

| Job Satisfaction | Low Work Stress n (%) | High Work Stress n (%) | Total    | p-value | OR (95% CI)       |
|------------------|-----------------------|------------------------|----------|---------|-------------------|
| Low (n = 61)     | 30 (49.2)             | 31 (50.8)              | 61 (100) | <0.001  | 8.27 (3.06–22.39) |

|               |                  |                  |                     |  |  |
|---------------|------------------|------------------|---------------------|--|--|
| High (n = 32) | 31 (96.9)        | 1 (3.1)          | 32<br>(100)         |  |  |
| <b>Total</b>  | <b>61 (65.6)</b> | <b>32 (34.4)</b> | <b>93<br/>(100)</b> |  |  |

Based on Table 4, among the 61 teachers with low job satisfaction, 30 (49.2%) experienced low work stress, while 31 (50.8%) experienced high work stress. In contrast, among the 32 teachers with high job satisfaction, nearly all, namely 31 (96.9%), experienced low work stress, and only 1 teacher (3.1%) experienced high work stress.

The Chi-Square test showed a  $p$ -value of  $<0.001$ , indicating a statistically significant relationship between job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City. Therefore, the research hypothesis stating that job satisfaction is associated with work stress was supported.

The odds ratio (OR) of 8.27 (95% CI: 3.06–22.39) indicates that teachers with low job satisfaction had approximately eight times higher odds of experiencing high work stress compared with teachers with high job satisfaction. The magnitude of the OR suggests that job satisfaction is strongly associated with work stress among teachers.

These findings indicate that higher levels of job satisfaction are associated with a lower likelihood of experiencing high work stress. Conversely, low job satisfaction may increase teachers' perceptions of various work demands as sources of psychological pressure. This finding highlights the importance of improving job satisfaction through enhanced organizational communication, fair reward systems, improved welfare, stronger leadership support, and the creation of a conducive work environment as part of a strategy to prevent work stress among educators.

### Factors Associated with Work Stress

In addition to analyzing the relationship between job satisfaction and work stress, this study also examined the association between respondent characteristics and work stress. The analysis was performed using the Chi-Square test at a 95% significance level ( $\alpha = 0.05$ ). The results are presented in Table 5.

Table 5. Relationship Between Respondent Characteristics and Work Stress among Teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, 2026 (n = 93)

| Variable      | Low Work Stress n (%) | High Work Stress n (%) | Total | $p$ -value | OR (95% CI)            |
|---------------|-----------------------|------------------------|-------|------------|------------------------|
| <b>Age</b>    |                       |                        |       |            |                        |
| 26–44 years   | 15 (30.0)             | 35 (70.0)              | 50    | 0.022      | 0.373<br>(0.159–0.873) |
| >45 years     | 23 (53.5)             | 20 (46.5)              | 43    |            |                        |
| <b>School</b> |                       |                        |       |            |                        |
| SMP Negeri 14 | 22 (42.3)             | 30 (57.7)              | 52    | 0.749      | 1.146<br>(0.497–2.640) |
| SMP Negeri 18 | 16 (39.0)             | 25 (61.0)              | 41    |            |                        |
| <b>Gender</b> |                       |                        |       |            |                        |
| Male          | 20 (55.6)             | 16 (44.4)              | 36    | 0.022      | 2.708<br>(1.143–6.417) |
| Female        | 18 (31.6)             | 39 (68.4)              | 57    |            |                        |

|                                                      |           |           |    |       |                        |
|------------------------------------------------------|-----------|-----------|----|-------|------------------------|
| <b>Teaching Experience</b>                           |           |           |    |       |                        |
| <15 years                                            | 17 (37.8) | 28 (62.2) | 45 | 0.558 | 0.781<br>(0.340–1.790) |
| ≥15 years                                            | 21 (43.8) | 27 (56.3) | 48 |       |                        |
| <b>Education</b>                                     |           |           |    |       |                        |
| Bachelor's degree (S1)                               | 29 (39.2) | 45 (60.8) | 74 | 0.518 | 0.716<br>(0.260–1.974) |
| Master's degree (S2)                                 | 9 (47.4)  | 10 (52.6) | 19 |       |                        |
| <b>Employment Status</b>                             |           |           |    |       |                        |
| Civil Servant (PNS)                                  | 18 (46.2) | 21 (53.8) | 39 | 0.377 | 1.457<br>(0.631–3.367) |
| Government Employee with Employment Agreement (PPPK) | 20 (37.0) | 34 (63.0) | 54 |       |                        |
| <b>Income</b>                                        |           |           |    |       |                        |
| < IDR 5 million                                      | 21 (42.9) | 28 (57.1) | 49 | 0.679 | 1.191<br>(0.520–2.731) |
| ≥ IDR 5 million                                      | 17 (38.6) | 27 (61.4) | 44 |       |                        |
| <b>Working Hours</b>                                 |           |           |    |       |                        |
| ≤40 hours/week                                       | 27 (45.0) | 33 (55.0) | 60 | 0.273 | 1.636<br>(0.676–3.963) |
| >40 hours/week                                       | 11 (33.3) | 22 (66.7) | 33 |       |                        |
| <b>Teaching Workload</b>                             |           |           |    |       |                        |
| <24 hours/week                                       | 23 (54.8) | 19 (45.2) | 42 | 0.013 | 2.905<br>(1.235–6.835) |
| ≥24 hours/week                                       | 15 (29.4) | 36 (70.6) | 51 |       |                        |

Based on Table 5, three variables were significantly associated with work stress, namely age ( $p = 0.022$ ), gender ( $p = 0.022$ ), and teaching workload ( $p = 0.013$ ). Regarding age, teachers aged 26–44 years had a higher proportion of high work stress (70.0%) than teachers aged over 45 years (46.5%). The OR of 0.373 (95% CI: 0.159–0.873) indicates that teachers aged over 45 years had lower odds of experiencing high work stress compared with teachers aged 26–44 years.

Regarding gender, female teachers had a higher proportion of high work stress (68.4%) compared with male teachers (44.4%). The OR of 2.708 (95% CI: 1.143–6.417) indicates that female teachers had approximately 2.7 times higher odds of experiencing high work stress than male teachers.

For teaching workload, teachers with a workload of ≥24 hours per week had a higher proportion of high work stress (70.6%) compared with teachers with a workload of less than 24 hours per week (45.2%). The analysis showed a statistically significant association ( $p = 0.013$ ), with an OR of 2.905 (95% CI: 1.235–6.835), indicating that teachers with a teaching workload of at least 24 hours per week had nearly three times higher odds of experiencing high work stress than those with a lower teaching workload.

Meanwhile, school ( $p = 0.749$ ), teaching experience ( $p = 0.558$ ), educational level ( $p = 0.518$ ), employment status ( $p = 0.377$ ), income ( $p = 0.679$ ), and working hours ( $p = 0.273$ ) were not statistically significantly associated with work stress ( $p > 0.05$ ). Nevertheless, variables with  $p$ -values  $< 0.25$ , namely age, gender, and teaching workload, along with the main study variable, job satisfaction, were considered candidates for inclusion in the multivariate analysis to identify the factors most strongly associated with work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City.

### **Sociodemographic Characteristics of Respondents**

This study involved 93 teachers from SMP Negeri 14 and SMP Negeri 18, South Tangerang City, with sociodemographic characteristics including school, age, gender, teaching experience, educational level, employment status, income, working hours, and teaching workload. These characteristics are important to examine because they may influence teachers' perceptions of working conditions and their ability to cope with work-related pressures. The majority of respondents were aged 26–44 years (53.8%), representing the productive-age group. Individuals in the productive-age group generally have adequate physical and psychological capacity to perform occupational activities; however, they may simultaneously face greater professional demands and career development expectations. McLean et al. (2023) explained that teachers of productive age tend to have more complex work responsibilities and may therefore be vulnerable to psychological pressure when adequate organizational support is lacking.

In terms of gender, the majority of respondents were female (61.3%). This finding reflects the continued predominance of women in the teaching profession in Indonesia. Li et al. (2024) reported that female teachers more frequently experience psychological pressure due to dual roles as educators and household managers. Such conditions may increase vulnerability to work stress, particularly when occupational demands become increasingly demanding. More than half of the respondents had more than 15 years of teaching experience (51.6%), indicating that the teachers in this study had relatively substantial professional experience. Longer teaching experience may enable teachers to develop better adaptation skills, classroom management abilities, and coping strategies for dealing with various occupational pressures.

This finding is consistent with Wirayuda et al. (2022), who reported that longer work experience may enhance resilience and teachers' ability to manage work stress. Most respondents held a Bachelor's degree (S1), accounting for 79.6%, indicating that the majority of teachers had met the academic qualification standards required for the teaching profession. Higher educational attainment may improve critical thinking, problem-solving, and decision-making abilities, thereby supporting teachers' capacity to address various occupational challenges (OECD, 2023).

Regarding employment status, most respondents were Government Employees with Employment Agreements (PPPK), accounting for 58.1%. In terms of income, the majority earned less than IDR 5,000,000 per month. This condition indicates that economic well-being remains an important concern for some teachers. Toropova et al. (2021) explained that compensation and job security are important components influencing teachers' job satisfaction. Nevertheless, this study found no significant relationship between income or employment status and work stress, suggesting that teachers' psychological conditions are not determined solely by economic factors but are also influenced by organizational and workplace environmental factors.

Overall, the characteristics of the respondents indicate a teacher population predominantly consisting of educators of productive age, with Bachelor's-level education, relatively extensive teaching experience, and responsibilities within a formal educational setting. These

characteristics provide an important basis for understanding the variations in job satisfaction and work stress observed in this study.

### **Teachers' Job Satisfaction**

The findings showed that 39.8% of teachers had low job satisfaction, while only 34.4% had high job satisfaction. This finding indicates that a considerable proportion of teachers had not yet achieved optimal satisfaction with their jobs. Analysis based on the Job Satisfaction Survey (JSS) showed that the highest-scoring aspects were pride in the teaching profession, harmonious relationships with colleagues, good communication within the school, and positive perceptions of leadership competence. These findings indicate that intrinsic factors, particularly the meaningfulness of the profession, remain an important source of teachers' job satisfaction. In contrast, the lowest-scoring aspects were related to compensation, rewards, supervisors' attention to subordinates, and clarity of organizational goals. This condition suggests that teachers' dissatisfaction is more strongly associated with organizational factors than with the nature of the teaching profession itself. This finding is consistent with Herzberg's Two-Factor Theory, which states that intrinsic factors such as achievement, recognition, and meaningful work increase job satisfaction, whereas extrinsic factors such as salary, organizational policies, relationships with supervisors, and working conditions function as hygiene factors that, when inadequately fulfilled, contribute to dissatisfaction (Herzberg et al., 1959). Wartenberg et al. (2023) similarly reported that financial rewards, organizational support, promotion opportunities, and recognition of performance are key determinants of teachers' job satisfaction. Therefore, efforts to improve teacher welfare need to be accompanied by more effective reward systems and organizational communication.

### **Teachers' Work Stress**

This study found that 65.6% of teachers were categorized as having low work stress, while 34.4% experienced high work stress. These findings indicate that, overall, teachers were still able to adapt to their occupational demands, although a proportion of respondents exhibited levels of stress that require attention. Based on the item-level analysis of the **Job Stress Scale**, the most frequently reported sources of work pressure included feeling guilty when taking leave, work extending beyond regular working hours, administrative demands, and the perception that job demands exceeded their available capacity.

These findings suggest that the primary sources of teachers' stress do not originate solely from teaching activities but also from administrative workloads, reporting requirements, preparation of instructional materials, student assessment, and various additional tasks that must be completed outside classroom teaching activities. Metrailler and Clark (2024) stated that increasing administrative demands are among the major factors contributing to rising teacher work stress across countries. Meanwhile, Kyriacou (2001) explained that teacher work stress occurs when job demands are perceived as exceeding an individual's ability to cope with them.

Nevertheless, most teachers in this study remained within the low-stress category. This may be attributed to their strong sense of pride in the teaching profession, positive interpersonal relationships with colleagues, and relatively effective communication within the school environment, which may function as protective factors against work stress.

### **Relationship Between Job Satisfaction and Work Stress**

The findings demonstrated a statistically significant relationship between job satisfaction and work stress ( $p < 0.001$ ). Teachers with low job satisfaction had 8.27 times higher odds of experiencing high work stress than teachers with high job satisfaction (OR = 8.27; 95% CI = 3.06–22.39). This finding indicates that lower job satisfaction is associated with a greater likelihood of experiencing work stress. Conversely, teachers who are satisfied with their jobs tend to be better able to manage occupational pressures. Item-level analysis indicated that

teachers' dissatisfaction was primarily associated with inadequate institutional recognition, insufficient compensation, limited attention from supervisors, and unclear organizational goals. These conditions may increase teachers' perceptions of job demands as substantial psychological burdens, thereby triggering work stress.

The findings support the Job Demands–Resources (JD–R) Model developed by Bakker and Demerouti (2017). The model explains that work stress may arise when job demands exceed the job resources available to individuals. Job satisfaction can be viewed as an indicator of organizational resources that may help reduce the negative effects of job demands on workers' psychological well-being. The present findings are also consistent with Jiang and Yuan (2025), who reported a strong negative relationship between job satisfaction and work stress and burnout among educators. Higher levels of teacher job satisfaction were associated with lower levels of stress.

Similar findings were reported by Collie (2021), who found that supportive work environments, effective organizational communication, and effective leadership can increase job satisfaction while reducing teacher work stress. Therefore, improving job satisfaction through better reward systems, fairer compensation, effective organizational communication, stronger leadership support, and appropriate workload management may constitute an important strategy for reducing teacher work stress.

### **Factors Associated with Work Stress**

The analysis showed that age, gender, and teaching workload were significantly associated with work stress, whereas school, teaching experience, educational level, employment status, income, and working hours were not significantly associated with work stress. Teachers aged 26–44 years had a higher likelihood of experiencing work stress than teachers aged over 45 years. This finding may be attributable to greater career demands, adaptation to changes in educational policies, and higher professional responsibilities during the productive-age period. This finding is consistent with McLean et al. (2023). Female teachers also had approximately 2.7 times higher odds of experiencing work stress than male teachers. This finding is consistent with Li et al. (2024), who explained that women may be more vulnerable to stress because they simultaneously face occupational demands and domestic responsibilities.

In addition, teachers with a teaching workload of  $\geq 24$  hours per week had nearly three times higher odds of experiencing work stress than those with a lower teaching workload. A high teaching workload not only increases teaching hours but also increases the volume of administrative tasks, student assessment, and preparation of instructional materials that must be completed. This finding is consistent with Metrailler and Clark (2024), who reported that increasing workload is a major predictor of teacher work stress. Conversely, the absence of significant associations between teaching experience, educational level, income, employment status, working hours, and school indicates that these factors were not the primary determinants of work stress in the study population. This finding suggests that psychosocial factors, particularly job satisfaction and workload, may play a more important role than individual characteristics in influencing teacher work stress.

### **Conclusion**

Based on the findings regarding the relationship between job satisfaction and work stress among teachers at SMP Negeri 14 and SMP Negeri 18, South Tangerang City, it can be concluded that teachers' overall level of job satisfaction remains suboptimal, although most teachers reported relatively low levels of work stress. The findings showed that 39.8% of respondents had low job satisfaction, 25.8% were categorized as ambivalent, and only 34.4% had high job satisfaction. These findings indicate that several aspects of the job, particularly those related to recognition, compensation, organizational communication, and attention from

supervisors, have not fully met teachers' expectations and may therefore affect their level of job satisfaction.

Regarding work stress, most teachers were categorized as having low work stress, while some continued to experience high to very high levels of work stress. This condition indicates that although the majority of teachers are able to adapt to their occupational demands, a proportion of teachers continue to face considerable work-related pressure that may potentially affect their psychological well-being and the quality of their professional duties.

Bivariate analysis demonstrated a statistically significant relationship between job satisfaction and work stress ( $p < 0.001$ ). Teachers with low job satisfaction had higher odds of experiencing work stress than those with high job satisfaction. This finding confirms that job satisfaction is an important factor associated with teachers' psychological well-being. Higher levels of job satisfaction were associated with a lower likelihood of experiencing work stress. In addition, analysis of respondent characteristics showed that the majority of teachers were aged 26–44 years, female, had more than 15 years of teaching experience, held a Bachelor's degree (S1), were Government Employees with Employment Agreements (PPPK), earned less than IDR 5,000,000 per month, worked  $\leq 40$  hours per week, and had a teaching workload of  $\geq 24$  hours per week. Further analysis showed that age, gender, and teaching workload were significantly associated with work stress, whereas school, teaching experience, educational level, employment status, income, and working hours were not significantly associated with work stress.

Overall, this study demonstrates that improving job satisfaction through improvements in the work environment, reward systems, organizational communication, and workload management is important for reducing work stress and promoting teachers' well-being in school settings.

Based on the findings, efforts to improve job satisfaction and prevent work stress among teachers should be implemented continuously by various stakeholders. Teachers are encouraged to apply effective stress-management strategies, maintain a healthy work–life balance, and continuously improve their professional competencies to perform their duties optimally and achieve greater job satisfaction. Schools are encouraged to create a more conducive work environment by strengthening organizational communication, providing recognition and rewards for teacher performance, ensuring proportional workload management, and conducting regular job satisfaction assessments as a preventive measure against work stress. In addition, the Education Office is expected to support teacher well-being through policies oriented toward occupational health improvement, including reducing unnecessary administrative burdens, strengthening mental health programs, and providing improved reward and recognition systems for educators. For future researchers, it is recommended that studies be conducted with larger and more diverse samples and incorporate additional variables, such as burnout, organizational support, work motivation, leadership style, and organizational culture, to provide a more comprehensive understanding of the factors influencing job satisfaction and work stress among teachers.

## Acknowledgment

The authors would like to express their gratitude to SMP Negeri 14 South Tangerang City and SMP Negeri 18 South Tangerang City for granting permission and providing support throughout the research process. The authors also extend their appreciation to all teachers who willingly participated as respondents, to the academic supervisors for their guidance and valuable advice, and to all parties who provided assistance and support, contributing to the successful completion of this study.

## References

Ade, A., & Panduwal, M. (2025). Occupational stress management among public school

teachers: Organizational support and burnout prevention. *Journal of Occupational Health*.

- Akturan, A., Arslan, A., Yener, S., & Kiliç, S. (2025). Understanding career adapt abilities, career stress, work stress, career regret, job satisfaction among nursing professionals. *Journal of Advanced Nursing*, 81(7), 3798-3810. <https://doi.org/10.1111/jan.16516>
- Amri, M. M., Maharani, A., & Hidayah, Z. (2022). Job burnout and flexible working arrangement associations on employee wellbeing with perceived organizational support as mediator: a study during pandemic. *Jurnal Aplikasi Manajemen*, 20(3), 594-610. <https://doi.org/10.21776/ub.jam.2022.020.03.11>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285.
- Budayová, Z., Ludvigh Cintulová, L., & Mrošková, L. (2023). Analysis of risk of burn out at workers in the field of social services and health care. *Journal of education culture and society*, 14(1), 365-380.
- Chan, C. K., Lim, S. H., & Lee, P. Y. (2024). Psychosocial work environment, job satisfaction and occupational stress among school teachers: A systematic review. *International Journal of Environmental Research and Public Health*, 21(3), 1–18.
- Chen, H., Wang, G., Qiu, H., Ma, H., Peng, Z., Liu, R., & Xu, F. (2026). The Relationship among Chinese Teachers' Organizational Support, Career Adaptability and Job Satisfaction: The Mediating Effect of Decent Work. *International Journal of Mental Health Promotion*, 28(1). <https://doi.org/10.32604/ijmhp.2025.073911>
- Chen, S., Ntim, S. Y., Zhao, Y., & Qin, J. (2023). Characteristics and influencing factors of early childhood teachers' work stress and burnout: A comparative study between China, Ghana, and Pakistan. *Frontiers in psychology*, 14, 1115866. <https://doi.org/10.3389/fpsyg.2023.1115866>
- Chen, W., Huang, Z., Peng, B., Li, L., & Chen, J. (2025). Teacher competency and work engagement among secondary school physical education teachers: the multiple mediating roles of occupational stress, emotional exhaustion, and professional achievement. *Frontiers in Psychiatry*, 16, 1530413.
- Collie, R. J. (2021). Teacher wellbeing and occupational stress: An examination of school climate and leadership. *Educational Psychology Review*, 33(2), 387–409.
- Cornejo, P. A., Villanueva, C. I., & Gutiérrez, R. J. (2026). Safety culture and climate in the education sector and its relationship with health from a gender perspective. *International Journal of Industrial Ergonomics*, 113, 103900. <https://doi.org/10.1016/j.ergon.2026.103900>
- Creagh, S., Thompson, G., Mockler, N., Stacey, M., & Hogan, A. (2025). Workload, work intensification and time poverty for teachers and school leaders: A systematic research synthesis. *Educational Review*, 77(2), 661-680. <https://doi.org/10.1080/00131911.2023.2196607>
- de Aguiar Bandeira, M., Rodeghiero Neto, I., Franz, L. A. S., Bemvenuti, R. H., & Bolzan, L. M. (2026). Determinants of burnout in higher education professors: a systematic literature review. *International Journal of Occupational Safety and Ergonomics*, 1-12. <https://doi.org/10.1080/10803548.2026.2618929>
- de Carvalho, N. A., Veiga, F. H., Martínez, I., & Veiga, C. M. (2025). Psychosocial development and student engagement in school: A study with girls and boys in early

- and late adolescence. *Trends in Psychology*, 1-27. <https://doi.org/10.1007/s43076-025-00440-4>
- Edú-Valsania, S., Laguía, A., & Moriano, J. A. (2022). Burnout: A review of theory and measurement. *International journal of environmental research and public health*, 19(3), 1780. <https://doi.org/10.3390/ijerph19031780>
- Falebita, O. S., Ayeni, S. E., Ekundayo, S. K., Ambode, A. B., Xulu, N. S. B., & Bankole, H. B. (2026). Gender differences in the impact of workload demands and motivation on teachers' burnout and stress: a multigroup analysis. *Education Sciences*, 16(2), 259. <https://doi.org/10.3390/educsci16020259>
- Ghasemi, F. (2025). Teachers' mental health challenges and contributing risk factors: a systematic narrative review based on the socio-ecological model. *Psychology in the Schools*, 62(7), 2111-2135.
- Hasnafiah, S. N. S. B. M., Salibi, G., & Tzenios, N. (2026). MALAYSIAN HOUSE OFFICERS'MENTAL HEALTH ISSUES: AN ANALYSIS USING A PROSPECTIVE COHORT STUDY FRAMEWORK. *Special Journal of the Medical Academy and other Life Sciences.*, 4(8). <https://doi.org/10.58676/sjmas.v4i8.185>
- Hatfield, J. L. (2025). From chalkboard to smartboard: an exploratory study of experienced teachers' perspectives on student generations X, Y, Z and Alpha. *Education and Information Technologies*, 30(16), 22595-22647. <https://doi.org/10.1007/s10639-025-13645-y>
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work* (2nd ed.). John Wiley & Sons.
- Iskandar, A., & Priyana, Y. (2024). Psychological challenges among junior high school teachers in adolescent learning environments. *Jurnal Pendidikan dan Psikologi Indonesia*, 15(2), 105–117.
- Jiang, Y., & Yuan, X. (2025). Job satisfaction, occupational stress, and burnout among teachers: A structural equation model. *Frontiers in Psychology*, 16, 1456321.
- Khammissa, R. A., Nemutandani, S., Feller, G., Lemmer, J., & Feller, L. (2022). Burnout phenomenon: neurophysiological factors, clinical features, and aspects of management. *Journal of International Medical Research*, 50(9), 03000605221106428. <https://doi.org/10.1177/03000605221106428>
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27–35.
- Li, X., Zhang, H., Wang, Y., et al. (2024). Gender differences in occupational stress among teachers: A multicentre study. *BMC Psychology*, 12, 215.
- Ma, P., Zhang, Y., Liu, H., et al. (2023). Occupational stress, job satisfaction and mental health among teachers: A multicountry analysis. *BMC Public Health*, 23, 1856.
- Marcedula, F., Angelini, G., & Fiorilli, C. (2026). Teacher self-efficacy and well-being: The mediating role of satisfaction with students, colleagues, and parents. *International Journal of Environmental Research and Public Health*, 23(2), 150. <https://doi.org/10.3390/ijerph23020150>
- McLean, L., Abry, T., Taylor, M., & Connor, C. (2023). Teacher wellbeing across career stages: Associations with occupational stress and resilience. *Teaching and Teacher Education*, 124, 104034.
- Metrailler, A., & Clark, S. (2024). Global prevalence of occupational stress among teachers:

An updated systematic review and meta-analysis. *Teaching and Teacher Education*, 139, 104492.

- Mohamad Zaki Hardi, M., Abdullah, N., & Rahman, M. A. (2025). Emotional demands and occupational stress among secondary school teachers. *Educational Research Review*, 41, 100601.
- Mu, R., Siripala, W., & Junaidi, J. (2026). Examining pre-service teacher competence in inclusive education: A case study from Guizhou, China. *International Journal of Advanced and Applied Sciences*, 13(5), 11. <https://doi.org/10.21833/ijaas.2026.05.002>
- Organisation for Economic Co-operation and Development. (2023). *Education at a glance 2023: OECD indicators*. OECD Publishing.
- Putra, N. A. T., Suprihatiningrum, J., & Nurbaeti, N. (2026). EMOTIONAL CHALLENGES OF JUNIOR SECONDARY STUDENTS: IMPLICATIONS FOR SCHOOL GUIDANCE AND COUNSELLING. *JURNAL TARBIYAH*, 33(1), 25-37.
- Rissa Syabrina. (2025a). Hubungan kepuasan kerja dengan stres kerja pada guru di Indonesia: Tinjauan psikososial. *Jurnal Kesehatan Kerja Indonesia*, 18(1), 45–56.
- Roloff, J., Kirstges, J., Grund, S., & Klusmann, U. (2022). How strongly is personality associated with burnout among teachers? A meta-analysis. *Educational Psychology Review*, 34(3), 1613-1650. <https://doi.org/10.1007/s10648-022-09672-7>
- Saputra, D. (2026). Workload, Job Stress, and Organizational Support Associated with Burnout Among ICU Nurses: A Systematic Literature Review. *Partners Journal of Health Care*, 1(2), 61-70.
- Sari, Y. Y. N., Suryana, E., & Zulhijra, Z. (2026). Late Adolescent Development and Its Implications for Education. *Journal of Educational Sciences*, 10(3), 52-63. <https://doi.org/10.31258/jes.10.3.p.52-63>
- Sha, X., & Chang, Y. (2025). Occupational health and performance among Chinese university teachers: a COR theory model of health-promoting leadership and burnout. *European Journal of Investigation in Health, Psychology and Education*, 15(7), 134. <https://doi.org/10.3390/ejihpe15070134>
- Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71–97.
- Uktamovna, R. Z. (2025). The transformative journey of adolescence: a study of the physical, cognitive, emotional, and social changes during the teenage years. *Spanish Journal of Innovation and Integrity*, 39, 169-172.
- Wartenberg, G., et al. (2023). Determinants of teacher job satisfaction: A systematic review. *International Journal of Educational Research*, 119, 102182.
- Wirayuda, A., Prasetyo, B., & Kurniawan, D. (2022). Masa kerja dan kemampuan adaptasi terhadap stres kerja pada tenaga pendidik. *Jurnal Keperawatan dan Kesehatan Masyarakat*, 10(3), 214–222.
- World Health Organization. (2022). *Mental health at work*. World Health Organization.