



**OCCUPATIONAL STRESS AND FATIGUE WITH QUALITY OF LIFE
IN THE TEXTILE INDUSTRY WORKERS**

Authors:

Yeremia Rante Ada¹, Sumardiyono², Reni Wijayanti³, Maria Paskanita Widjanarti⁴, Bachtiar Chahyadhi⁵, Farhana Syahrotun Nisa Suratna⁶, Rachmawati Prihantina Fauzi⁷

*¹⁻⁷Occupational Health and Safety Department Vocational School Universitas Sebelas Maret
Surakarta*

*Corresponding Email: *yeremia_ada@staff.uns.ac.id*

About the Author

1. 1st Author : Yeremia Rante Ada', S.Sos.,M.Kes
Affiliation : Occupational Health and Safety Department Vocational School Universitas Sebelas Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : yeremia_ada@staff.uns.ac.id
Orcid ID : 0009-0001-4318-5741
Google Scholar URL: <https://scholar.google.co.id/citations?user=UfC3NNcAAAAJ&hl=en>
Phone number : 081347122037

2nd Author : Dr. Sumardiyono, S.K.M.,M.Kes
Affiliation : Occupational Health and Safety Department Vocational School Universitas Sebelas Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : sumardiyono@staff.uns.ac.id
Orcid ID : 0000-0002-8065-7568
Google Scholar URL: <https://scholar.google.co.id/citations?user=tB-P8IIAAAAJ&hl=id>
Phone number : 08562838920

3rd Author : Reni Wijayanti, dr., M.Sc
Affiliation : Occupational Health and Safety Department Vocational School Universitas Sebelas Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : reniwijayanti@staff.uns.ac.id
Orcid ID : <https://orcid.org/0009-0009-9089-7133>
Google Scholar URL: <https://scholar.google.com/citations?user=SvI8ArYAAAAJ&hl=en>
Phone number : 087836662993

4th Author : Dr. Maria Paskanita Widjanarti, S.K.M., M.Kes
Affiliation : Occupational Health and Safety Department Vocational School Universitas Sebelas Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : maria.paskanita@staff.uns.ac.id
Orcid ID : <https://orcid.org/0000-0002-2456-0614>

Google Scholar URL: https://scholar.google.com/citations?hl=en&user=mj_8E6IAAAAJ
Phone number : 08121022742

5th Author : Bachtiar Chahyadhi, S.ST., M.KKK
Affiliation : Occupational Health and Safety Department Vocational School Universitas Sebelas
Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : bachtiarchahyadhi@staff.uns.ac.id
Orcid ID : <https://orcid.org/0009-0005-5112-3670>
Google Scholar URL: <https://scholar.google.com/citations?user=MvAAwwcAAAAJ&hl=en>
Phone number : 081223043690

6th Author : Farhana Syahrotun Nisa Suratna, S.ST., M.KKK
Affiliation : Occupational Health and Safety Department Vocational School Universitas Sebelas
Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : farhanasyahrotun@staff.uns.ac.id
Sinta ID : 6758890
Google Scholar URL: <https://scholar.google.com/citations?user=La-j9kEAAAAJ&hl=en&oi=ao>
Phone number : 087735140234

7th Author : Rachmawati Prihantina Fauzi, S.Si., M.Si
Affiliation : Occupational Health and Safety Department Vocational School Universitas
Sebelas Maret Surakarta/Kentingan, Surakarta, Indonesia
Mailing address : Jln. Ir. Sutami No. Kentingan No.36, Jebres, Surakarta, Jawa Tengah, Indonesia
Email : rachmawatipfauzi@staff.uns.ac.id
Scopus ID : 58485917800
Orcid ID : 0009-0001-1076-9214
Google Scholar URL : <https://scholar.google.com/citations?hl=en-US&user=JuuQ8xYAAAAJ>
Phone number : 088224997088

ABSTRACT

Occupational stress and fatigue in workers are problems that many employees have. These two problems can not only affect the company but also the employees' standard of living. The purpose of this study is to examine how stress at work and fatigue on workers' quality of life. The study was conducted on 100 workers who work in a textile company. Bivariate statistical analysis using the Spearman test and multivariate analysis using SPSS version 25 to perform linear regression analysis. The outcomes demonstrated that each work stress and fatigue significantly affected quality of life ($p=0.00$) with a Spearman correlation value for work stress of -0.351 and fatigue on quality of life of 0.444 . Based on multivariate analysis, the value of Adjusted R Square is 34% . This study concludes that the equation obtained can contribute to 34% of life's quality. while the remainder of 66% is explained through another factor not examined. This research is useful as a basis for upcoming scholars to further examine additional factors that can have an impact on the standard of living of textile workers.

Keywords: Occupational stress, fatigue, quality of life, textile industry

ABSTRAK

Stres kerja dan kelelahan pada pekerja merupakan permasalahan yang banyak dialami oleh pekerja. Kedua masalah ini selain dapat berdampak pada organisasi juga dapat berdampak kepada kualitas hidup pekerja. Tujuan penelitian ini untuk menganalisis pengaruh stres kerja dan kelelahan terhadap kualitas hidup pada pekerja. Penelitian dilakukan pada 100 pekerja di perusahaan tekstil. Uji spearman digunakan untuk analisis bivariat dan regresi linear untuk analisis multivariat dengan program SPSS versi 25. Hasil penelitian menunjukkan masing-masing stres kerja dan kelelahan memiliki pengaruh bermakna terhadap kualitas hidup ($p=0,00$) dengan nilai korelasi Spearman stress kerja sebesar $-0,351$ dan kelelahan terhadap kualitas hidup sebesar $-0,444$. Berdasarkan analisis multivariat diperoleh nilai Adjusted

R Square sebesar 34%. Kesimpulan dari penelitian ini bahwa persamaan yang diperoleh mampu menjelaskan kualitas hidup sebesar 34 %, sedangkan 66 % sisanya, dijelaskan oleh variabel lain yang tidak diteliti. Penelitian ini penting sebagai dasar peneliti selanjutnya untuk mengkaji lebih lanjut variabel lain yang berpengaruh pada kualitas hidup pekerja tekstil.

Kata kunci: Stres kerja, kelelahan, kualitas hidup, industri tekstil

INTRODUCTION

To meet fundamental human needs, the textile industry must continue to exist (Rasheed, 2022). The contentment people experience with their lives in society is known as their quality of life. There are several factors that are considered to affect the quality of life of workers. These factors include: 1) individual factors, such as gender, marital status, employment status, and tenure; 2) interpersonal factors, such as relationships with supervisors and coworkers; and 3) organizational factors, such as job characteristics, well-being, workplace safety, physical environment, chemical environment, and ergonomic environment (Kittipichai et al., 2015). Aiming to create a great work environment for people and production—that is, healthier, happier, and more productive employees and organizations—the quality of work life is a component of overall life quality that includes relationships between coworkers (Rathamani dan et al., 2013). Currently, work stress is a real problem for organizations that can hinder individual and organizational work performance. The financial impact of workplace stress on organizations is huge. It was found that approximately 18% of male workers and 25% of female workers suffer from workplace stress (American Psychological Association, 2011). A study in the textile industry of one of the developing country industries (Pakistan) with a limited sample of organizational managers revealed that physical, psychological, behavioral, performance, and physiological factors as potential consequences of work stress (Aftab Ahmad et al., 2018). Rasheed (2022) in his research in the textile industry found that as workload increases in organizations, it can directly or indirectly affect workers physically and mentally. This workplace pressure can cause fatigue in workers. In addition, workers are also not well aware of their physical and psychological health. Policies and strategic plans are needed to improve and maintain workers' mental and physical health conditions, for example, companies should have the initiative to develop policies to prevent burnout, stress, and fatigue among workers through rescheduling, holidays, encouragement, appraisals, and bonuses on task completion to keep their spirits high and positive.

According to LIFE (2015), quality of life is a personal evaluation of one's physical and emotional well-being that is greatly impacted by the values and culture of one's immediate environment as well as the socioeconomic circumstances of each individual. In addition to being free from illness and frailty, people who have a high quality of life also have a balance between their social, emotional, and physical needs (WHO, 2010). Four factors can be used to quantify quality of life: environmental, social, psychological, and physical. Quality of life is the most important aspect of life in the current situation experienced by individuals and then subjectively assessed against physical conditions, psychological social relationships, and the environment which can affect several factors and influences from the individual himself such as age, education, gender, and educational status (Maria Cristina Manullang, 2018). Workers are not aware of their physical and psychological health, and some strategic and practical policies are needed to improve and maintain the mental and physical health conditions of workers, especially in the textile industry. Physical and psychological health are significant predictors of quality of life in textile workers (Rasheed, 2022). The purpose of this study

is to examine how workers' quality of life is impacted by workplace stress and burnout. Policymakers, particularly those in textile companies, can use this research to enhance workers' mental and physical well-being, promote workers' quality of life, and help workers develop into competent, content human beings at work, all of which will help the organization become a quality one.

METHOD

Research methodology

Cross-sectional analytical observational research methodology was used in this study. In one of the textile companies located in Surakarta, Central Java. Data were collected from June to August 2023.

Sampling technique

100 workers from one of the textile companies in Surakarta, Central Java, made up the population of this study. A research sample of 100 participants was selected using either the saturated sample sampling approach or total sampling.

Instrument

Primary data for quality of life, occupational stress (measured using the HSE Questionnaire), and job tiredness (measured using the KAUPK2 questionnaire) were collected directly from workers using questionnaires that have been reviewed for validity and reliability.

Data analysis

With the aid of the SPSS version 25 software, the data were analyzed descriptively (univariately), bivariately using the spearman test, and multivariately using linear regression.

RESULTS AND DISCUSSION

1. Univariate Analysis

Normality Test of Study Data

Table 1.

Tendency and Normality Test of Job Stress, Job Fatigue, and Quality of Life

Variable	N	Min	Max	Mean	SD	p-value
Occupational Stress	100	0	14	3,75	2,298	0,000
Fatigue	100	10	25	14,08	3,218	0,000
Quality of Life	100	0,366	1,000	0,934	0,109	0,000

Source: Primary Data (2023)

According to Table 1, the average score for job stress is 3.75 points, with 0 being the lowest and 14 being the highest. The standard deviation (SD) value of job stress is 2.298 or smaller than the mean value which indicates the weariness on the work variable is homogeneous.

With a minimum score of 10 points and a maximum score of 25, the average score for job burnout is 14.08. The homogeneity of the job weariness variable is shown by the standard deviation (SD) value of 3.218 or less than the mean value.

With a lowest point total of 0.366 and a highest point total of 1.000, the average quality of life score is 0.934. The standard deviation value of quality of life is 0.109 or smaller than the mean value which indicates that the work fatigue variable is homogeneous.

All three variables (quality of life, burnout, and job stress) exhibited significant values of 0.000 ($p < 0.05$), indicating that they were not normally distributed according to the Kolmogorov-Smirnov normality test.

2. Bivariate Analysis

To find out if there is a relationship between two variables—stress and quality of life, and work burnout and quality of life—bivariate analysis is utilized. In this research employing the Spearman Correlation Test. This is because the results of the normality test that has been carried out in univariate analysis show that both variables are not normally distributed. The following are the results of data analysis using SPSS:

Table 2.

Correlation Test Results of Job Stress, Fatigue with Quality of Life

Variables	Quality of Life		
	N	Significance (p)	Correlation Coefficient (r)
Occupational Stress	100	0.000	-0.351
Fatigue	100	0.000	-0.444

Source: Primary Data (2023)

The Spearman Correlation Test results, displayed in Table 2, indicate a significant correlation (p -value = 0.000; $p < 0.05$) between the work stress and quality of life variables. The coefficient of correlation (r) = - 0.351 shows that there is a weak connection between the two variables, and indicates a negative correlation direction (-) It implies that workers' quality of life is negatively impacted by work-related stress.

P value = 0.000 ($p < 0.05$) was found in the connection between work fatigue characteristics and quality of life variables (Table 2). The two variables have a moderately significant association with a negative correlation direction (-), as indicated by the correlation coefficient (r) = -0.444. This suggests that workers' quality of life decreases as job tiredness increases.

3. Multivariate Analysis

The association between job stress and tiredness characteristics and quality of life variables was examined using multivariate analysis. In this study using linear regression analysis. The variables of work stress and fatigue in the bivariate analysis have a p -value = 0.000 ($p < 0.25$) so they qualify for linear regression analysis. The following are the results of the linear regression analysis:

Table 3.

Linear Regression Multivariate Analysis Results

Variables	Quality of Life		
	Coefficient	Correlation Coefficient	p
Occupational Stress	-0.014	-0.302	0.006

Fatigue	-0.012	-0.352	0.001
---------	--------	--------	-------

Source: Primary Data (2023)

Summary Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.594 ^a	.353	.340	.088348

DISCUSSION

1. Occupational Stress and Quality of Life

Internal variables including sex, age, and degree of education, weariness, and personality can be the root causes of work-related stress. External variables include interactions between people, workload, professional advancement, individual tasks, and external pressures on the organization (Zaenal, 2014). Work stress is a psychological reaction that the body has to demands and pressures from the workplace that are greater than what it can handle. These demands can be environmental or physical, or they can be social situations that make it difficult to complete tasks. Work stress is a result of people interacting with their work. Whereas according to Rice in Waluyo (2013), Stress at work generally has a negative impact on both employees and employers. These repercussions may manifest in employees as low job enthusiasm, elevated anxiety, irritation, and so forth. Meanwhile, according to Arnold in Waluyo (2013), Individuals who encounter work-related stress may face four outcomes: impairment of their physical and psychological well-being, decreased performance, and an impact on their ability to make decisions. Indirect effects of work stress on businesses include higher absenteeism, lower productivity, and psychological effects that can weaken organizational commitment and lead to alienation and attrition (Waluyo, 2013). The stress reaction can be psychological or physical. Usually, stressed workers or employees will show behavioral changes. Behavioral changes occur in humans as an effort to cope with stress. Efforts to cope with stress can be in the form of behavior against stress (flight) or freeze (silence).

Table 2 presents a noteworthy correlation between Stress at job and life quality variables. With a negative correlation direction (-), the association is weak, indicating that workers experience lower levels of quality of life the more stressed they are at work. These findings are consistent with Marques-Duarte and da Pureza (2019) research, which discovered a link between job stress and a decline in existence quality. Anshasi et al (2020) found that occupational stress was linked to a decline in The elements of life quality that are both physiological and mental in another research on nurses in Lebanon. The two main factors causing job stress found in the study were overly workload and dealing with dying patients. In addition, Kumar, Bhat, and Ryali (2018) found an association between various domains of job pressure (mental health variables) and various areas of the standard of living for employees. Feeling of stress by employees is a global problem that in addition to having an impact on work organizations can potentially affect the standard of living for employees. It is necessary to make efforts to improve the standard of living by implementing interventions to reduce job stress since exhaustion with professional standards of living is affected through strain at work and social support (Shin Minyoung and Joung Woojoung, 2023). Quality of life is a mutual relationship between various aspects of human nature, one of which is with their labor. There is an association between job stress as well as living quality that is reciprocal (Lu *et al.*, 2019). A poorer quality of life standard of living is linked to a rise incidences of job stress in both general and psychiatric nursing (Hamaideh, 2011). Stress harms quality of life, especially

health-related quality of life, therefore a need for interventions that can reduce, minimize, or eliminate stressors in workers (Sarafis *et al.*, 2016)

2. Occupational Fatigue and Quality of Life

Occupational fatigue can be caused by several factors, including age, gender, nutritional state, workload, duration of labor, and physical aspects of the workplace (Lientje Setyawati K. Maurits, 2017a). According to Susanti, Rizki, and Ap (2019), fatigue is a variety of conditions accompanied by a decrease in efficiency and flexibility while working. Work activities carried out by PT Iskandartex workers can cause fatigue in workers. The work activities carried out by workers make workers feel some complaints such as feeling tired all over the body, back pain, and feeling thirsty which are symptoms of fatigue. The symptoms felt by workers can be caused by activities that require too much physical energy, repeated motions, and poor working environment situations. According to Suma'mur (2014), The central nervous system's two antagonistic systems—the activating system (activation) and the inhibitory system (inhibition)—have an impact on weariness, a functional response of the cortex cerebri. An inclination toward fatigue and a reduction in human reactivity can be caused by the thalamic inhibitory system. The activator system in the formation reticular can stimulate the vegetative center for egotropic conversion of the body towards doing an activity. A person's condition will depend on the work between the two systems. If the inhibition system is stronger than the activation system, the body will experience a decrease in alertness in reacting to a stimulus and cause feelings of fatigue (Lientje Setyawati K. Maurits, 2017).

The work weariness variable and the quality of life variable are significantly correlated. The p-value of 0.000 ($p < 0.05$) in Table 2 indicates a moderately strong association among the two variables with a negative correlation direction (-). (The correlation coefficient value (r) = -0.444), indicating that workers' quality of life decreases as work tiredness increases. These results conform to the findings of the study which states implies a connection exists between job fatigue as well as life quality in Nurses at UNS Surakarta Hospital (Titik Purwanti, et.al, 2023). Low income encourages workers to prolong the duration of work so that they experience fatigue. As a result of this fatigue, workers prefer to rest at home, causing a lack of availability of information for daily life. The lack of time to socialize also causes a lack of support for the problems experienced by workers (Octaviana, et al., 2019). Tiredness can also cause discomfort for workers so it can interfere with the quality of one's sleep. Sleep is an essential and highly significant function. Disturbances in sleep latency, duration, efficiency, and sleep satisfaction are signs of someone experiencing insomnia. The effects of chronic sleeplessness can negatively impact one's standard of living (Premani *et al.*, 2017). Fatigue can be interpreted as a mechanism to protect the body from further damage. As job burnout increases, quality of life decreases (Craiovan, 2015).

3. Occupational Stress, Fatigue and Quality of Life

Considering the outcomes of multivariate analysis (table 3), the adjusted R Square value is 34%, meaning that the equation obtained can explain the quality of life by 34%. The remaining 66% is explained by other variables not studied. The basic concept of quality of life for workers describes the methods by which organizations can ensure the holistic well-being of workers, emphasizing not just characteristics of the workplace but also the method by which employees and stakeholders in the organization learn to collaborate more effectively to enhance staff quality of life and organizational effectiveness at the same time (Moradi *et al.*, 2014). Physical and psychological health are considerable indicators of textile workers' quality of life (Rasheed, 2022). Workers have a good the reason standard of living is considerable is it tends to make the worker more productive and from a personal point of view, workers having a fulfilling life tend to also have good mental health (Wijaya et al., 2019). The relationships with coworkers, safety procedures at work in the

context of preventing accidents, qualities of the work, relationship with supervisor, well-being, marital status, and physical surroundings are the seven aspects that are linked to the general standard of living. Moreover, among those who produce textile dye plants, connections with coworkers factors among textile dyeing workers were marital status, injury prevention, and significant variables which explained twenty-three percent of the variation in total quality of life (Kittipichai *et al.*, 2015). Physical and psychological health are significant predictors of workers' life quality, especially in the textile sector, so there is a need for appropriate organizational policies and procedures to address workers' physical and mental health by managing workloads and stresses that maintain workplace safety Shier (et al., 2021).

Quality of life for workers describes the method by which organizations can ensure the holistic well-being of workers that not only focuses on work-related aspects but also the process by which workers and organizational Stakeholders acquire work skills together better to raise organizational effectiveness and staff quality of life at the same time (Moradi *et al.*, 2014). Seven elements contribute to total life quality: relationship with co-workers, workplace safety in terms of preventing accidents and the qualities of the work, relationship with supervisor, well-being, marital status, and physical environment. 23% of the standard of living for textile laborers in Thailand was affected by the variables of relationship with co-workers, accident avoidance, and marital status (Kittipichai *et al.*, 2015). Skeletal muscle complaints, fatigue, and low life satisfaction might result from stress (Tarwaka, 2014). The standard of living is also associated with 4 domains according to the WHOQOL-BREF instrument for assessment, that is, social relations, psychological well-being, physical health, and the environment (Octaviana *et al.*, 2019). Living quality is a reciprocal relationship between various aspects of human nature, one of which is with their work (Marques-Duarte and da Pureza, 2019). As though defining a good work environment or a good and healthy life, the ideas of job satisfaction as well as the standard of work life (QWL) have a connection (Pereira, Leitão, and Ramos, 2022).

THE STUDY'S LIMITATIONS

This study has certain limitations. First, because it only looks at one textile company, the research topic is still too narrow. Secondly, other elements that could have an impact on the quality of life for textile workers were not looked at in this study.

CONCLUSIONS AND SUGGESTIONS

There is a significant influence of occupational stress and fatigue on the quality of life of workers, where the lower the occupational stress, the higher the quality of life of workers, as well as the smaller the fatigue, the higher the quality of life of workers. Work stress and fatigue are factors that can impact the standard of living of textile workers as well as other factors. Other factors that affect the quality of life of textile workers need to be added for further research. Some strategic and practical policies are essential to preserve and raise workers' quality of life with efforts to control stress and fatigue among workers, for example by rescheduling, holidays, providing encouragement, assessment, and bonuses for completing tasks to keep workers' spirits high and positive.

ACKNOWLEDGMENT (IF NECESSARY)

The workers' invaluable participation in this study is much appreciated by the authors. The LPPM Universitas Sebelas Maret and the Vocational School's Research Group Occupational Health Environmental Health (OHEH) provided funding for this study.

ETHICAL CONSIDERATIONS

This study has obtained ethical approval issued by the Health Research Ethics Committee of Dr Moewardi Hospital through letter No. 1.101/VI/HRECEC/2023. In addition, the researchers had obtained official preliminary permission and complied with local health authorities. Informants provided written informed consent before data collection.

FUNDING STATEMENT.

The Dr. Moewardi Hospital's Health Research Ethics Committee granted ethical permission for this study with letter No. 1.101/VI/HRECEC/2023. Furthermore, the researchers complied with local health authorities and acquired official preliminary permission. Before any data was collected, informants gave their signed, informed consent.

CONFLICT OF INTEREST STATEMENT

The authors affirm that there are no known conflicts of interest associated with the composition and release of this work.

REFERENCES

- Aftab Ahmad *et al.* (2018) 'Effects of workplace stress on managers of textile industries of developing countries: a case study from Pakistan', in *In Advances in Human Factors, Business Management and Society: Proceedings of the AHFE 2018 International Conference on Human Factors, Business Management and Society*. Loews Sapphire Falls Resort at Universal Studios, Orlando, Florida, USA 9 : Springer International Publishing., pp. 500–507.
- American Psychological Association (2011) *Annual Report of the American Psychological Association*, <https://www.apa.org/pubs/reports/2011-report.pdf>.
- Anshasi, H.A. *et al.* (2020) 'Nurses' stressors and their quality of life: A study on nurses caring for older patients', *Nursing Open*, 7(6), pp. 1698–1706. Available at: <https://doi.org/10.1002/nop.2.553>.
- Craiovan, P.M. (2015) 'Burnout, depression and quality of life among the Romanian employees working in non-governmental organizations', *Procedia-Social and Behavioral Sciences*, 187, pp. 234–238.
- Hamaideh, S.H. (2011) 'Occupational stress, social support, and quality of life among Jordanian mental health nurses', *Issues in Mental Health Nursing*, 33(1), pp. 15–23. Available at: <https://doi.org/10.3109/01612840.2011.605211>.
- Kittipichai, W. *et al.* (2015) 'Quality of life among Thai workers in textile dyeing factories', *Global journal of health science*, 7(3), pp. 274–282. Available at: <https://doi.org/10.5539/gjhs.v7n3p274>.
- Kumar, A., Bhat, P. and Ryali, S. (2018) 'Study of quality of life among health workers and psychosocial factors influencing it', *Industrial Psychiatry Journal*, 27(1), p. 96. Available at: https://doi.org/10.4103/ipj.ipj_41_18.
- Lientje Setyawati K. Maurits (2017) *Selintas Tentang Kelelahan Kerja*. 5th edn. Yogyakarta: Amara Books.
- LIFE, O. (2015) 'Kualitas hidup kesehatan: Konsep, model dan penggunaan. Jurnal Ilmiah Kesehatan', *Jurnal Ilmiah Kesehatan*, 7(2).
- Lu, Y.K. *et al.* (2019) 'Reciprocal relationship between psychosocial work stress and quality of life: The role of gender and education from the longitudinal study of the Survey of Health, Ageing and Retirement in Europe', *BMJ Open*. BMJ Publishing Group. Available at: <https://doi.org/10.1136/bmjopen-2018-027051>.

- Maria Cristina Manullang (2018) 'Penghargaan dan Kondisi Pekerjaan Mempengaruhi Kualitas Hidup Profesional Perawat', *Hospitalia*, 1, pp. 51–66.
- Marques-Duarte, M.S. and da Pureza, D.Y. (2019) 'Association between job satisfaction and workers' quality of life in a public maternity hospital in the far North of Brazil', *Revista Brasileira de Saude Materno Infantil*, 19(3), pp. 723–732. Available at: <https://doi.org/10.1590/1806-93042019000300013>.
- Moradi, M. *et al.* (2014) 'Impact of endometriosis on women's lives: A qualitative study', *BMC Women's Health*, 14(1). Available at: <https://doi.org/10.1186/1472-6874-14-123>.
- Octaviana, A., Rachmawati, D.A. and Nurdian, Y. (2019) 'Hubungan antara Beban Kerja Fisik dengan Kualitas Hidup Kuli Panggul', *Al-Sihah : Public Health Science Journal*, 11(1), pp. 18–30.
- Pereira, D., Leitão, J. and Ramos, L. (2022) 'Burnout and Quality of Work Life among Municipal Workers: Do Motivating and Economic Factors Play a Mediating Role?', *International Journal of Environmental Research and Public Health*, 19(20). Available at: <https://doi.org/10.3390/ijerph192013035>.
- Premani, N.T. *et al.* (2017) 'Insomnia Berkorelasi dengan Terganggunya Kualitas Hidup Personil Militer di Lingkungan Makesdam IX/Udayana', *Medicina*, 48(3), pp. 206–210.
- Rasheed, A. (2022) 'The role of professional quality of life in physical and psychological health of textile employees', *Jurnal Psikologi Integratif*, 10(2), pp. 152–166.
- Rathamani dan, P. *et al.* (2013) *Studi tentang Kualitas Kehidupan Kerja Karyawan di Industri Tekstil-Sipcot, Perundurai*. Available at: www.iosrjournals.org.
- Sarafis, P. *et al.* (2016) 'The impact of occupational stress on nurses' caring behaviors and their health related quality of life', *BMC Nursing*, 15(1). Available at: <https://doi.org/10.1186/s12912-016-0178-y>.
- Shier, M.L. *et al.* (2021) 'Social Service Worker Experiences with Direct and Indirect Violence When Engaged with Service Users', *British Journal of Social Work*, 51(4), pp. 1238–1258. Available at: <https://doi.org/10.1093/bjsw/bcab035>.
- Shin Minyoung and Joung Woojung (2023) 'Effects of Job Stress, Social Support, and Infection Control Fatigue on Professional Quality of Life among Nurses in Designated COVID-19 Hospitals', *Journal of Korean Academy of Nursing Administration*, 29(5), p603.
- Suma'mur (2014) *Higiene Perusahaan dan Kesehatan Kerja*. Jakarta: PT Sagung Seto.
- Susanti, S., Rizki, A. and Ap, A. (2019) **FAKTOR YANG BERHUBUNGAN DENAGN KELELAHAN KERJA PADA PEKERJA PT MARUKI INTERNATIONAL INDONESIA MAKASSAR TAHUN 2018**.
- Tarwaka (2014) *Ergonomi Industri: dasar-Dasar pengetahuan Ergonomi dan Aplikasi di Tempat Kerja*. 2nd edn. Surakarta: Harapan Press.
- Titik Purwanti, S.Dwi Sulisetyawati and Sahuri Teguh Kurniawan3 (2023) *Hubungan Kelelahan Kerja Dengan Kualitas Hidup Perawat Di RS UNS Surakarta*. University of Kusuma Husada Surakarta.
- Waluyo, M. (2013a) *Psikologi Industri*. Jakarta: Akademia Permata.
WHOQOL User Manual PROGRAMME ON MENTAL HEALTH DIVISION OF MENTAL HEALTH AND PREVENTION OF SUBSTANCE ABUSE WORLD HEALTH ORGANIZATION (no date).
- Wijaya, K.S., Koesma, R. and Zamralita, Z. (2019) 'PERANAN REAKSI STRES KERJA TERHADAP KUALITAS HIDUP PADA PEKERJA LEVEL OPERATOR', *Jurnal Muara Ilmu Sosial, Humaniora, dan Seni*, 3(1), p. 159. Available at: <https://doi.org/10.24912/jmishumsen.v3i1.3510>.
- Zaenal, V.R., D. (2014) *Manajemen Sumber Daya Manusia Untuk Perusahaan dari Teori Ke Praktik*. Jakarta: Rajagrafindo Persada.