

“The Impact of Resilience and Neuroticism Personality on Burnout of Mining Employees”

Abdul Rahman Kadi, Andik Matulesy, Amanda Pasca Rini

Faculty of Psychology, 17 Agustus 1945 University Surabaya

DOI: <https://doi.org/10.51244/IJRSI.2024.1108068>

Received: 21 July 2024; Accepted: 13 August 2024; Published: 11 September 2024

ABSTRACT

This research aims to determine the influence of resilience and neuroticism personality on burnout in PT X mining employees. This research involved 269 general crew using random sampling techniques to determine research participants. Data collection used a burnout scale, and a resilience scale developed by researchers, the Big V personality scale, to look at the neuroticism variable in the research. The research data has been tested for assumptions using normality and linearity tests and the data analysis technique used in this research is multiple linear regression. The results show that resilience and neuroticism personality together can have an influence on burnout with a significance value of $0.000 < 0.01$. Resilience is also proven to have an influence on burnout with a significance value of $0.000 < 0.01$. Likewise, neuroticism can influence burnout with a significance value of $0.000 < 0.01$.

Keywords: Burnout, Resilience, Neuroticism, Mining Employees

INTRODUCTION

Indonesia is a country known for its very rich and abundant natural resources, with this wealth Indonesia has great potential to improve the welfare of its people. Realizing this, the government is opening opportunities for investors, both domestic and foreign from various countries, to invest their capital in Indonesia to carry out business activities, one of which is in the mining sector. This situation makes the country benefit, such as increasing state income, improving the local economy and creating new jobs which ultimately reduces the unemployment rate in Indonesia to 1,156,361 in 2020 according to data from the Investment Coordinating Board (BKPM).

However, working in the mining sector is not an easy thing, this is because the work system applied in the mining sector on average adheres to a 3 shift 24 hour/day work system, which ultimately forces workers to remain conscious and work at night. which is in conflict with the human body's biological clock which can have an impact on health (Copertaro & Bracci, 2019), apart from that, heavy and monotonous physical work for employees can potentially trigger work fatigue or what is also known as burnout (Bláfoss et al., 2019).

Burnout is a psychological syndrome that appears when employees or working people experience emotional exhaustion, depersonalization, and reduced socialization and self-esteem (Maslach, 1982). Burnout can occur in any scope of work, including in the mining sector, according to research conducted by Yi et al., (2022), showing that employees who work in the mining sector have a burnout rate at a severe level of up to 16.2% (218 people of 1,346), apart from that research conducted by (Lu et al., 2020), shows that of the 6,120 respondents, 2,342 (38.27%) of them suffer from psychological health problems, this cannot be separated from the harsh work environment such as the high temperatures, dark or dusty working conditions. Sun et al., (2020), also conducted similar research, the results showed that 5.26% (66 of 1,014

respondents) fell into the severe burnout category, with this figure there are many variables that cause burnout in mining employees, apart from the heavy workload. heavy or monotonous work, emotional conflict can also be one of the causes of burnout, according to research conducted by Deng et al., (2021), showing that burnout that occurs in workers can also be caused by emotional conflict, especially in married employees, because most of the workers are separated from their partners for quite a long time.

PT X is a company operating in the nickel smelter sector located in Morosi, Southeast Sulawesi, which has been established since 2013. This company implements a 5-day work system a week and 3 8-hour work shifts a day. The system implemented is in accordance with Law No. .13 of 2003 concerning employment, but in practice there are some employees who are unable to adapt to tough work situations in the field which ultimately has an impact on the physical and mental health of the workers. In several cases it was found that many employees experienced acute respiratory infections (Tawakkal et al., 2023), this occurred because the work environment was full of dust and other chemical particles, apart from that, the results of interviews also found that many employees experienced stomach ulcers because irregular eating patterns, as well as severe physical fatigue caused by heavy work demands, which require working in conditions that are not conducive, such as workplaces full of dust, high temperatures, or work that uses physical strength, apart from that it was also found that The long distance to the workplace makes most employees feel more tired after work and have less rest time. This is because most workers have taken home ownership credit (KPR) in Kendari City, where the distance between the company and Kendari City is at least takes 1-2 hours to travel, this dilemma arises whether employees should increase their living expenses for a house contract near their place of work or stay on a mortgage that is far away, this of course cannot be separated from the economic aspect.

The fatigue experienced by PT X employees ultimately has an impact on the employees' physical health, such as muscle pain, headaches, and even sleep disorders due to irregular sleep patterns. Apart from that, it was also found that some employees felt unsure about whether they should continue working or choose to resign, this thought became a burden for employees because each of them had responsibilities that had to be met, this ultimately had an impact on mental health, especially since most employees were immigrants who were far from family, so that employees receive less emotional support.

Burnout experienced by employees if not addressed can have a negative impact on employees and companies, such as resulting in a decrease in individual, team and organizational performance (Bakker et al., 2014), creativity and innovation in employees can be hampered (Huhtala & Parzefall, 2007) and can increase workplace errors, accidents, and injuries (Han et al., 2019; Nahrgang et al., 2011). Burnout is also associated with counterproductive work behavior such as higher absenteeism (Schaufeli et al., 2009) and can even increase employee turnover (Bakker et al., 2014).

Basically, each employee has differences in dealing with the workload they face, this difference can be caused by several factors such as resilience (Grover & Furnham, 2020) and big v personality (Bashkirova et al., 2023). In the resilience variable, this variable is able to see how tough and calm a person is in facing the difficulties they face, individuals with good resilience also have the ability to manage emotions in themselves and others lain (Athota & Roberts, 2015; O'Connor & Athota, 2013), where this variable has a causal relationship with employee burnout (Grover & Furnham, 2020). The resilience of an employee is different, based on research related to resilience, it shows that the resilience possessed by a person has a dynamic nature, such as research conducted by Ong et al., (2006), the results of his research explain that resilience can change when influenced by surrounding circumstances. depending on the workload faced by the employee, so that a person's resilience can vary and can be related to the working conditions experienced.

Not only resilience, personality also influences individual perceptions and reactions to stressful situations experienced (Maslach et al., 2001). This explains that differences in the level of burnout experienced by

employees are also influenced by their personalities. According to Costa & McCrae (1992), there are 5 dimensions of personality or what we usually know as big V Personality, including extraversion, agreeableness, conscientiousness, openness and neuroticism. Kastanya et al., (2022), explain that someone who has an extroverted personality tends to be sociable, assertive and friendly, while individuals who have an introverted personality tend to be quiet, shy and calm. Individuals who have the personality trait of openness have a strong relationship with openness to insight and originality of ideas. These individuals like new information and are ready to adapt to new ideas or situations. Agreeableness is reflected in good social adaptability, such as a friendly attitude, a compromise attitude, avoiding conflict, and a tendency to go along with the majority. The next personality dimension is conscientiousness, where individuals who have a high level of conscientiousness tend to be very careful, trustworthy, orderly, and responsible for the tasks they carry out. Lastly, Neuroticism is often considered the personality characteristic most associated with burnout (Zellars et al., 2000). A highly neurotic person exhibits cognitive traits such as low self-esteem and fear, and has a tendency to experience a higher risk of burnout (McCrae & Costa, 1987). According to research by Bühler & Land, (2003), individuals who have high levels of Neuroticism tend to experience emotional exhaustion and depersonalization. Neuroticism has also been shown to have a negative impact on personal achievement. For example, Bianchi, (2018) conducted a relative weight analysis and found that Neuroticism could account for 53.46% of job burnout compared to only 31% explained by reward imbalance factors contextualized by work. While the other four Big V personality traits will also be explored, neuroticism will be the primary personality trait examined in this study.

Although there has been previous research that examined the relationship between neuroticism, resilience and burnout separately, there has been no research that specifically examined the relationship between these three variables simultaneously, apart from that, previous research also studied more conducive working conditions compared to the research that will be conducted. In the mining sector, which has a culture and working conditions that are quite harsh and have high work risks, therefore this research will examine the relationship between these three variables, with the hope that the research can provide an overview and explanation of the relationship between neuroticism, resilience and burnout, and can further be the basis for developing prevention and intervention strategies to reduce the risk of burnout in employees working in the mining sector.

RESEARCH PURPOSES

The objectives of this study are:

1. To determine the relationship between burnout, resilience and neurotic personality in mining employees
2. To determine the relationship between resilience and burnout in mining employees
3. To determine the relationship between neurotic personality and burnout in mining employees

RESEARCH METHODS

The population in this study was the general crew of PT. X in Southeast Sulawesi with a total of 825 employees. Determining the sample size in this research uses the Slovin formula with a critical value in drawing the sample size for this research using 5%. The sampling technique in this research is to use a simple random sampling technique, where this technique will select employees at random, so that the sample in this research is 269 people.

This research uses a quantitative type of research. This research data was obtained using a research scale consisting of a burnout scale compiled by researchers using aspects of the Maslach Burnout Inventory (MBI) scale, a resilience scale was also compiled by researchers using aspects of The Connor-Davidson

Resilience Scale (CD-RISC), as well as the Big Five Inventory (BFI) scale which was adapted into Indonesian by Ramdhani (2012), to measure aspects of neuroticism in this study

The burnout scale has 22 items with an Item-rest correlation ranging from 0.303 – 0.775 and a Cronbach alpha value of 0.905, the resilience scale has 26 items with an Item-rest correlation value ranging from 0.311 – 0.875 and a Cronbach alpha value of 0.939, and the final scale is the Big Five Inventory (BFI) has 39 items with item-rest correlation values ranging from 0.311 – 0.876 and Cronbach alpha of 0.959.

The data analysis method for testing this research data is multiple linear regression analysis with the help of the SPSS (Statistics Program for Social Science) 26.0 for Windows program.

RESULTS AND DISCUSSION

A. Descriptive Analysis

The following are the results of descriptive analysis in this research.

TABLE I Burnout Levels in Mining Employees

Level	Frequency	Percentage
Very High	11	4,11 %
High	76	28,25 %
Moderate	101	37,54 %
Low	73	27,13 %
Very Low	8	2,97 %
Total	269	100 %

Based on the data in the table above, the results show that 4.11% of employees are in the very high burnout category and 28.25% are in the high category. Apart from that, 27.13% is in the low category and 2.97% is in the very low category. These results explain that there is a sufficient balance of burnout experienced by the average mining employee at PT X.

Other results also found in the resilience variable can be seen in the following table:

TABLE II Level of Resilience in Mining Employees

Level	Frequency	Percentage
Very High	14	5,20 %
High	55	20,44 %
Moderate	138	50,18 %
Low	48	17,84 %
Very Low	14	5,20 %
Total	269	100 %

Based on the data in the table above, the results show that 5.20% of employees fall into the very high resilience category and 20.44% fall into the high category. Apart from that, 27.13% is in the low category and 5.20% is in the very low category.

Meanwhile, the neuroticism variable is as follows:

TABLE III Level of Neuroticism in Mining Employees

Level	Frequency	Percentage
Very High	7	2,6 %
High	77	28,62 %
Moderate	64	23,79 %
Low	95	35,31 %
Very Low	26	9,66 %
Total	269	100%

Based on the data in the table above, the results show that 2.6% of employees fall into the very high neuroticism category and 28.62% fall into the high category. Apart from that, 35.31% is in the low category and 9.66% is in the very low category.

B. Hypothesis Testing

The first hypothesis (H1) states that there is a relationship between resilience and neuroticism personality and burnout in mining employees. The test results can be seen in the following table:

TABLE IV Results of Hypothesis 1 (H1)

Variable	F	Sig	Result
Resilience and neuroticism with burnout	41.456	0.000	Significant

From the table above, it can be seen that the F value = 41.456 with significance = 0.000 ($p < 0.01$), so it can be concluded that there is a very significant correlation between resilience and neuroticism personality and burnout in mining employees (H1 is accepted).

The second hypothesis (H2) states that there is a relationship between resilience and burnout in mining employees. The test results can be seen in the following table:

TABLE V Results of Hypothesis 2 (H2)

Variabel	F	Sig	Result
Resiliensi – Burnout	-15.275	0.000	Significant

From the table above, it can be seen that the F value = -15.275 with significance = 0.000 ($p < 0.01$), so it can be concluded that there is a very significant correlation between resilience and burnout in mining employees (H2 is accepted).

The third hypothesis (H3) states that there is a relationship between neuroticism personality and burnout in mining employees. The test results can be seen in the following table:

TABLE VI Results of Hypothesis 3 (H3)

Variabel	F	Sig	Result
<i>Extraversion</i> – Burnout	-0.105	0.001	Significant

<i>Agreeableness</i> – <i>Burnout</i>	-0.745	0.000	Significant
<i>Conscientiousness</i> – <i>Burnout</i>	-0.305	0.761	Not Significant
<i>Neuroticism</i> – <i>Burnout</i>	12.869	0.000	Significant
<i>Openness</i> – <i>Burnout</i>	-1.112	0.001	Significant

From the table above, it can be concluded that there is a very significant correlation between neuroticism personality and burnout in mining employees (H3 is accepted).

C. Effective Contribution

The following are effective contributions in this research:

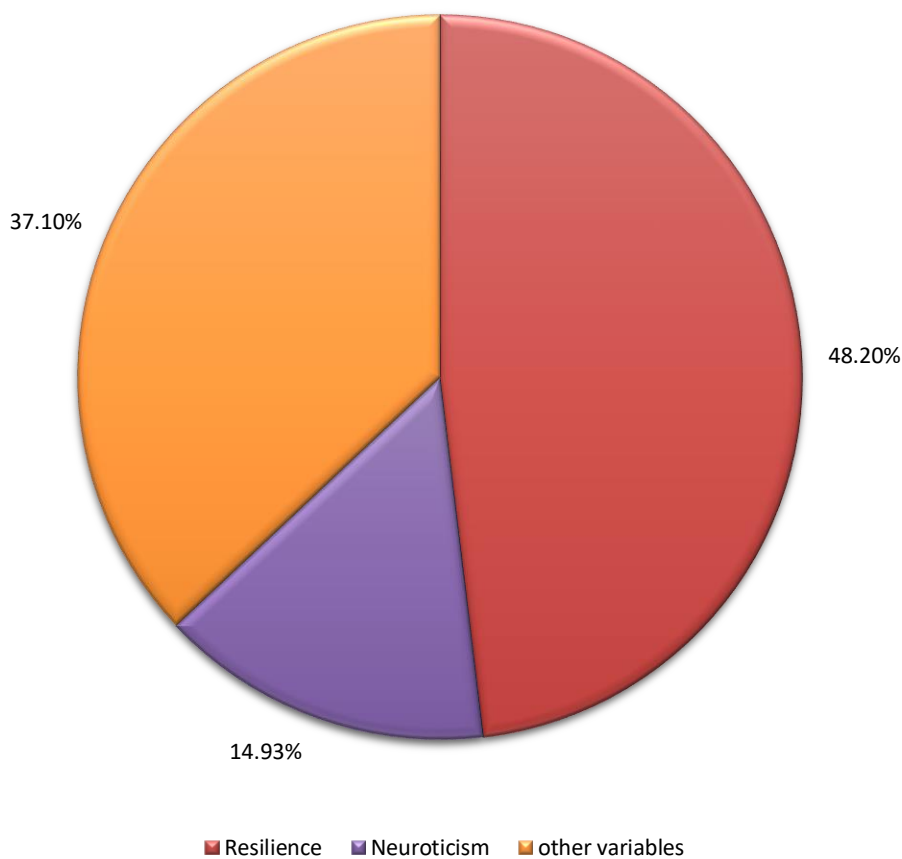


Fig. 1 Effective Contribution

Based on the diagram above, the effective contribution (SE) value of the resilience variable (X1) to the burnout variable (Y) is 48.02%. Meanwhile, the effective contribution value (SE) of the personality variable neuroticism (X2) to burnout (Y) is 14.93%. Therefore, it can be concluded that the resilience variable (X1) and the neuroticism personality variable (X2) have a relationship that is not as strong as the burnout variable (Y). The total effective contribution is 78.81% or almost the same as the coefficient of determination (R^2) for regression analysis, namely 78.81%.

CONCLUSION

The burnout phenomenon in mining workers at PT X is a condition of physical and emotional exhaustion caused by high and continuous work pressure in the mining industry. Workers often face heavy workloads, work in dangerous conditions, and endure long hours. Harsh and dangerous work environments, with exposure to chemicals, as well as dust, exacerbate this situation. The pressure to meet high production targets within a tight timeline also adds to stress levels. In addition, unfavorable mining locations and busy work schedules limit social interactions with family and friends, causing social isolation. The lack of psychological support in the mining work environment also makes it difficult for workers to manage stress and burnout.

The impact of burnout is very significant, not only for individual workers but also for company productivity and work safety. Workers who experience burnout tend to have decreased performance, increased levels of absenteeism, and a higher risk of work accidents. However, in these working conditions, not all mining employees experience the same burnout, of course there are also employees who are able to adapt to these work pressures. This of course can be caused by many variables, which in this research will examine the relationship between resilience and neuroticism on burnout. for employees working in the mining sector.

Based on the results of data analysis testing the relationship between resilience and burnout in PT X mining employees, it shows that the F value = -15.275 and the significance value = 0.000 ($p < 0.01$), these results explain that resilience has a negative influence on burnout which is getting worse. The higher a person's resilience, the lower the burnout experienced. These results are in accordance with previous research conducted by oleh (Rajan & Jimmy, 2013; Ueno & Suzuki, 2016; Castillo et al., 2023; Hezaveh et al., 2021; Utami & Helmi, 2017) which shows that resilience has a negative relationship and significant to burnout. The results of the descriptive analysis also show that as many as 4.11% are in the very high category, and 28.25% are in the high category, while resilience shows that as many as 5.20% have very high resilience while 20.44% are in the high category, this explains that employees at PT X are experiencing burnout but are still resilient in dealing with the workload they are experiencing.

Resilience describes a personal attitude that is able to give rise to a very concrete belief. This belief is a manifestation of the complexity of individual and group responses to challenging traumatic situations, so that it can cause adaptation effects in the midst of life's difficulties and problems (Lindström, 2001). This is closely related to the influence of the values of inner balance, perseverance, independence, meaningfulness and existential solitude that are formed in employees (Wagnild & Young, 1993). For example, when employees encounter work problems in the field, with the value of good inner balance, employees will be able to have strong instincts about how to solve the problems they face based on the employees' life experiences. Employees will also be able to manage emotions well and adapt to the difficult situations they face. Employees will act calmly and not be influenced or provoked by negative effects such as anger, discrimination and so on.

Therefore, it is possible that when PT X employees encounter work problems that can lead to burnout, such as limited career paths, high work demands, and frequently changing work rules (Quick et al., 1997), employees will still have good resilience in facing these problems, because the values of resilience are

also embedded in each employee.

Apart from that, neuroticism also has a positive influence on burnout in mining employees, where based on the results of the analysis that has been carried out, it was found that the F value = 12,869 and the significance value = 0.000 ($p < 0.01$), these results indicate that there is a positive relationship between neuroticism and burnout in employees working in the mining sector. This is in accordance with several previous studies such as research conducted by Bianchi et al., (2021), who conducted studies related to burnout and employee work situations. The results of his research showed that aspects of neuroticism consistently had a significant relationship with burnout in the work environment, apart from that The results of research conducted by Bakker et al., (2006), also show that individuals who have neuroticism are more likely to experience burnout and have lower levels of personal achievement, besides that, Bühler & Land, (2003), conducted similar research, the results showed that individuals who have higher levels of neuroticism experience higher levels of burnout and depersonalization. This explains that these two variables have a positive relationship with each other, where the higher the burnout, the higher the individual's neuroticism

This research also examines the variables extraversion, agreeableness, openness which when these variables have a significant negative relationship where the F value = -0.105 and the significance value = 0.001 ($p < 0.01$) on extraversion, and the F value = -0.745 and the value significance = 0.000 ($p < 0.01$) on agreeableness, F value = -1.112 and significance value = 0.001 ($p < 0.01$) on openness. This is relevant to previous research conducted by (Angelini, 2023; Pérez-Fuentes et al., 2019 & Liu et al., 2022). Where these three aspects have positive indicators in personality, extraversion has the characteristics of warmth and positive emotions, agreeableness has the characteristics of friendliness, honesty and soft-heartedness, and openness has the characteristics of an intellectual individual and tends to explore new ideas (Zhao & Seibert, 2006).

The conscientiousness variable does not have a correlation with burnout in mining employees, this is a different finding from several other relevant studies whose results have a significant relationship with the burnout variable (Angelini, 2023; Pérez-Fuentes et al., 2019 & Liu et al., 2022). Conscientiousness has the characteristics of persistence, hard work and motivation in achieving a goal (Zhao & Seibert, 2006), which has a positive character, but the results of research conducted by Mossakowski, (2011), show that an expectation that is not achieved can This can cause depression in individuals and they experience obstacles in rising to achieve their goals.

This research also explains that the relationship between resilience and neuroticism personality and burnout in mining employees together has a significant relationship, where the F value = 41.456 and significance value = 0.000 ($p < 0.01$). The relationship between resilience and neuroticism has a positive and negative relationship with burnout in mining employees, where if resilience has a negative effect, then neuroticism will have a positive effect on burnout. Theoretically, resilience is a positive variable that contains the ability to manage negative emotions, remain calm under pressure and the ability to find creative solutions in difficult situations. This is inversely proportional to neuroticism which tends to respond to stressful situations in a maladaptive way, such as feeling excessively anxious. , easily give up, and experience difficulty in managing negative emotions, this is ultimately related to burnout which is a variable that also has negative characteristics so that the presence of neuroticism can aggravate or create burnout in mining employees.

The effective contribution in this research shows that the resilience variable has an effective contribution of 48.02% to burnout, followed by neuroticism which has an effective contribution of 14.93%, Agreeableness of 4.56%, Extraversion of 4.96% and the variable Openness 1.63%. The conscientiousness variable only has an effective contribution of 0.7%, which does not have a direct effect on the burnout variable in this study. If the total effective discordance of all variables is 78.81%, this shows that 21.19% of the results of this

research are also influenced by other variables.

REFERENCES

1. Angelini, G. (2023). Big five model personality traits and job burnout: a systematic literature review. *BMC Psychology*, *11*, 49. <https://doi.org/10.1186/s40359-023-01056-y>
2. Athota, V. S., & Roberts, R. D. (2015). How Extraversion + Leads to Problem-Solving Ability. *Psychological Studies*, *60*(3), 332–338. <https://doi.org/10.1007/s12646-015-0329-3>
3. Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and Work Engagement: The JD–R Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
4. Bakker, A. B., Van der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: a study among volunteer counselors. *The Journal of Social Psychology*, *146*(1), 31–50. <https://doi.org/10.3200/SOCP.146.1.31-50>
5. Bashkirova, A., Compagner, A., Henningsen, D. M., & Treur, J. (2023). An adaptive modelling approach to employee burnout in the context of the big five personality traits. *Cognitive Systems Research*, *79*, 109–125. <https://doi.org/10.1016/j.cogsys.2022.12.010>
6. Bianchi, R. (2018). Burnout is more strongly linked to neuroticism than to work-contextualized factors. *Psychiatry Research*, *270*, 901–905. <https://doi.org/10.1016/j.psychres.2018.11.015>
7. Bianchi, R., Manzano-García, G., & Rolland, J.-P. (2021). Is Burnout Primarily Linked to Work-Situated Factors? A Relative Weight Analytic Study. *Frontiers in Psychology*, *11*, 1–14. <https://doi.org/10.3389/fpsyg.2020.623912>
8. Bláfoss, R., Sundstrup, E., Jakobsen, M. D., Brandt, M., Bay, H., & Andersen, L. L. (2019). Physical workload and bodily fatigue after work: cross-sectional study among 5000 workers. *European Journal of Public Health*, *29*(5), 837–842. <https://doi.org/10.1093/eurpub/ckz055>
9. Bühler, K.-E., & Land, T. (2003). Burnout and Personality in Intensive Care: An Empirical Study. *Hospital Topics*, *81*(4), 5–12. <https://doi.org/10.1080/00185860309598028>
10. Castillo, J. C. A., Ballesteros, M. A. A., Valle, M. de los Á. G., Farroñán, E. V. R., Valle-Palomino, N., Segundo, M. G. F., Ninaquispe, J. C. M., & Rodríguez, J. C. F. (2023). Resilience and Burnout Syndrome as Perceived by University Faculty in Lambayeque, Peru. *Academic Journal of Interdisciplinary Studies*, *12*(6), 251–260. <https://doi.org/10.36941/ajis-2023-0167>
11. Copertaro, A., & Bracci, M. (2019). Working against the biological clock: a review for the Occupational Physician. *Industrial Health*, *57*(5), 557–569. <https://doi.org/10.2486/indhealth.2018-0173>
12. Deng, H., Li, X., Abulimiti, X., Mutailifu, Z., Zheng, S., Lin, X., & Li, F. (2021). *The Factors Influencing Job Burnout Among Coal Miners in Xinjiang Uygur Autonomous Region, China: a Cross-Sectional Study*. Research Article. <https://doi.org/10.21203/rs.3.rs-368800/v1>
13. Grover, S., & Furnham, A. (2020). Does emotional intelligence and resilience moderate the relationship between the Dark Triad and personal and work burnout? *Personality and Individual Differences*, *169*, 109979. <https://doi.org/10.1016/j.paid.2020.109979>
14. Han, S., Shanafelt, T. D., Sinsky, C. A., Awad, K. M., Dyrbye, L. N., Fiscus, L. C., Trockel, M., & Goh, J. (2019). Estimating the attributable cost of physician burnout in the United States. *Annals of Internal Medicine*, *170*(11), 784–790. <https://doi.org/10.7326/M18-1422>
15. Hezaveh, Z., Seyedfatemi, N., Mardani-Hamooleh, M., Aabbasi, Z., Haghani, S., & Ghaljeh, M. (2021). The Effect of Resilience Training Program on the Job Burnout of Nurses: A Quasi-experimental Study. *Iran Journal of Nursing*, *33*(128), 100–112. <https://doi.org/10.52547/ijn.33.128.100>
16. Huhtala, H., & Parzefall, M. R. (2007). A review of employee well-being and innovativeness: An opportunity for a mutual benefit. *Creativity and Innovation Management*, *16*(3), 299–306. <https://doi.org/10.1111/j.1467-8691.2007.00442.x>
17. Kastanya, L., Lakshmi, P. A. V., & Cuangganatha, S. (2022). Kepribadian (Big Five Personality) dan

- Burnout Pada Karyawan Bekerja dari Rumah (Working From Home/WFH) Era Pandemi Covid-19. *PSIKODIMENSIA Kajian Ilmiah Psikologi*, 21(2), 187–197. <https://doi.org/10.24167/psidim.v21i2.4605>
18. Lindström, B. (2001). The meaning of resilience. *Journal of Adolescent Medicine and Health*, 13(1), 7–12. <https://doi.org/10.1515/IJAMH.2001.13.1.7>
 19. Liu, Z., Li, Y., Zhu, W., He, Y., & Li, D. (2022). A Meta-Analysis of Teachers' Job Burnout and Big Five Personality Traits. *Frontiers in Education*, 7, 822659. <https://doi.org/10.3389/feduc.2022.822659>
 20. Lu, Y., Zhang, Z., Gao, S., Yan, H., Zhang, L., & Liu, J. (2020). Association of occupational burnout and occupational exposure factors on psychological health among factory workers and miners: a propensity score analysis. *International Archives of Occupational and Environmental Health*, 94, 441–450. <https://doi.org/10.1007/s00420-020-01587-6>
 21. Maslach, C. (1982). Understanding burnout: Definitional issues in analyzing a complex phenomenon. In W. S. Paine (Ed.), *Job Stress and Burnout*. Sage. https://www.researchgate.net/publication/240370761_Understanding_burnout_Definitional_issues_in_analyzing_a_complex_phenomenon
 22. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52, 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>
 23. McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality Across Instruments and Observers. *Journal of Personality and Social Psychology*, 52(1), 81–90. <https://doi.org/10.1037/0022-3514.52.1.81>
 24. Mossakowski, K. N. (2011). Unfulfilled expectations and symptoms of depression among young adults. *Social Science & Medicine*, 73(5), 729–736. <https://doi.org/10.1016/j.socscimed.2011.06.021>
 25. Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71–94. <https://doi.org/10.1037/a0021484>
 26. O'Connor, P. J., & Athota, V. S. (2013). The intervening role of Agreeableness in the relationship between Trait Emotional Intelligence and Machiavellianism: Reassessing the potential dark side of EI. *Personality and Individual Differences*, 55(7), 750–754. <https://doi.org/10.1016/j.paid.2013.06.006>
 27. Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology*, 91(4), 730–749. <https://doi.org/10.1037/0022-3514.91.4.730>
 28. Pérez-Fuentes, M. del C., Molero Jurado, M. del M., Martos Martínez, Á., & Gázquez Linares, J. J. (2019). Burnout and Engagement: Personality Profiles in Nursing Professionals. *Journal of Clinical Medicine*, 8(3), 286. <https://doi.org/10.3390/jcm8030286>
 29. Quick, J. C., Quick, J. D., Nelson, D. L., & Hurrell, J. J. (1997). *Preventive Stress Management in Organizations*. American Psychological Association. <https://doi.org/10.1037/10238-000>
 30. Rajan, S. K., & Jimmy, J. (2013). The effect of resilience on burnout among the blue collared employees in metal factories. *EXCEL International Journal of Multidisciplinary Management Studies*, 13(6), 48–55. <https://www.indianjournals.com/ijor.aspx?target=ijor:xijmms&volume=3&issue=6&article=007>
 31. Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893–917. <https://doi.org/10.1002/job.595>
 32. Sun, X., Zhang, L., Zhang, C., Liu, J., & Ge, H. (2020). The status of job burnout and its influence on the working ability of copper-nickel miners in Xinjiang, China. *BMC Public Health*, 20(1), 305. <https://doi.org/10.1186/s12889-020-8245-4>
 33. Tawakkal, Nurmala, I., Lisawati, Andriyani, & Kurniawan, F. (2023). Correlation between Clean and Healthy Behavior and ARI Incidence in the Work Area of the Morosi Community Health Center, Konawe Regency. *Indonesian Journal of Contemporary Multidisciplinary Research (MODERN)*, 2(3), 465–480. <https://doi.org/10.55927/modern.v2i3.4371>
 34. Ueno, Y., & Suzuki, T. (2016). Longitudinal study on the relationship between resilience and burnout

- among Japanese athletes. *Journal of Physical Education and Sport*, 16(4), 1137–1141. <https://doi.org/10.7752/jpes.2016.04182>
35. Utami, C. T., & Helmi, A. F. (2017). Self-Efficacy dan Resiliensi: Sebuah Tinjauan Meta-Analisis. *Buletin Psikologi*, 25(1), 54–65. <https://doi.org/10.22146/buletinpsikologi.18419>
36. Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1(2), 165–178. <http://www.ncbi.nlm.nih.gov/pubmed/7850498>
37. Yi, X., Li, X., Ma, X., & Li, F. (2022). The relationship between occupational stress and job burnout in coal miners: Interactions between GCCR and SLC6A4 gene polymorphisms and the environment. *Journal of Affective Disorders*, 297, 76–82. <https://doi.org/10.1016/j.jad.2021.10.002>
38. Zellars, K. L., Perrewé, P. L., & Hochwarter, W. A. (2000). Burnout in Health Care: The Role of the Five Factors of Personality. *Journal of Applied Social Psychology*, 30(8), 1570–1598. <https://doi.org/10.1111/j.1559-1816.2000.tb02456.x>
39. Zhao, H., & Seibert, S. E. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91(2), 259–271. <https://doi.org/10.1037/0021-9010.91.2.259>