The Moderating Role of Psychological Well-Being on The Relationship Between Psychological Capital and Job Satisfaction

Maria Asri Legowati[1], Martina Dwi Mustika[2]
[1,2]University of Indonesia, Depok, Indonesia
Email: maria.asri@gmail.com

Abstract

There has been a lot of research on job satisfaction recently. Employees who are satisfied with their job will have an impact on their job performance. This study aimed to determine the moderating role of Psychological Well-Being on the relationship between Psychological Capital and Job Satisfaction. Participant in this study is 207 employees of an X coal mining company in Indonesia. The measuring tools used were Psychological Well Being Scale (Ryff et al., 1995), Psychological Capital Questionnaire (Luthans et al., 2007), and Michigan Organization Assessment Questionnaire Job Satisfaction Sub Scale (Camman, et al., 1979). The result of the analysis data show that there was a relationship between psychological capital and job satisfaction, and psychological well-being had no moderating effect on the relationship between psychological capital and job satisfaction.

Keywords: *Psychological Capital*, *Job Satisfaction*, *Psychological Well-Being*, *Coal Mining.*

A. INTRODUCTION

The coal industry in Indonesia is one of the industries that absorbs quite a lot of Indonesian Workers (TKI). Based on data from the Directorate General of Oil and Gas & the Directorate General of Mineral and Coal in the 2019 - 2020 EITI Indonesia Report, it was stated that the number of workers employed in coal companies was recorded at 9,083 in 2020. This number of workers has of course increased along with the increase in coal production in Indonesia from year to year as stated in coal production and sales realization report released by the Ministry of Energy and Mineral Resources every year (https://modi.esdm.go.id/produk-batubara). Based on this report, coal production in Indonesia increased from 565.69 million tons in 2020 to reach 767.64 million tons in 2023. With increasing production targets and increasing numbers of human resources, human resource management, especially in the mining industry sector, is important to ensure that it can support maximum improvement in organizational performance.

One attempt to carry out appropriate human resource management, in 2020, company X, which operates in the coal mining sector, conducted an Employee Engagement Survey (EES) for all employees. The EES results show that of the 15 key drivers, three of them have the lowest scores, namely reward, job advancement and opportunity, and involvement. These three key drivers have decreased in value from the previous EES results conducted in 2017. The indicator included in the key driver of job advancement and opportunity is career development. Career development and

work atmosphere are positively related to job satisfaction (Ashraf, 2019). The results of the 2020 EES show a decrease in job satisfaction among employees compared to the EES three years earlier. If it is not followed up appropriately, this decrease in job satisfaction will have a negative impact on the continuity of the organization in the future. In line with the results of research by Oswald (2015) which states that employee satisfaction has an impact on performance which contributes to overall productivity, it is even stated that employees who have positive emotions can increase productivity by 12%.

Job Satisfaction can be explained as the extent to which a person reports satisfaction with the intrinsic and extrinsic features of a job (Warr, Cook, & Wall, 1979). It was also explained that total job satisfaction is defined as the sum of all separate items and overall job satisfaction is the overall satisfaction reported regarding the job as a whole. Discussions regarding Job Satisfaction are still widely researched today because it has consequences for the emergence of work-related behavior, such as job performance, job quitting, and organizational citizenship behavior (Chowhan & Pike, 2023; Wen, Maani & Dong, 2023; Torlak et. al., 2021). To increase employee job satisfaction, companies can pay attention to conditions in the company such as work-life balance, growth opportunities and managerial support (Tshivhase & Vilakazi, 2018) and increase the psychological capital of their employees (Paliga, et.al., 2022).

Psychological capital is a condition of positive psychological development of a person who has the characteristics, namely (1) having the self-confidence (efficacy) to take part in important efforts to achieve challenging tasks; (2) make positive attributions (optimism) about current and future success; (3) persistent in achieving goals, and if important can redirect the path towards the goal (hope) in order to achieve success; (4) when hit by problems and difficulties, survive and rise again and even overcome them (resiliency) to achieve success (Luthans, et.al., 2007). Psychological capital is one of the factors that is related and can predict employee job satisfaction (Kanengoni, Ngarambe & Buitendach, 2018; Mustika, Raharjo & Prasetya, 2020; Ngwenya & Pelser, 2020). Therefore, psychological capital will be examined in this research to predict job satisfaction.

Apart from psychological capital factors, psychological well-being factors also influence job satisfaction (Esen, Besdil & Erkmen, 2021). Psychological well-being is often linked to psychological capital (Saman & Wirawan, 2023; Sato et al., 2022; Gyu Park, 2017). Explained further in their research conducted on workers in the energy sector in Turkey, Esen et al., (2021) explained that there is a significant relationship between psychological well-being and job satisfaction, and psychological capital and job satisfaction. Even though they are related to each other, the research results show that there is no moderating effect of psychological well-being on the relationship between psychological capital and job satisfaction. However, because this research was not conducted in Indonesia, the researchers tried to determine the moderating role of psychological well-being on the relationship between psychological capital and job satisfaction in coal mine workers in Indonesia.

B. LITERATURE REVIEW

1. Job Satisfaction

Herzberg's motivation theory is often used to understand more deeply about Job Satisfaction (Tshivhase & Vilakazi, 2018). According to Herzberg's Motivation Theory which applies in the workplace, there are two types of driving factors: 1) satisfiers (motivators) which are the main drivers of job satisfaction and include achievement, recognition, responsibility and work progress, and 2) dissatisfaction (hygiene factors) which is the main cause of job dissatisfaction (Herzberg, 1966). Alrawahi, et.al., (2020) in their research found several factors that cause job dissatisfaction and factors that cause job satisfaction. Several factors that can cause job dissatisfaction that can be identified are health and safety, heavy workload, wages, promotions, recognition, and organizational policies. Meanwhile, the factors that cause job satisfaction or satisfaction factors (motivators) are relationships with colleagues, relationships with superiors, and professional development.

Warr, Cook, & Wall (1979) defines job satisfaction as the extent to which a person reports satisfaction with the intrinsic and extrinsic features of a job. Total job satisfaction is defined as the sum of all separate items and overall job satisfaction is the overall satisfaction reported about the job as a whole (Warr, Cook, & Wall, 1979).

Tshivhase & Vilakazi (2018) found that work-life balance, company culture, growth, salary and managerial support have a positive relationship with job satisfaction. Meanwhile, Usman, et.al., (2018) found that education, professional, industry, and self-recognition factors have a significant effect on job satisfaction. Janovac et al., (2021) found that there is a relationship between motivational factors and job satisfaction among employees, in addition it was found that non-material motivators related to work and also material motivators have a significant influence on job satisfaction. Ngwenya & Pelser (2020) in their research found that job satisfaction is a mediator in the relationship between psychological capital and employee performance.

2. Psychological Capital

Psychological capital is a condition of positive psychological development of a person who has the characteristics, namely (1) having the self-confidence (efficacy) to take part in important efforts to achieve challenging tasks; (2) make positive attributions (optimism) about current and future success; (3) persistent in achieving goals, and if important can redirect the path towards the goal (hope) in order to achieve success; (4) when hit by problems and difficulties, survive and rise again and even overcome them (resiliency) to achieve success (Luthans et al., 2007). Overall psychological capital not only has a positive relationship with job satisfaction, organizational commitment, and well-being but can also predict these things (Kanengoni, Ngarambe & Buitendach, 2018). Psychological capital is also a significant predictor of job satisfaction and knowledge sharing and successfully mediates the relationship between perceived organizational support and knowledge sharing

(Mustika, Raharjo & Prasetya, 2020). In their research, Esen, Besdil & Erkmen (2021) revealed that there is a significant relationship between psychological well-being and psychological capital, psychological well-being and job satisfaction, and between psychological capital and job satisfaction. Apart from that, Psychological Capital is positively related to individual level job satisfaction (Paliga et.al., 2022).

Psychological capital also significantly influences employee engagement, job satisfaction and employee performance Ngwenya & Pelser, 2020). An experimental study conducted by Patnaik, et.al. (2022) found that subjects who were given Psychological Capital Intervention (PCI) were able to develop the Psychological Capital within them and had an impact on reducing stress and job insecurity significantly. Psychological Capital and Job Satisfaction play an important role in the organizational commitment of employees in small and medium companies (Huynh & Hua, 2020). Noreen et al. (2021) in their research found that Psychological Capital significantly moderated the relationship between leaders' emotional labor strategies, their job satisfaction, and their emotional exhaustion. Sweetman & Luthans (2010) describe Psychological Capital as a resource that can increase employees' perceptions and their sensitivity to the resources they have, organizational dimensions, and other positive outcomes related to work.

3. Psychological Well-Being

Ryff (1989) developed a Psychological Well Being structure consisting of 6 unique dimensions, namely: self-acceptance, positive relations, autonomy, environmental mastery, purpose in life, and personal growth. According to Ryff, self-acceptance refers to a positive attitude towards oneself, the main characteristic of positive psychological functioning. Positive relations involve warm relationships and personal relationships of mutual trust, strong feelings of empathy and affection. Environmental mastery is defined as the ability to choose or create an environment that suits one's psychological condition. Purpose in life refers to awareness of life's purpose, direction and intentionality in life. Personal growth is defined as the ability to continuously develop potential competencies and thereby grow as a person. Finally, autonomy includes attributes such as self-determination, independence, internal locus of control, individualization, and internal regulation of behavior (Ryff, 1989).

Psychological Well Being is an integral part of living a fulfilling and thriving life, and is closely related to people's capacity to work and maintain positive relationships (Wiklund et al., 2019). Lee & Kim (2023) in their research found that an individual's level of psychological well-being can influence the level of job satisfaction to a higher level, so managing mental and emotional well-being in the company is very important. In line with these findings, Kim et al., (2022) stated that psychological well-being and job satisfaction have a significant impact on job performance.

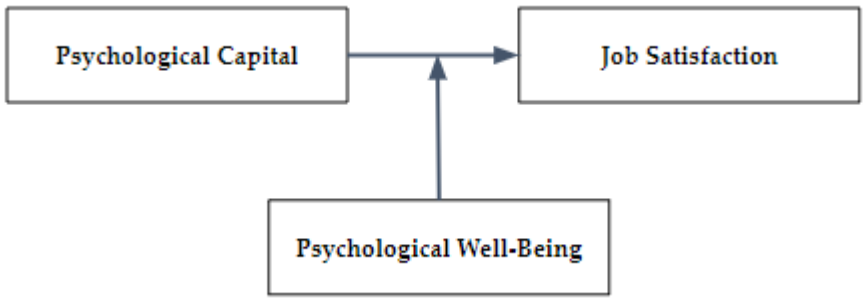


Figure 1. Proposed Research Model

The research model and the proposed relationship between psychological capital, job satisfaction and psychological well-being are shown in figure 1.

H1: Psychological capital will be positively related to job satisfaction.

H2: Psychological well-being will moderate the relation between psychological capital and job satisfaction.

C. METHOD

The study in this research is quantitative correlational research which aims to explain the relationship between variables and measure the strength of this relationship. The study design used is a cross sectional non-experimental study which aims to see the prevalence of a phenomenon, situation or problem using samples from a population without being involved in it (Kumar, 2005). The research subjects in this study were 207 employees from Company X which operates in the coal mining sector from various divisions or departments. The sampling technique used is simple random sampling, where every individual in the population has the same opportunity to be selected (Gravetter & Forzano, 2016). The job satisfaction variable was measured using the Michigan Organizational Assessment Questionnaire - 3 items (Cammann et al., 1979), the psychological capital variable was measured using the psychological capital questionnaire - 12 items (Luthans et al., 2007), and the psychological well-being variable used psychological well-being scale - 18 items (Ryff & Keyes, 1995).

The data collection technique uses a questionnaire, either online or in printed form, depending on the comfort and convenience of each research respondent. This is because there are research respondents who are less familiar with the use of online surveys (for example: dump truck drivers or non-staff employees in other fields). The questionnaire contains an explanation of the research objectives, informed consent, and procedures for filling out the questionnaire. The data obtained will be analyzed by carrying out normality, correlation and linear regression tests. The statistical model that will be used is descriptive statistics, Pearson correlation to see the relationship between psychological capital and psychological well-being and job satisfaction, as well as linear regression to see the influence of psychological capital on job satisfaction.

D. RESULT AND DISCUSSION

The total number of participants in this study was 207 people, dominated by male participants, 193 (93%), while the number of female participants was 14 (7%). As many as 66% of participants have worked more than 5 years. The majority of participants' employment status is permanent employees, namely 148 people (71%).

Correlation analysis was performed to examine the interactions between research variables. Table 1 presents means, standard deviations, correlations and reliability for all the variables.

Table 1. Means, Standard Deviations, Correlations and Reliability between Variables

No	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1	**Psychological Capital**	56.6	8.72	**0.886**												
2	Hope	4.64	0.784	0.858**	0.756											
3	Efficacy	4.62	1.12	0.848**	0.601**	0.870										
4	Resilience	4.70	0.853	0.752**	0.527**	0.460**	0.665									
5	Optimism	5.05	0.803	0.783**	0.608**	0.608**	0.498**	0.720								
6	**Psychological Well-Being**	84.5	8.58	0.625**	0.569**	0.503**	0.390**	0.606**	**0.731**							
7	Autonomy	4.44	0.754	0.312**	0.307**	0.187**	0.255*	0.299*	0.576**	0.0584						
8	Environmental Mastery	4.77	0.699	0.584**	0.549**	0.487**	0.377**	0.479**	0.782**	0.380**	0.411					
9	Personal Growth	5.20	0.688	0.541**	0.399**	0.487**	0.373**	0.543**	0.687**	0.264**	0.476**	0.371				
10	Positive Relations	4.75	0.745	0.439**	0.420**	0.369**	0.220**	0.440**	0.727**	0.243**	0.480**	0.384**	0.267			
11	Purpose in Life	4.50	0.587	0.160*	0.108	0.139*	0.097	0.212**	0.505**	0.149*	0.213**	0.340**	0.316**	0.0772		
12	Self Acceptance	4.49	0.812	0.385**	0.397**	0.298**	0.194**	0.386**	0.634**	0.196**	0.476**	0.283**	0.404**	0.115**	0.387	
13	**Job Satisfaction**	12.6	1.88	0.533**	0.528**	0.446**	0.284**	0.479**	0.602**	0.245**	0.505**	0.394**	0.446**	0.266**	0.495**	**0.684**

Note:

***Correlation is significant at the 0.01 level*

**Correlation is significant at the 0.05 level*

Diagonal numbers is reliability number (Cronbach Alpha)

As shown in Table 1, results showed that psychological capital has a significant and positive correlation with psychological well-being ($p < 0.01$) and also it is positively correlated with job satisfaction ($p < 0.01$).

Tabel 2. Regression Analysis of The Effect of Psychological Capital on Job Satisfaction

Variable	Job Satisfaction		
	B	t	*p*
Psychological Capital	0.115	9.03	< .001
R = 0.533; R2 = 0.284			

In order to test the model of the research and to determine the effect of psychological capital on job satisfaction, regression analysis was conducted. Table 2

presents the findings. The result of regression analysis (table 2) shows that job satisfaction has a significant effect on psychological capital (p < .001).

Table 3. Moderation Analysis of Psychological Well-Being Between Psychological Capital and Job Satisfaction

Variable	Job Satisfaction			
	B	SE	*p*	*95% CI*
Psychological Capital	0.0617	0.0142	< .001	[0.0338 ; 0.08961]
Psychological Well Being	0.0971	0.0117	< .001	[0.0741 ; 0.12012]
Psychological Capital x Psychological Well-Being	6.55	8.39	0.435	[-9.9 ; 0.00230]

Table 3 shows that psychological capital has effect on job satisfaction (b = .0617, SE = .0142, p < .001, 95% CI [0.0338; 0.08961], so are psychological well-being has effect on job satisfaction (b = .0971, SE = .0117, p < .001, 95% CI [0.0741; 0.12012]. Psychological well-being, however, has no moderating effect on job satisfaction since the interaction variable has no effect on job satisfaction.

E. CONCLUSION

Based on the results described in the previous section, it can be concluded that psychological capital and psychological well-being influence job satisfaction but do not reinforce each other. The subdimensions of psychological capital were also examined in this study in relationship with job satisfaction. Hope had a strong and positive correlation with job satisfaction. On the other hand, Resilience showed a weak but positive correlation with job satisfaction. Employees are happier in their jobs when they have a higher level of psychological capital. When someone has psychological capital, they have traits like hope, efficacy, resilience and optimism. The premise that "psychological capital will be positively related to job satisfaction" is supported by the study's findings. These findings are in line with the previous research findings (Kanengoni, Ngarambe & Buitendach, 2018; Mustika, Raharjo & Prasetya, 2020; Ngwenya & Pelser, 2020).

In this study, it was also found that psychological well-being had no moderating effect on the relationship between psychological capital and job satisfaction. So, the premise that “Psychological well-being will moderate the relation between psychological capital and job satisfaction” is rejected, although the results show a correlation between psychological well-being and job satisfaction. This finding is similar with the research before that conducted on workers in the energy sector in Turkey, Esen et al., (2021), the research results show that there is no moderating effect of psychological well-being on the relationship between psychological capital and job satisfaction. Results cannot be extrapolated to other industries or the entire nation because this study was limited to Indonesian coal mining workers.

REFERENCES

1. Ashraf, M. A. (2019). The mediating role of work atmosphere in the relationship between supervisor cooperation, career growth and job satisfaction. *The Journal of Workplace Learning, 31*(2), 78-94.
2. Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. University of Michigan, Ann Arbor.
3. Chen, L., Li, H., Zhao, L., Tian, F., Tian, S., & Shao, J. (2022). The effect of job satisfaction regulating workload on miners' unsafe state. *Scientific Reports (Nature Publisher Group), 12*(1).
4. Chowhan, J., & Pike, K. (2023). Workload, work–life interface, stress, job satisfaction and job performance: A job demand–resource model study during COVID-19. *International Journal of Manpower, 44*(4), 653-670.
5. Esen, E., Besdil, G., & Erkmen, T. (2021). Moderating Role of Psychological Well-Being on the Relationship Between Psychological Capital and Job Satisfaction. *Management Research and Practice, 13*(4), 26-40.
6. Gravetter, F. J., & Forzano, L. A. B. (2016). *Research Methods for the Behavioral Sciences*. Cengage, Stamford.
7. Gyu Park, J., Sik Kim, J., Yoon, S. W., & Joo, B. K. (2017). The effects of empowering leadership on psychological well-being and job engagement: The mediating role of psychological capital. *Leadership & Organization Development Journal, 38*(3), 350-367.
8. Herzberg, F. (1966). *Work and the Nature of Man*. World Publishing Company, Cleveland.
9. Huynh, T. N., & Hua, N. T. A. (2020). The relationship between task-oriented leadership style, psychological capital, job satisfaction and organizational commitment: Evidence from Vietnamese small and medium-sized enterprises. *Journal of Advances in Management Research, 17*(4), 583-604.
10. Janovac, Tatjana & Jovanovic, Sasa & Tadić, Jelena & Tomić, Gordana & Ćufalić, Slobodan. (2021). The Influence of Employee Motivation Factors on Job Satisfaction in Mining Companies. *Polish Journal of Management Studies, 23*(1), 224-238.
11. Lundberg, C., Gudmundson, A., Andersson, T., 2009. Herzberg's Two-Factor Theory of work motivation tested empirically on seasonal workers in hospitality and tourism. *Tourism Manag, 30*(6), 890–899.
12. Kanengoni, H., Ngarambe, C. N., & Buitendach, J. H. (2018). Psychological capital and work behaviour–related outcomes among South African church ministers. *South African Journal of Psychology, 48*(4), 488-500.
13. Kementrian Energi dan Sumber Daya Mineral Republik Indonesia. (2020). *Laporan EITI Indonesia 2019-2020*.
14. Kim, H., Kim, M., & Koo, D. (2022). From teamwork to psychological well-being and job performance: The role of CSR in the workplace. *International Journal of Contemporary Hospitality Management, 34*(10), 3764-3789.
15. Kumar, R. (2005). *Research methodology second edition: A step by step guide for beginners*. London: SAGE Publications Ltd.

16. Lee, M., & Kim, B. (2023). Effect of the employees' mental toughness on organizational commitment and job satisfaction: Mediating psychological well-being. *Administrative Sciences, 13*(5), 1-18.
17. Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford University Press.
18. McNeish, D. (2017, May 29). *Thanks Coefficient Alpha, We'll Take It from Here. Psychological Methods*. Advance online publication.
19. Mustika, S. I., Rahardjo, K., & Prasetya, A. (2020). The effect of perceived organizational support and psychological capital on job satisfaction and knowledge sharing. *Bisnis & Birokrasi, 27*(1), 25-33.
20. Ngwenya, Bongani & Pelser, Theuns. (2020). Impact of psychological capital on employee engagement-job satisfaction and employee performance. *SA Journal of Industrial Psychology*.
21. Noreen, S., Nisar, Q. A., Haider, S., & Yean, T. F. (2021). Role of leaders' emotional labor toward leader's job satisfaction and emotional exhaustion: Moderating role of psychological capital. *Gadjah Mada International Journal of Business, 23*(1), 36-54.
22. Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of Labor Economics, 33*(4), 789-822.
23. Paliga, Mateusz & Kozusznik, Barbara & Pollak, Anita & Sanecka, Elżbieta. (2022). The relationships of psychological capital and influence regulation with job satisfaction and job performance. *PLOS ONE, 17*. e0272412.
24. Patnaik, S., Mishra, U. S., & Mishra, B. B. (2022). Can psychological capital reduce stress and job insecurity? An experimental examination with indian evidence: APJM. *Asia Pacific Journal of Management, 39*(3), 1071-1096.
25. Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069–1081.
26. Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719-727.
27. Saman, A., & Wirawan, H. (2023). *Predicting students' soft skills: The role of psychological capital, psychological well-being and grade levels*. Education & Training (London).
28. Sato, S., Kinoshita, K., Kim, M., Oshimi, D., & Harada, M. (2022). The effect of rugby world cup 2019 on residents' psychological well-being: A mediating role of psychological capital. *Current Issues in Tourism, 25*(5), 692-706.
29. Sweetman, D., & Luthans, F. (2010). *The power of positive psychology: Psychological Capital and work engagement*. Work Engagement: A Handbook of Essential Theory and Research.
30. Torlak, N. G., Kuzey, C., Sait Dinç, M., & Budur, T. (2021). Links connecting nurses' planned behavior, burnout, job satisfaction, and organizational citizenship behavior. *Journal of Workplace Behavioral Health, 36*(1), 77-103.

31. Tshivhase, T., & Vilakazi, L. (2018). Job Satisfaction: What factors in the Coal Mining Industry will lead to Higher Satisfaction?. *International Journal of Management Science and Business Administration, 4*, 17-25.
32. Usman, I., Maupa, H., Haerani, S., & Idrus, M. (2018). The Factors that Influence Job Satisfaction: A Study of Mining Companies. *Scientific Research Journal, VI*.
33. Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology, 52*(2), 129-148.
34. Wen, L., Maani, S. A., & Dong, Z. (2023). Educational job mismatch, job satisfaction, on-the-job training, and employee quit behaviour: A dynamic analytical approach. *Applied Economics, 55*(56), 6605-6626.
35. Wiklund, J., Nikolaev, B., Shir, N., Foo, M., & Bradley, S. (2019). Entrepreneurship and well-being: Past, present, and future. *Journal of Business Venturing, 34*(4), 579-588.