

The Impact Of Perceived Organizational Support On Workplace Loneliness: The Moderating Role Of Agreeableness In Remote And Rural Work Settings

¹Nehemia Simanjuntak, ²Zulkarnain, ³Vivi Gusrini Ramadani Pohan

^{1,2,3}Department of Industrial and Organizational Psychology

Faculty of Psychology, Universitas Sumatera Utara

Medan, Indonesia

Corresponding autor: Nehemia Simanjuntak. E-mail: nehemiaww@gmail.com



Abstract: The phenomenon of workplace loneliness is an important concern because it can affect the work experience of employees, especially those who work in remote and rural areas. This study aims to examine the effect of perceived organizational support on workplace loneliness with personality trait agreeableness as a moderating variable. This study was conducted using quantitative methods with 106 respondents who were employees in remote rural areas. The measurement tools used were the workplace loneliness scale, the perceived organizational support scale, and the personality trait agreeableness scale. The analysis in this study was conducted using multiple regression analysis techniques. The results showed that POS had a significant negative effect on workplace loneliness ($Beta = -0.498$; $Sig. = 0.00$) and was able to explain 24.8% of the variability in workplace loneliness. Meanwhile, the agreeableness variable did not have a significant direct effect on workplace loneliness ($B = -0.277$; $t = -1.548$; $Sig. = 0.125$). Similarly, the moderation test results show that agreeableness is not proven to be significant as a moderator variable in the relationship between perceived organizational support and workplace loneliness ($B = 0.004$; $t = 1.485$; $Sig. = 0.141$). These findings emphasize the importance of perceived organizational support in reducing workplace loneliness among remote and rural area employees, while the agreeableness personality factor does not strengthen this relationship.

Keywords: Workplace Loneliness, Perceived Organizational Support, Personality Trait Agreeableness, Remote, Rural Areas

I. INTRODUCTION

Globally, there are types of work based on their geographical location. According to Gilani, Yasin, Duncan, & Smith (2024), to understand the definition of a remote-rural area, there are five dimensions, namely population and population density, proximity to urban areas, development, culture, and social perception. Based on these dimensions, there is a dimension that explains that low population density can cause an area to be identified as a rural area. Rural areas are also identified as areas that are located far outside urban areas. Remoteness is also identified with areas that lack water, roads, and electricity, which has an impact on the communities living there (Potter, 2012). In line with research according to Holmes (1981, in Darusmin & Himam, 2016), there are six characteristics that can distinguish urban areas from remote and isolated areas, namely a difficult physical environment, high economic and social costs and involvement in the exploitation of natural resources, places that are not very attractive to live in, the total population in the local area is limited to the level necessary to operate resources, and the population is often considered deprived due to isolation.

There are several sectors that fall under the remote and rural area category. The sector that falls under the remote-rural area category is the plantation sector. The plantation sector is generally located in rural areas that are relatively far from urban centers. These locations are chosen because they require large areas of land and fertile soil, which are generally not found in urban areas. According to Obidzinski et al. (2012), the expansion of oil palm plantations in Indonesia has largely occurred in remote and rural areas that are far from urban economic centers and infrastructure. Another sector that is also located in remote rural areas is mining. Many mining areas are known to have limited access and minimal infrastructure, with many mining areas lacking access to highways, public services, or urban infrastructure. Therefore, most mining workers must live in special housing, or the company provides special transportation (Petkova, Lockie, Rolfe, & Ivanova, 2009). Research by McKenzie (2011) also reveals that due to the remote location of the work, many mining companies use a system where workers are flown to the mining site, stay for several weeks, and are then returned to their hometowns.

In reality, even though this employment sector helps the country's economy, there are still challenges faced by workers in these remote rural areas. According to Oeser (1976), it is known that geographical isolation, extreme climate, unbalanced demographics, and inadequate physical facilities will reduce a person's attitude and behavior characteristics. According to research by Iverson & Maguire (2000), it is known that work areas that are far from urban areas will make it difficult for workers to meet with their families regularly, and this is known to exacerbate feelings of isolation or loneliness. In line with Wright's (2005) research, which reveals that loneliness in the workplace can be linked to several factors, such as working in geographically remote conditions, working in socially isolated conditions such as working from home, or workers who are always alienated from their colleagues due to restrictions on discussing their work because of confidential information.

There are tangible effects on workers who experience loneliness in the workplace. Research by Ozelik & Barsade (2018) reveals that loneliness is a painful and destructive emotion, and the results of the study also provide evidence that loneliness can have a negative impact on a person's working life. In line with the results of research by Ayazlar & Güzel (2014), which revealed that employees who feel lonely in a job or organization will have a negative impact on their commitment to work in that organization. Wright et al. (2006) also revealed that social contact and a sense of friendship in the workplace will make coworker relationships more meaningful, thereby affecting overall job satisfaction.

Workers who feel lonely at work can apparently try to reduce these feelings of loneliness. Research by Shaolong, Ying, Liu, Bai, Liu, & Su (2022) reveals that workers who lack organizational support are at risk of loneliness and social isolation within an organization. This is in line with other research findings which reveal that high perceived organizational support can be achieved by creating a workplace that is considered to have mutual support, accommodating, attentive, open, and will lead to higher organizational performance, which in turn will reduce feelings of loneliness in the workplace (Mohapatra, Madan, & Srivastava, 2023). Research by Kanbur & Kanbur (2020) reveals that employees will not feel lonely at work as long as the organization supports and empowers employees and values empowerment positively. Thus, in line with the research by Çetin and Alacalar (2016), which reveals that the presence of organizational support felt by employees will have a negative impact on feelings of loneliness at work.

Other studies also reveal that workers in remote-rural areas need to understand that they have support from their organization. Research by Daniels, Miller, Mian, & Black (2022) reveals that there are differences in workers' needs for organizational support based on their work location. Organizational support refers to supporting employee decisions, prioritizing employee health or welfare, having good communication within the organization, listening to and caring for employees, and making employees feel comfortable. The study also concluded that organizational support in career development is an important component in improving overall employee performance, which in turn increases employee morale and ultimately boosts production and productivity in that area (Tamilselvan & Israel, 2024).

Workers who feel lonely can also be identified based on their personality types. Research by Michinov, Ruiller, Chedotel, Dodeler, & Michinov (2022) reveals that there is a combined effect of high levels of extraversion, conscientiousness, and agreeableness and low levels of neuroticism on feelings of loneliness in the workplace experienced by employees. According to research by Ozelik & Barsade (2011), there are four personality factors, such as extraversion, agreeableness, positive traits, and negative traits possessed by employees, which confirm that there are differences in loneliness in the workplace based on these

personality traits. The results of the study also predict employee performance based on the employees' own personalities. In line with other studies, it was found that loneliness in the workplace can be predicted by knowing a person's level of agreeableness (Jaksic, Steel, Stewart, & Moore, 2019). Individuals who are warm, friendly, and caring can be said to have agreeableness traits, which are known to have a negative relationship with loneliness (Buecker, Maes, Denissen, & Luhmann, 2020).

Research according to Doshi (2020) also explains that workers, especially leaders in rural areas, are known to exhibit several important traits and characteristics, namely adaptability, thoroughness, being a role model, having a high level of initiative in performing tasks, and having an agreeable personality type. The results of the study also explain that workers in rural areas are more important to have a sense of ownership, involvement, high enthusiasm, and friendliness when working, and will be different from workers in urban areas who place more importance on perseverance when working (Doshi, 2020). The research also found that there are differences in agreeableness traits depending on where employees work, but the results differ from previous studies, which found that employees with agreeable personalities are more often found in metropolitan cities than in municipalities or rural areas (Basnet, Shrestha, & Aryal, 2023).

II. METHOD

This study uses a quantitative approach that aims to examine the relationship between variables, namely perceived organizational support as the independent variable, *personality trait agreeableness* as the moderating variable, and workplace loneliness as the dependent variable. The research design used is a correlational design, which aims to evaluate the relationship between the perceived organizational support variable and the workplace loneliness variable, with the personality trait agreeableness variable as the moderator.

The research subjects were remote rural area employees selected using purposive sampling techniques. Sample selection was based on specific criteria, namely employees who worked in remote rural areas, adjusted according to their work environment or working hours, and who were willing to participate in the study. The sample size was determined based on the calculation by Hair et al. (2019) by multiplying the total number of variable indicators used in the study by five, resulting in a sample size of 106 respondents consisting of 86 men and 20 women. Data collection was conducted through a survey using a 5-point Likert scale questionnaire, which was designed to measure the congregation's perceptions of the research variables.

The research instrument consisted of three main scales. The workplace loneliness scale was adapted from Wright et al. (2006), which covers two aspects, namely emotional deprivation and social companionship, consisting of 16 items. Perceived organizational support was measured using three aspects developed by Rhoades & Eisenberger (2002), namely fairness, supervisor support, and organizational rewards and job conditions, consisting of 29 items. Personality trait agreeableness in this study was measured using six facets proposed by Widiger and Costa (2013), namely trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness, consisting of 33 items. The reliability value obtained from statistical testing using Cronbach's Alpha for the perceived organizational support variable was 0.924, while the reliability value obtained from statistical testing of the agreeableness personality trait variable was 0.916, and the reliability value of the workplace loneliness variable was 0.519.

Before performing multiple regression analysis, the measurement tools were tested for validity using Confirmatory Factor Analysis (CFA) to ensure the factor structure of the research variables. CFA values were measured using the standard values proposed by Hair et al. (2019), namely CFI and TLI > 0.93, RNI > 0.93, RMSEA < 0.08. In confirmatory analysis, it is important to consider the characteristics of the items used. Items with different directions, such as favorable and unfavorable, have the potential to cause problems in model convergence if they are directly combined in one analysis. Therefore, a number of studies suggest that CFA testing can be done separately. Rogers (2024) also emphasizes that separating positive and negative items helps minimize distortion in model parameters. Next, reliability testing was conducted by looking at Cronbach's Alpha values to assess the internal consistency of each scale, with a recommended value of >.080 (Azwar, 2017). The validity and reliability values are presented in Table 1 and Table 2, and are declared to have passed the validity and reliability tests based on the recommended standard values.

Table 1 *Validity Test Results (CFA)*

Variable		CF I	TL I	RN I	RMS EA
Perceived Organizational Support Item Favorable		1.00	1.028	1.022	0.00
Perceived Organizational Support Item Unfavorable		1.00	1.047	1.040	0.00
Personality Agreeableness Favorable	Trait Item	1.00	1,001	1,001	0.00
Personality Agreeableness Unfavorable	Trait Item	1.00	1.020	1.019	0.00
Workplace Loneliness		1.00	1,005	1,004	0.00

Table 2 *Reliability Test Results*

Variable		Number of items	Cronbach's Alpha
Perceived Organizational Support		29	0.924
Personality Agreeableness	Trait	33	0.916
Workplace Loneliness		16	0.519

After the measurement tools were declared valid and reliable, the research data was then tested using classical assumption tests, which included normality, linearity, heteroscedasticity, and multicollinearity tests, before performing multiple regression analysis. The analysis process was carried out using IBM SPSS Statistics Version 22 software.

III. RESULTS

This study involved 106 employee respondents working in remote rural areas. An overview of the research subjects based on employment sector can be seen in Table 3. The results show that the majority of respondents came from the mining sector (42.5%) and the plantation sector (40.6%). A small number of respondents worked in the shipping sector (9.4%), indicating a link between rural economic activity and water transportation routes. As for other sectors, such as manufacturing, education, retail, tourism and services, as well as business and economics, each contributed less than 2%.

Table 3 *Overview of Research Subjects Based on Employment Sector*

Congregation Category	Number of respondents	Percentage (%)
Plantation Sector	43	40.6%
Mining Sector	45	42.5%
Shipping Sector	10	9.4%
Manufacturing Sector	2	1.9%
Education Sector	1	0.9%
Retail Sector	1	0.9%
Tourism and Services Sector	2	1.9%
Business and Economy Sector	2	1.9%
Total	106	100%

An overview of the research subjects based on age can be seen in Table 4. The results show that the majority of respondents were in the 18-39 age range, with a total of 97 respondents (92%), and some were in the 40-65 age range, with a total of 9 respondents (8%).

Table 4 *Overview of Research Subjects Based on Age*

Age Range	Number of respondents	Percentage (%)
18-39 years old	97	92%
40-65 years old	9	8%
TOTAL	106	100%

An overview of the research subjects based on their place of work can be seen in Table 5. The results show that the majority of respondents came from Kalimantan Island, namely 48 people or 45.3% of the total respondents. Furthermore, there were 24 respondents (22.6%) from Sumatra Island and 17 respondents (16.0%) from Java Island. The number of respondents from other regions was relatively smaller, such as 4 people (3.8%) from the Riau Islands, 3 people (2.8%) from Sulawesi Island and the Nusa Tenggara Islands, and 2 people (1.9%) from Papua Island, the Bangka Belitung Islands, and the Maluku Islands. The smallest number of respondents came from Bali, with 1 person (0.9%).

Table 5 *Overview of Research Subjects Based on Work Location*

Work Address	Number of respondents	Percentage (%)
Java Island	17	16,0%
Sumatra Island	24	22,6%
Kalimantan Island	48	45,3%
Sulawesi Island	3	2,8%
Papua Island	2	1,9%
Bali	1	0,9%
Nusa Tenggara Islands	3	2,8%
Riau Islands	4	3,8%
Bangka Belitung Islands	2	1,9%
Maluku Islands	2	1,9%
Total	106	100%

Before performing regression analysis, classical assumption tests were conducted to ensure that the data met the necessary statistical requirements. The Kolmogorov-Smirnov normality test is normally distributed if the Exact Sig. value is > 0.05 (Mehta & Patel, 2010). In the linearity test, the Linearity line must have $p < 0.05$ for the relationship between variables to be declared linear (Shadiqi, 2023). The Glejser test is used to identify heteroscedasticity, and if the p-value is > 0.05 , then there is no heteroscedasticity in the regression model (Ghozali, 2006). In the multicollinearity test, if the VIF value is < 10 and the Tolerance is > 0.10 , then there is no multicollinearity problem (Hair et al., 2010; Kutner et al., 2005).

The results of the classical assumption test shown in Table 6 indicate that the data meet the requirements of normality, linearity, homoscedasticity, and do not experience multicollinearity, so they can be used in multiple regression analysis.

Table 6 Results of Classical Assumption Tests

Test	Results	Interpretation
Normality Test (Kolmogorov-Smirnov Test)	0.123 (Exact Sig.)	Data is normally distributed ($p > 0.05$)
Linearity Test	$p = 0.000$ (Perceived Organizational Support) $p = 0.011$ (Personality Trait Agreeableness)	The relationship between variables is linear ($p < 0.05$)
Heteroscedasticity Test (Glejser Test)	$p = 0.068$ (Perceived Organizational Support), $p = 0.909$ (Personality Trait Agreeableness)	No heteroscedasticity ($p > 0.05$)
Multicollinearity Test	VIF = 1.166 Tolerance = 0.857	No multicollinearity issues (VIF < 10, Tolerance > 0.10)

After ensuring that the regression model meets the basic statistical assumptions, multiple regression analysis was performed to test the effect of perceived organizational support on workplace loneliness with personality trait agreeableness as a moderator variable.

Table 7 Regression Analysis Results (F Test)

Model	R Square	Adjusted R Square	F-Test	p-value
Perceived Organizational Support → Workplace Loneliness	0.248	0.241	34.316	0.000
Agreeableness	0.265	0.244	12.290	0.000
↓				
Perceived Organizational Support → Workplace Loneliness				

The regression analysis results in Table 7 show an R Square value of 0.248, which means that 24.8% of the variance in workplace loneliness can be explained by perceived organizational support, while an R Square of 0.265 means that approximately 26.5% of the variation in workplace loneliness can be explained by the contribution of POS, agreeableness, and the interaction effect of the two (POS_PTA). The significant F-Test value ($p < 0.001$) indicates that the regression model as a whole has good predictive power.

Table 8 Hypothesis Test Results (T-Test)

Model	Beta Coefficient	t-Value	p-value	Interpretation
Perceived Organizational Support→ Workplace Loneliness	-0.498	-5.858	0.000	Perceived Organizational Support has a negative and significant effect on Workplace Loneliness
Personality Trait Agreeableness → Workplace Loneliness	-0.678	-1.548	0.125	Personality Trait Agreeableness has no negative and insignificant effect on Workplace Loneliness
Agreeableness ↓ Perceived Organizational Support → Workplace Loneliness	1.201	1.485	0.141	The interaction variable (POS_PTA) has no effect and is not significant on Workplace Loneliness

The results of hypothesis testing show that the perceived organizational support variable is directly proven to have a significant negative effect on workplace loneliness, although the interaction between perceived organizational support and the personality trait agreeableness does not contribute significantly to the level of workplace loneliness in the sample studied.

IV. DISCUSSION

The results of this study indicate that perceived organizational support has a significant negative effect on Workplace Loneliness among employees in remote rural areas. This finding is in line with the Perceived Organizational Support theory proposed by Eisenberger et al. (1986), which states that when employees feel that the organization values their contributions and cares about their well-being, they will be more emotionally attached to the organization. This feeling of being valued and cared for directly suppresses the emergence of loneliness in the workplace. There are several other reasons that may underlie the research results revealing that perceived organizational support can have a negative effect on workplace loneliness. The first reason can be linked to the dimension of POS, namely supervisor support. Research by Ozcelik & Barsade (2018) also reveals that warm interpersonal support can reduce feelings of alienation and loneliness in the workplace. The quality of interactions with superiors and coworkers is known to be an important factor in reducing emotional loneliness (Wright, 2005). The second reason relates to another dimension that also contributes to reducing workplace loneliness, namely fairness. Colquitt et al.'s (2013) meta-analysis on organizational justice also found that fairness in organizations is positively related to job satisfaction and psychological well-being, while reducing negative symptoms such as withdrawal behavior and loneliness. The findings of Li & Chen (2018) also confirm that fairness in organizations is an important predictor of employee well-being, especially in the context of remote work. The third reason relates to the third dimension of POS, namely organizational rewards & job conditions. According to Rhoades & Eisenberger (2002), good rewards and working conditions are important indicators for employees to assess the extent to which the organization values their contributions.

The results also show that agreeableness does not act as a moderator in the relationship between POS and workplace loneliness, nor does it have a direct effect on workplace loneliness among employees working in remote rural areas. This finding deviates from most previous studies that found a significant contribution of agreeableness to loneliness experiences (Mund & Neyer, 2016; Buecker et al., 2020). This difference in results can be understood by considering the geographical and cultural context. Previous studies were generally conducted on populations of students, urban communities, or workers with extensive social access (Chopik, 2016). Working conditions in remote areas are characterized by geographical distance from urban centers, limited social access, and the nature of work that tends to be individual and isolated (Onnis, 2016; Reeve, Johnston, & Young, 2020). In such conditions, opportunities to actualize the cooperative and friendly nature of individuals with high agreeableness levels become limited. In such conditions, opportunities to actualize the cooperative and friendly nature of individuals with high agreeableness

levels become limited. In addition, social dynamics in rural communities are often more exclusive, with social norms that tend to be closed to outsiders or strong bonds that are only formed within certain groups (Helliwell & Putnam, 2004). In line with previous research findings, prosocial traits such as agreeableness do not always manifest consistently, as situational factors can weaken their influence. For example, Sun, Liu, Guo, and Fan (2019) showed that high levels of agreeableness do not always lead to prosocial behavior when individuals have barriers in social competence, while a meta-analysis by Thielmann, Spadaro, and Balliet (2020) confirmed that the expression of prosocial behavior is greatly influenced by available situational affordances. There are several other reasons that could explain these results. According to Judge and Zapata (2015), personality influences are more prominent in less structured work conditions. Therefore, when organizations provide clear rules and strong support, the role of agreeableness as a moderator becomes less significant in reducing workplace loneliness. This is in line with the results of this study, which found that perceived organizational support has a moderate contribution. Additionally, research by Gibson, Pedersen-San Miguel, & Letzring (2023) also reveals that an individual's personality is often considered to operate independently, for example, focusing solely on the effects of agreeableness or extraversion alone. However, in reality, an individual possesses a combination of several traits simultaneously, and this combination results in different behaviors.

V. CONCLUSION

This study shows that Perceived Organizational Support () has a negative effect on Workplace Loneliness. The results also reveal that the greater the support provided by the organization, the lower the level of loneliness among employees working in remote rural areas. In addition, Personality Trait Agreeableness as a moderator in the relationship between Perceived Organizational Support and Workplace Loneliness does not show a significant effect, either directly on Workplace Loneliness or as a moderator variable in the relationship between POS and WL.

REFERENCES

- [1] Ayazlar, Y., & Güzel, S. (2014). The effect of loneliness on organizational commitment: A study on employees in the mining industry. *International Journal of Academic Research in Business and Social Sciences*, 4(12), 1–11. <https://doi.org/10.6007/IJARBSS/v4-i12/1315>
- [2] Azwar, S. (2017). *Reliability and validity in psychological research*. Pustaka Pelajar.
- [3] Basnet, D. M., Shrestha, R. M., & Aryal, P. A. (2023). Relationship between demographic characteristics, personality traits, and organizational commitment among Nepalese saving and credit co-operative workers. *Personality Traits and Organizational Commitment Among Nepalese Saving and Credit Co-operative Workers*.
- [4] Buecker, S., Maes, M., Denissen, J. J. A., & Luhmann, M. (2020). Loneliness and the Big Five personality traits: A meta-analysis. *European Journal of Personality*, 34(1), 8–28. <https://doi.org/10.1002/per.2229>
- [5] Buecker, S., Maes, M., Denissen, J. J. A., & Luhmann, M. (2020). Loneliness and the Big Five personality traits: A meta-analysis. *European Journal of Personality*, 34(1), 8–28. <https://doi.org/10.1002/per.2229>
- [6] Çetin, A., & Alacalar, Ç. A. (2016). The role of personality traits, perceived organizational and social support in predicting loneliness in the workplace. *International Journal of Management Economics and Business*, 12(27), 193–216.
- [7] Chopik, W. J. (2016). The benefits of social technology use among older adults are mediated by reduced loneliness. *Cyberpsychology, Behavior, and Social Networking*, 19(9), 551–556. <https://doi.org/10.1089/cyber.2016.0151>
- [8] Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology*, 98(2), 199–236.
- [9] Daniels, R. A., Miller, L. A., Mian, M. Z., & Black, S. (2022). One size does NOT fit all: Understanding differences in perceived organizational support during the COVID-19 pandemic. *Business and Society Review*, 127(2), 193–222.

- [10] Darusmin, D. F., & Himam, F. (2016). Subjective well-being among judges serving in remote areas. *Gadjah Mada Journal of Psychology*, 4(3), 193–201. <https://doi.org/10.22146/gamajop.9886>
- [11] Doshi, D. (2020). Improving leadership of health services in rural areas: Exploring traits and characteristics. *International Journal of Healthcare Management*.
- [12] Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565–573.
- [13] Ghozali, I. (2006). Application of multivariate analysis with the SPSS program. Diponegoro University Publishing Agency.
- [14] Gibson, J. R., Pedersen-San Miguel, C., & Letzring, T. D. (2023). Predicting satisfaction with life and affect balance using trait interactions. *Graduate Student Journal of Psychology*, 20, 26–48. <https://doi.org/10.52214/gsjp.v20i1.10231>
- [15] Gilani, S. A. M., Yasin, N., Duncan, P., & Smith, A. M. (2024). What is remote-rural and why is it important? *World Review of Entrepreneurship, Management and Sustainable Development*, 20(5), 517–537.
- [16] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- [17] Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1449), 1435–1446. <https://doi.org/10.1098/rstb.2004.1522>
- [18] Iverson, R. D., & Maguire, C. (2000). The relationship between job and life satisfaction: Evidence from a remote mining community. *Human Relations*, 53(6), 807–839.
- [19] Jaksic, C., Steel, G., Stewart, E., & Moore, K. (2019). Antarctic stations as workplaces: Adjustment of winter-over crew members. *Polar Science*, 22, 100484.
- [20] Judge, T. A., & Zapata, C. P. (2015). The person–situation debate revisited: Effect of situation strength and trait activation on the validity of the Big Five personality traits in predicting job performance. *Academy of Management Journal*, 58(4), 1149–1179. <https://doi.org/10.5465/amj.2010.0837>
- [21] Kanbur, E., & Kanbur, A. (2020). Mediating role of perceived internal status on the relationship between perceived psychological empowerment and loneliness at workplace. *Business and Economics Research Journal*, 11(1), 213–227.
- [22] Li, X., & Chen, W. (2018). Perceived organizational justice and employee well-being: The mediating role of trust in organization. *Social Behavior and Personality: An International Journal*, 46(8), 1297–1308.
- [23] McKenzie, F. H. (2011). Fly-in fly-out: The challenges of transient populations in rural landscapes. In G. W. Luck, D. Race, & R. Black (Eds.), *Demographic change in Australia's rural landscapes: Implications for society and the environment* (pp. 353–374). Springer. https://doi.org/10.1007/978-90-481-9654-8_15
- [24] Mehta, C. R., & Patel, N. R. (2010). *IBM SPSS Exact Tests* 22. IBM Corporation.
- [25] Michinov, E., Ruiller, C., Chedotel, F., Dodeler, V., & Michinov, N. (2022). Work-from-home during COVID-19 lockdown: When employees' well-being and creativity depend on their psychological profiles. *Frontiers in Psychology*, 13, 862987.
- [26] Mohapatra, M., Madan, P., & Srivastava, S. (2023). Loneliness at work: Its consequences and role of moderators. *Global Business Review*, 24(3), 433–450.
- [27] Mund, M., & Neyer, F. J. (2016). The winding paths of the lonesome cowboy: Evidence for mutual influences between personality, subjective health, and loneliness. *Journal of Personality*, 84(5), 646–657. <https://doi.org/10.1111/jopy.12188>
- [28] Obidzinski, K., Andriani, R., Komarudin, H., & Andrianto, A. (2012). Environmental and social impacts of oil palm plantations and their implications for biofuel production in Indonesia. *Ecology and Society*, 17(1), 25. <https://doi.org/10.5751/ES-04775-170125>

- [29] Oeser, O. A. (1976). The study of human relations in the mining industry: Implications for planning new towns in isolated environments. *Australian UNESCO Reports on Man and the Biosphere*, 2, 1–24
- [30] Onnis, L. (2016). What is a sustainable remote health workforce? People, practice and place. *Rural and Remote Health*, 16, 3806. <https://doi.org/10.22605/RRH3806>
- [31] Ozcelik, H., & Barsade, S. G. (2011, January). Work loneliness and employee performance. In *Academy of Management Proceedings*, 2011(1), 1–6.
- [32] Ozcelik, H., & Barsade, S. G. (2018). No employee an island: Workplace loneliness and job performance. *Academy of Management Journal*, 61(6), 2343–2366. <https://doi.org/10.5465/amj.2015.1066>
- [33] Petkova, V., Lockie, S., Rolfe, J., & Ivanova, G. (2009). Mining developments and social impacts on communities: Bowen Basin case studies. *Rural Society*, 19(3), 211–228. <https://doi.org/10.5172/rsj.19.3.211>
- [34] Potter, L. (2012). New transmigration ‘paradigm’ in Indonesia: Examples from Kalimantan. *Asia Pacific Viewpoint*, 53(3), 272–287.
- [35] Reeve, C., Johnston, K., & Young, L. (2020). Health profession education in remote or geographically isolated settings: A scoping review. *Journal of Medical Education and Curricular Development*, 7, 2382120520943595. <https://doi.org/10.1177/2382120520943595>
- [36] Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714.
- [37] Shadiqi, F. (2023). *Social and psychological research methodology*. Pustaka Pelajar.
- [38] Shaolong, E., Ying, T., Liu, D., Bai, S., Liu, X., & Su, H. (2022). Prevalence and risk factors of loneliness and social isolation among medical residents: A multi-center cross-sectional study. *Research Square*. <https://doi.org/10.21203/rs.3.rs-1730638/v1>
- [39] Sun, P., Liu, Z., Guo, Q., & Fan, J. (2019). Shyness weakens the agreeableness–prosociality association via social self-efficacy: A moderated-mediation study of Chinese undergraduates. *Frontiers in Psychology*, 10, 1084. <https://doi.org/10.3389/fpsyg.2019.01084>
- [40] Tamilselvan, M., & Israel, D. J. (2024). Impact of organizational support toward professional skill development and self-learning attitude on the career success of employees from rural background. *Multidisciplinary Reviews*, 7(9), 2024202.
- [41] Thielmann, I., Spadaro, G., & Balliet, D. (2020). Personality and prosocial behavior: A theoretical framework and meta-analysis. *Psychological Bulletin*, 146(1), 30–90. <https://doi.org/10.1037/bul0000217>
- [42] Wright, S. L. (2005). *Loneliness in the workplace* (Doctoral dissertation). University of Canterbury.
- [43] Wright, S. L., Burt, C. D. B., & Strongman, K. T. (2006). Loneliness in the workplace: Construct definition and scale development. *New Zealand Journal of Psychology*, 35(2), 59–68.