

Living with Risk and Pressure: Exploring Psychological Well-Being of Coal Mining Workers

Patria Mukti, Joniarto Parung, Artiawati

Doctor of Psychology Program, Faculty of Psychology, Universitas Surabaya,
Indonesia¹

Doctor of Psychology Program, Faculty of Psychology, Universitas Surabaya,
Indonesia²

Doctor of Psychology Program, Faculty of Psychology, Universitas Surabaya,
Indonesia³

E-mail: patria.uki@gmail.com¹, jparung@staff.ubaya.ac.id²,
artiawati@staff.ubaya.ac.id³,

Correspondent Author: Artiawati, artiawati@staff.ubaya.ac.id

Doi: 10.31316/g-couns.v10i03.9039

Abstract

Coal mining employees work in high-risk environments, face long working hours, and experience limited interaction with their families, conditions that potentially affect their psychological well-being. However, empirical understanding of how workers construct and experience psychological well-being within this context remains limited. This study aims to explore the personal experiences and individual meanings of psychological well-being among coal mining employees, describe the factors influencing it, and identify coping mechanisms used to maintain or enhance it. The research design/methodology used an interpretative phenomenological approach. Semi-structured interviews were conducted to collect data, which were analyzed using Interpretative Phenomenological Analysis (IPA). The informants were permanent employees, married, and working as temporary employees. The findings reveal: 1) an in-depth understanding of how coal mining workers define and experience psychological well-being, 2) several factors influencing psychological well-being, including family-health, organizational facilities, connection with family, and work duration. The practical implications of this study indicate that organizations need to place greater emphasis on employees' psychological well-being, particularly those working far from their families. At the individual level, employees are encouraged to develop adaptive coping strategies, while at the organizational level, psychological support programs and evaluation of working hours are required to better safeguard employee well-being.

Keywords: psychological well-being, mining employees, phenomenology

Article info

Received November 2025, Revised December 2025, Accepted January 2026, Published February 2026

How to Cite:

Mukti, P., Parung, P., Yuniarti, P., & Artiawati. (2026). Living with Risk and Pressure: Exploring Psychological Well-Being of Coal Mining Workers. *G-Couns: Jurnal Bimbingan Dan Konseling*, 10 (03), July, 2058-2077. <https://doi.org/10.31316/g-couns.v10i03.9039>

© 2026. The author(s). *G Couns: Jurnal Bimbingan dan Konseling* is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

Available online at <https://journal.upy.ac.id/index.php/bk/index>



INTRODUCTION

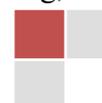
Coal mining employees face substantial occupational challenges, including long working hours, high-risk work environments, and limited opportunities for family interaction, particularly among dispatched workers. These conditions can significantly affect their psychological well-being. Recent studies indicate that high-risk job characteristics and extreme working conditions may compromise mental health, increase work stress, and reduce psychological safety (Pizarro & Fuenzalida, 2021; Shackel, 2024; Yin et al., 2023). This situation is further exacerbated by work demands that often create work–family imbalance, leading to psychological strain and a decline in employee well-being (Yu & Li, 2020).

This context becomes particularly critical considering that the coal mining sector is one of Indonesia's largest contributors to national revenue after taxation, resulting in high production targets set by the government for coal companies (<https://modi.esdm.go.id/>). Achieving these targets depends heavily on organizational productivity, which is inseparable from employees' psychological well-being. Therefore, psychological well-being is not merely an individual concern but has direct implications for organizational performance, occupational safety, and industrial sustainability.

Research on psychological well-being in organizational contexts has received increasing scholarly and managerial attention over the past decades. Danna & Griffin, (1999) emphasized that employee well-being has become a central concern among academics and practitioners. Sonnentag & Ilies, (2011) further noted a shift in scholarly focus from individual differences toward understanding daily work dynamics and their effects on well-being. However, in Asia, studies on psychological well-being remain relatively limited and lag behind organizational needs (Zheng et al., 2015). The theoretical framework proposed by Dagenais-Desmarais & Savoie, (2012) strengthens the importance of research in this area by conceptualizing psychological well-being as a positive subjective experience at work, encompassing interpersonal fit, work competence, recognition, self-development, and engagement, while also highlighting optimal psychological functioning in demanding work environments.

In practice, the characteristics of work in the coal mining industry differ markedly from those in other sectors. Employees work under a shift system with extended working hours. The commonly applied roster is 13:1, meaning 13 consecutive working days followed by 1 day off, with daily working hours of up to 12. Dispatched staff-level employees receive 14 days of leave after 56 working days, while non-staff employees receive the same leave after 84 working days. Such working arrangements may reduce the intensity of direct family interaction, potentially creating additional challenges in maintaining work–family balance. Previous research has shown that long working hours negatively affect productivity, increase fatigue, stress, and turnover risk (Immawati, 2022; Pencavel, 2015; Syakina et al., 2022), and may also disrupt family life while heightening the risk of mental health problems such as depression and anxiety (Virick et al., 2007).

Despite growing recognition of the importance of psychological well-being, a clear research gap remains. First, there is a lack of in-depth studies exploring the subjective experiences of Indonesian coal mining employees as they construct the meaning of psychological well-being amid high-risk work conditions and prolonged separation from their families. Second, phenomenological approaches are limited in their application to understanding psychological well-being within the context of extreme roster systems that demand strong psychological adaptation. Consequently, a comprehensive understanding of how employees construct the meaning of well-being, the



factors that influence it, and the coping strategies they employ remains insufficient, as most previous studies are quantitative and primarily focus on occupational risk, stress, and safety. Based on these gaps, this study addresses the following questions: How do coal mining employees construct the meaning of psychological well-being within high-risk work conditions and limited family interaction? What factors influence their psychological well-being? What coping strategies do employees employ to maintain or enhance their psychological well-being?

The originality of this study lies in its exploration of the meaning of psychological well-being from the perspective of dispatched coal mining employees using an interpretative phenomenological approach. This method allows for capturing deep subjective experiences, including the factors influencing psychological well-being and the coping strategies adopted. The findings are expected to contribute theoretically by enriching conceptual understanding of psychological well-being in high-risk, geographically dispersed work contexts, while also offering practical implications for developing more context-specific employee well-being policies in the mining sector.

Accordingly, this study addresses an important gap in the literature on psychological well-being in the Indonesian coal mining industry and extends theoretical understanding of how extreme working conditions, work–family imbalance, and psychological well-being intersect.

Mental health is more related to the absence of psychological disorders than to positive psychological functioning (Ryff, 1989). Therefore, mental health is more closely associated with the absence of illness than with a state of health. Well-being is defined as the extent to which a person is able to function optimally (Ryan & Deci, (2001). Felicia A Huppert, (2009) states that mental health refers to a smooth life. It is a combination of feeling good and functioning effectively. People with high levels of mental health feel happy, capable, supported, and satisfied with their lives. Additionally, better physical health is mediated by brain activation patterns, neurochemical effects, and genetic factors.

Ryan & Deci, (2001) identified two main approaches to understanding mental health. First, mental health focuses on happiness, setting limits to achieve happiness and prevent suffering. The second focus of mental health is the limits of a person's overall functioning, including good thinking and physical health. Researching mental health is important because the positive value of mental health allows a person to identify what is missing in life (Ryff & Keyes, 1995). Ryff, (1989) formulated the concept of psychological well-being by integrating clinical psychology, developmental psychology, and mental health theory, then defining psychological well-being as a condition in which an individual has a positive attitude towards themselves and others, can make their own decisions and regulate their own behaviour, can create and regulate an environment compatible with their needs, and strive to explore and develop themselves. Robertson & Cooper, (2010) define psychological well-being at work as the psychological feelings and goals an individual experiences there.

The six dimensions of psychological well-being that form the core of the theories of positive functioning psychology, formulated by Ryff & Keyes, (1995), are: self-acceptance, positive relationships with others, autonomy, environmental mastery, life purpose, and personal growth, which serve as indicators of optimal psychological functioning. In the context of the coal mining sector, these dimensions play a crucial role because the challenging work environment demands that employees adapt, maintain healthy social relationships, sustain motivation, and develop their potential to maintain workplace well-being. They continuously develop their potential, nurture, and enhance



their positive traits.

The researcher asks basic questions to examine psychological well-being among miners in greater depth. These basic questions will develop into more specific questions during the process. The purpose of these basic questions is to explore the depth of meaning and psychological dynamics experienced by respondents in relation to the phenomenon of psychological well-being. The fundamental questions are as follows, 1) What does psychological well-being mean to you as a coal miner, and how do your personal experiences shape that meaning?, 2) What factors influence your psychological well-being while working in the coal mining sector?, and 3) What strategies or methods do you employ to maintain and enhance your psychological well-being amidst workplace challenges such as long working hours, roster systems, job risks, and limited interaction with family?

METHOD

The theoretical framework and philosophical perspective of this study draw on the Heideggerian interpretive phenomenological tradition (Gill, 2014). The phenomenological approach is an attempt to understand individuals, lives, or experiences through their perceptions of something (Creswell, 2007). La Kahija, (2017) states that the interpretive phenomenological approach is used to interpret how each participant gives meaning to their experiences.

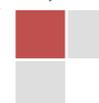
This study uses a qualitative phenomenological approach because its main focus is to determine the psychological well-being of coal mining employees. Therefore, it requires a method that can provide a subjective experience for these employees. This study also prioritises subjective or emic experiences (La Kahija, 2017). This means the study is based on informants' subjective experiences regarding the issues raised. Additionally, this study does not involve a large number of informants, as it places greater emphasis on contextual relevance to the research problem.

The purpose of this study is to understand the meaning of psychological well-being for employees, describe the factors that influence it, and identify coping mechanisms to improve employees' psychological well-being in the coal mining sector. In this study, the case of interest is psychological well-being among coal mining employees.

Participants were selected using purposive sampling, a technique that deliberately considers specific characteristics relevant to the research objectives (Frechette et al., 2020; Kartono, 1996). The inclusion criteria were explicitly defined as follows: (1) permanent coal mining employees, (2) married, and (3) dispatched workers. These criteria were established because this group is assumed to experience dual pressures, high job risk and limited family interaction, making them particularly relevant to the focus on psychological well-being.

Prior to data collection, ethical approval was obtained from the University of Surabaya's Ethics Committee. Participant recruitment was conducted through direct communication with coal mining companies and distribution of participation invitations. Individuals who met the inclusion criteria and provided consent were included in the study. A total of five participants participated, which is consistent with Interpretative Phenomenological Analysis (IPA) principles that prioritize depth of exploration over sample size and is considered sufficient to generate rich and meaningful phenomenological insights (La Kahija, 2017)

Data were collected through interviews. Semi-structured interviews were employed, as they facilitate in-depth exploration of feelings, experiences, attitudes, and



beliefs (DeJonckheere & Vaughn, 2019; Holmqvist & Frisén, 2012). Open-ended questions were used to optimize data collection, allowing participants to freely articulate their thoughts and experiences (Braun et al., 2019; Braun & Clarke, 2006). Each participant was interviewed individually for approximately 60 minutes to explore their experiences and perceptions of psychological well-being as coal miners.

Data analysis followed the Interpretative Phenomenological Analysis (IPA) framework as outlined by Smith & Osborn, (2015) and operationally guided by the detailed analytic stages described in La Kahija, (2017). The analysis was conducted in a phased, systematic, and idiographic manner, emphasizing deep engagement with participants' subjective experiences and applying double hermeneutics, in which participants interpret their own experiences and the researcher interprets those interpretations.

The first stage was data immersion, during which interview transcripts were repeatedly read to gain a holistic understanding of participants' experiences and to enter the world of meanings they constructed. At this stage, the researcher maintained a phenomenological attitude, characterized by openness to emerging meanings and minimizing presuppositions.

The second stage involved initial noting, where detailed notes were developed, covering descriptive aspects (what participants experienced), linguistic aspects (word choice, metaphors, emotional emphasis), and conceptual aspects (more abstract meanings linked to the experience). These notes served as the foundation for deeper interpretative analysis.

The third stage was the development of emergent themes. Based on exploratory notes, structured meaning units were organized into preliminary themes that capture the essence of participants' experiences while remaining close to their language and meanings.

The fourth stage involved identifying connections among themes. Emergent themes were clustered into higher-order thematic structures through abstraction, subsumption, polarization, and contextualization, resulting in superordinate themes that comprehensively represented experiential meaning.

The fifth stage was idiographic commitment, where the entire analytical process was completed for one participant before proceeding to the next. This ensured analytical depth and preserved individual experiential uniqueness, in line with IPA principles.

The sixth stage involved cross-case analysis, where findings across participants were compared to identify convergences, divergences, and unique experiential characteristics. This process produced the final thematic structure consisting of universal, contextual, and personally significant themes.

Throughout the analysis, the principle of double hermeneutics was consistently applied, acknowledging that participants interpret their lived experiences while researchers interpret those interpretations. This ensured that the resulting meanings were not only descriptive but also interpretative and reflective, consistent with IPA's philosophical foundations.

The final findings are presented as comprehensive thematic narratives, supported by verbatim participant quotations to retain closeness to empirical data and integrated with relevant psychological theoretical frameworks to strengthen interpretation.

This study adopts Lincoln & Guba, (1985) a trustworthiness framework comprising confirmability, credibility, transferability, and dependability. To ensure credibility, member checking was conducted by discussing interview summaries with participants to validate the accuracy of meaning (Nowell et al., 2017). A reflexive journal was



maintained to document the researcher’s positionality, assumptions, and potential biases. Peer debriefing sessions were conducted to strengthen interpretations and minimize individual bias. In addition, triangulation was employed to reduce subjectivity and enhance the objectivity of findings (Nowell et al., 2017; Van Manen, 2006).

At the final stage, thematic findings, including main themes and subthemes, were documented and reported as the outcome of rigorous analytical processes (Nowell et al., 2017; Urry et al., 2024). This study has several methodological limitations that warrant consideration. First, participants were drawn from a single mining sector, and the study did not compare findings with other high-risk industries, such as the oil and gas sector, which also involves extended working periods and elevated risk. Second, although the relatively small and homogeneous sample aligns with IPA characteristics, it may limit the diversity of perspectives. Third, response bias may have occurred because participants maintain employment relationships with their companies, potentially leading to cautious responses. Nevertheless, rigorous methodological strategies were implemented to minimize bias and strengthen the validity of the findings.

RESULTS AND DISCUSSION

Results

This study aims to understand the psychological well-being of mining employees. There were five informants in this study. The characteristics of the informants in this study can be seen in the following table 1:

Table 1.
 Characteristics of the Informants

No	Name	Age
1	BH	39
2	IS	38
3	BG	30
4	JT	35
5	SW	36

This section presents the thematic responses corresponding to the themes identified during data analysis process. Each theme and its associated subthemes are described and supported by relevant quotations from the interview transcripts as evidentiary excerpts. An overview of the themes and subthemes is provided in Table 2.

Table 2.
 Theme, Subtheme and Coding

No.	Theme	Subthemes	Coding for Theme
1.	Meaning of Psychological Well-Being	a. Stable and sufficient income b. Safe working conditions c. Absence of work-related obstacles d. Time and opportunity to be with family	a. Psychological well-being is perceived as having a stable and sufficient income that ensures family security b. Feeling psychologically well when working in a safe environment with minimal risk of workplace accidents or fatalities



	e. Ability to remain connected with family	c. Experiencing mental calmness when work runs smoothly without operational barriers or unmet targets d. Psychological well-being involves having opportunities to spend time with family, either through leave or direct presence at important family events e. Maintaining psychological well-being through regular communication with family via phone calls or video calls despite physical distance
--	--	--

2. Factors Affecting Psychological Well-Being

Family Health	a. Child illness b. Parental illness c. Emotional distress and anxiety d. Impact on work focus and motivation Coping strategies	a. Experiencing anxiety, worry, and sadness when a child or parent becomes ill while the employee is working on site b. Feeling psychological strain due to the inability to physically accompany family members during illness c. Frequently thinking about family health conditions during working hours d. Reduced concentration and work motivation when family members are ill e. Maintaining frequent communication with family members via phone or video calls f. Seeking information and emotional support from colleagues to reduce stress
Company Facilities	a. Compensation and wage system b. Family health benefits c. Leave and transportation accommodation d. Housing assistance	a. Perceiving compensation and wage systems as competitive and supportive of employee well-being b. Family health benefits (for spouse and children) enhancing employees' sense of security and work motivation



	e. Limited immaterial support	c. Transportation and accommodation support during leave facilitating access to home and family d. Housing or rental assistance supporting employees who bring their families to the work location e. Perceiving a lack of non-material support, such as attention to psychological well-being, evaluation of working hours, and assessment of roster policies
Connected with Family	a. Use of communication technology b. Maintaining emotional closeness c. Adaptive communication patterns in long-distance families	a. Using phone calls and video calls to maintain emotional closeness with family members while working remotely b. Communication technology reducing feelings of longing and psychological pressure during extended periods away from home c. Engaging in intensive communication when family situations are perceived as critical d. Spouses attempting to resolve issues independently before initiating direct communication
Working hours	a. Twelve-hour work shifts b. Extended roster system c. Physical and mental fatigue d. Impact on family life	a. Working twelve-hour daily shifts, which differ substantially from standard office working hours b. Extended roster systems limiting opportunities for time with family c. Experiencing physical and mental exhaustion due to prolonged working hours and high workload d. Inability to be present during important family events, such as child illness or key family decision-making moments



		e. Expressing the need for organizational evaluation of roster policies and employee stress thresholds
3. Coping Mechanisms	<ul style="list-style-type: none"> a. Regular family health updates b. Seeking social and informational support c. Utilising company facilities d. Proposing intangible organisational support e. Maintaining emotional closeness through technology f. Advocating for work roster evaluation 	<ul style="list-style-type: none"> a. Coping with family health concerns by maintaining frequent communication and receiving regular updates from home b. Reducing anxiety by seeking advice, information, and shared experiences from colleagues c. Using company-provided facilities (health benefits, leave, accommodation) to maintain psychological stability d. Actively proposing intangible support such as counselling services, well-being programmes, and recreational activities e. Maintaining emotional closeness with family members through regular phone and video calls f. Coping with work-related strain by proposing evaluation and revision of long working hours and extended roster policies

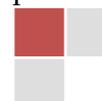
The first theme identified in this study concerns the meaning of psychological well-being for coal miners. Psychological well-being in this context refers to a condition in which employees have jobs with sufficient and stable incomes and are free from obstacles, including the risk of workplace accidents. In addition, psychological well-being is characterised by having time to interact with family, whether through online communication on smartphones or in person, such as when accompanying sick family members or attending family events. This was conveyed by the five informants as follows:

First informant:

“The situation is that he has sufficient income and has time with his family, even though he is far away, trying to balance it with communication through video calls.”

“For workers like myself, of course I want to work close to home, but because of this roster system...”

“Balancing communication, whether it's in the form of video calls now, or phone



calls in the past, now we can use video calls.’ (I.1)

Second informant:

“When work is going smoothly, there aren’t many obstacles and the family is healthy.”

“The important thing is that my friends and I can work smoothly in the field without any obstacles that cause headaches, such as not meeting targets or accidents, which are a headache.”

“If everyone at home is healthy, I can work calmly. If someone is sick, I can’t concentrate and have to keep calling them.” (I.2)

Third informant:

“Being able to work in good health and take frequent leave to spend time with my family, making sure to plan my leave well so that I don’t miss important family events, because this is valuable to me’ (I.3)

Fourth informant:

“A safe job with no workplace accidents or fatalities is already satisfying.”

“Another factor that can affect mental well-being is, especially during events or gatherings, such as children’s events, when a child is receiving their report card, or when a child has activities requiring parental presence” (I.4)

Fifth informant:

“The condition where I can always stay connected with my family and work in the field according to production targets”

“We work, are busy, but outside of work, we find time to stay connected with our family, whether with our spouse, parents, and others” (I.5)

The second theme, obtained from the verbatim analysis results, identified factors affecting the psychological well-being of coal mining employees, namely:

a. Family health

One factor that affects the psychological well-being of employees in the mining sector is family health. Informants reported that one of the biggest challenges they face is when a family member falls ill. This situation has a significant impact on their psychological well-being, particularly due to the limitations on being able to be with their family in person. As heads of their households, they feel a sense of responsibility to be present, but work demands require them to remain at their work sites, leaving them able to communicate only via phone or video call.

This situation causes prolonged sadness and affects various aspects of work, including decreased motivation, difficulty concentrating, and attention disorders. Physically, they also experience effects such as decreased concentration and difficulty managing their thoughts when remembering the condition of their sick family members. To reduce anxiety, informants contacted their families regularly to check on the condition of sick family members. They felt more at ease receiving updates from their families at home every few hours. Meanwhile, when dealing with other family issues, informants felt better prepared because they had made advance preparations. However, when family members were sick, they still experienced distractions and worries while at work.



“When there are cases like that, so, every few hours, there are reports from home, how the child is progressing, and so on. Here, I also look for information from friends, whether any of their children have ever experienced an illness like my child's, and what the solution was. That's pretty much the way I reduce stress. Anxiety, stress, hearing unpleasant information because the child is sick. “ (I.1)

“It's on my mind, of course. But if it gets to the point where I can't think about work, make the wrong decisions, insha'Allah, alhamdulillah, I hope it doesn't come to that. But if it does cross my mind, it's still on my mind. Especially during the COVID days . “ (I.2)

“This year, we also experienced the coincidence of our child being hospitalised. Meaning, on this side, the wife was mentally prepared from the start and truly accepted it, even though the husband wasn't there, but we could use technology like phones and video calls to check on the child's condition at the hospital. “ (I.2)

“The picture is definitely one of sadness, sir. This sadness will definitely affect our activities, where the frequency of our work will definitely be affected. The picture is that we will definitely call more frequently than we usually do when we are working, usually with our families, usually calling at night. “ (I.3)

The physical impact is that we may have been working with enthusiasm, but there is a slight decrease. In terms of concentration, there is definitely some difficulty focusing. There is definitely difficulty focusing when we are still thinking about the child being in the hospital (I.4)

Another thing I might feel is related to parents. Because, coincidentally, even though we are already married, we will still update our parents (I.4)

Similarly, when our parents undergo surgery, we also want to know their condition out of curiosity, so we will keep updating their condition until it is resolved (1.5)

As for issues outside of illness, for example, perhaps with family, there may be differences of opinion here, but that does not have a significant impact. Because we are confident that we can find a solution (I.5)

b. Has supporting facilities from the company

The facilities provided by mining companies are among the factors that influence employees' psychological well-being. Informants said the wage system in the mining sector differs from that in typical office jobs. This difference makes employees feel comfortable through various allowances and facilities, such as family allowances, medical facilities, and family accommodation. The availability of these facilities provides additional motivation for employees in their work. Additionally, the accommodation system during leave periods also contributes to improved workplace comfort. To enhance employee well-being, the company provides housing assistance for employees who wish to bring their families, enabling them to maintain family site status with adjustments to



the leave roster system.

According to informants, the company pays close attention to material aspects such as the completeness of facilities, increases in allowances, and insurance, but not to immaterial aspects. According to informants, immaterial aspects refer to the company's attention to employees, such as: (1) analysing whether the 2- to 3-month work roster policy is still relevant, and (2) whether 12-hour working hours are still effective and productive.

“In terms of material aspects, it is evident that this company has consistently demonstrated concentration, focus, and special attention to improving the material well-being of its employees, in line with the company's development. However, when it comes to non-material aspects, I hardly see any. If there are any, they are still related to material aspects, such as insurance facilities and so on. “ (I.2)

“Regarding work schedules, other companies have started to analyse their own policies, such as whether 3 months or 2 months is still relevant. Is the daily work schedule of 12 hours still effective and productive? “ (I.2)

“The wage system in this mining company is quite attractive and competitive, offering benefits that make employees feel comfortable and providing facilities. “ (I.3)

“Medical programmes for wives and children can also increase people's motivation to continue working enthusiastically. “ (I.4)

“The next factor that can increase people's motivation to continue working enthusiastically in a mining company is the accommodation system offered by the mining company, which provides accommodation, such as travel or airlines to take us to our domicile“ (I.4).

“The company's strategy to improve employee welfare, especially for those who wish to bring their families to the work location, includes offering housing assistance . “ (I.5)

c. Staying connected with family

Staying connected with family is important for mining employees. To stay connected, informants utilise information technology, such as telephones and video calls. Although communication is conducted virtually, the availability of this technology helps employees feel closer to their families, boosting their morale and improving their mental state for work. In addition, online communication also plays a role in resolving family issues. Although informants prefer meeting in person, distance limitations make video calls the primary alternative.

The informants also said that when working at the site, their main focus was on completing their work and waiting for the time to go home. Leave was an important moment to reconnect with their families. In maintaining relationships with their spouses, especially their wives, the informants had made adjustments from the outset. Both parties tried to resolve problems independently first and only contacted their spouses if they could not do so.



“We work, we are busy, outside of work, we find time to stay connected with our families, whether it be with our wives, parents, or others. “ (I.1)

“Basically, we rarely communicate. So maybe that’s another reason why we’ve been able to maintain this long-distance relationship so far. Each of us tries to handle our own problems. If it’s really impossible, then when my wife chats or even video calls me, it means there’s something she can’t solve on her own. It’s reached a dead end. Including me. If I end up talking to her about work, it means I’m really worried about the problem “ (I.1)

“Balancing communication, whether it’s through video calls now or phone calls in the past, we can now use video calls, so working in the mine isn’t really an issue for me or most people. “ (I.3)

“It means that even though there have been differences of opinion, we still use the communication available now, find solutions, use current technology, and use video to resolve the relationships that were like that before. “ (I.4)

d. Long working hours

The duration and system of work in the mining sector differ from those in office work. Informants stated that working hours in mining reach 12 hours per day, longer than the typical 8-hour workday in office jobs. The work system in mining uses a roster system of 6 weeks on and 2 weeks off, so the long working hours and time spent at the mining site will affect employees physically and mentally because a lot of energy is drained due to long working hours, and high workloads will affect their mental and physical condition.

For staff employees, the work roster consists of 56 working days and 16 days off, while for non-staff employees, it consists of 84 working days and 16 days off. One of the main problems employees face as a result of this work system is their absence during important family moments, such as family decision-making or when a family member is ill. Therefore, according to the informant, it is necessary to conduct an analysis of the stress tolerance limits of employees under high workloads. This evaluation aims to formulate a more optimal roster policy, rather than simply following the patterns used in other industries, such as the oil sector, which implements a 2-week work and 2-week leave system.

“Yes, for staff members, it's still a 5-6 week roster, while for non-staff members, it's 84 days every two weeks. “ (I.1)

“So often we can't be at home when important decisions need to be made that we should be present for. Or at least minor issues, like problems at home, such as leaks, a sick child, ranging from minor to more significant issues. “ (I.2)

“I can’t say exactly how long it should be ideally. If we were to follow other companies, it might be as short as 6 weeks, or even 4 weeks, but that depends on what. Maybe 2 weeks, 2 weeks. It’s the same as in the oil industry, right? Two weeks of work, two weeks off. “ (I.2)



“We implement a 6-week work system with a 2-week rest period, where the work schedule at the site is 6 days of work, 1 day off, so it’s a holiday. “ (I.3)

“Mining work has a very long working duration. It’s different from office work, where office work starts at 8 AM and ends at 5 PM. Mining work usually starts at 6 AM and ends at 6 PM in the evening. “ (I.3)

“Just the energy alone is already drained, especially for physical activities and mental energy. Currently, the workload is quite heavy, which affects both our mental and physical well-being in general. “ (B.1.5)

The third theme that emerged from the analysis of the informants' verbatim data was the coping mechanisms they used to address factors affecting their psychological well-being. After identifying the factors that influenced psychological well-being in the second theme, the informants developed various strategies to overcome these challenges. The coping mechanisms used included:

a. Family health by updating information regularly

Informants face limitations in direct access to families, but can update information regularly through routine communication. This is done to ensure that the condition of the family remains monitored and to reduce anxiety arising from limited direct interaction.

“Even though the husband is not at the location, we can still use technology such as telephones and video calls to check on the condition of the child in the hospital’ (I.1)

“The feeling is definitely sadness, Sir. This sadness will inevitably affect our activities, as the frequency of our work will be affected by these thoughts. Typically, we would call our family at night, but now we call more frequently.” (1.3)

“So, during work hours or breaks, I try to call to check on the child’s condition, which hasn’t changed yet. After that, we hang up, and I continue working, though there’s definitely a sense of sadness in my mind” (1.4)

“When there’s a case like that, I’ll get updates from home every few hours about the child’s progress and so on. Here, I also ask my friends if any of their children have ever experienced a similar illness” (I.5)

b. Company facilities by proposing intangible facilities=

Informants sought to improve psychological well-being by proposing the provision of intangible facilities, such as psychological well-being programmes, counselling services, and recreational activities, to help reduce work pressure.

“On the material side, it is evident that this company has consistently demonstrated concentration, focus, and special attention to improving the material welfare of its employees, in line with the company's development. However, in terms of immaterial aspects, I see almost none. Even if there are any, they are still related to material aspects, such as the availability of insurance facilities and so on” (I.1)

“Materially, it does have an attractive compensation system, but the company must have a strategy to improve employee welfare beyond material aspects, especially



for those who wish to bring their families to the work location. The company also offers some housing assistance, and for those who bring their families, there should be a day when they can bring their families to the mine to see the work pressure they face so that they can focus on resting at home.” (I.3)

c. Connecting with family through video calls and phone calls

To overcome the limitations of meeting in person, informants utilise technology by making regular video calls and phone calls. This strategy allows them to maintain emotional closeness and reduce the negative impact of prolonged separation.

”Balancing communication, which now takes the form of video calls, whereas in the past it was telephone calls, now we can use video calls.”(I.1)

”This means that even though there have been differences of opinion, we still use the current means of communication, find solutions, use current technology, and use video to resolve the issues that previously existed.” (I.2)

”But we can also find solutions, such as during a family event yesterday, we ended up using video calls during the family event, we could see the whole family, so the sadness that was there before could turn into joy.” (I.4)

d. Working hours with proposed analysis and review of work roster policy

Informants recognised that long working hours were a major challenge to their psychological well-being. Therefore, they took the initiative to propose an analysis and review of the work roster policy to management. The proposal aimed to adjust the work system to achieve a better balance between company productivity and employee well-being.

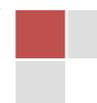
“The issue of work schedules. Other companies have already begun analysing their respective policies. Are three months or two months still relevant? Are daily working hours of 12 hours still effective and productive?” (I.2)

“I can't say what the ideal is yet. If we just follow other companies, it could be 6 weeks, or maybe only 4 weeks, but that depends on what. Maybe it will be 2 weeks, 2 weeks. Just like oil workers, 2 weeks on, 2 weeks off.” (I.4)

These findings indicate that coal mining employees not only experience challenges in psychological well-being, but also actively seek solutions to manage and improve their well-being. The coping mechanisms they use reflect adaptation strategies that are not only individual in nature but also involve collective efforts within the organisation.

Discussion

Based on the results of data analysis and categorization in this study, the five informants are coal mining employees with temporary employment status. Staff employees work on-site for 56 consecutive working days, followed by 16 days off, while non-staff employees work for 84 consecutive working days, followed by 16 days off. Based on this description, the first factor influencing the psychological well-being of mining employees concerns family health. Family illness constitutes a significant concern for employees, as it substantially affects their psychological well-being. This situation becomes particularly burdensome for employees who are heads of families and wish to



be physically present, but are limited to phone or video calls.

Such conditions can lead to feelings of sadness and significantly affect daily functioning, resulting in reduced work motivation, concentration, and focus when a family member is ill. To alleviate these concerns, employees regularly contact their families to monitor the condition of the ill family member. The findings of this study are consistent with previous research on psychological well-being among mining employees. One such study by A. K. Ryan & Willits, (2007) reported that the quality of family relationships and family health are closely related to individuals' feelings of personal well-being. These results align with the present study's findings, which demonstrate that family health plays a crucial role in shaping psychological well-being.

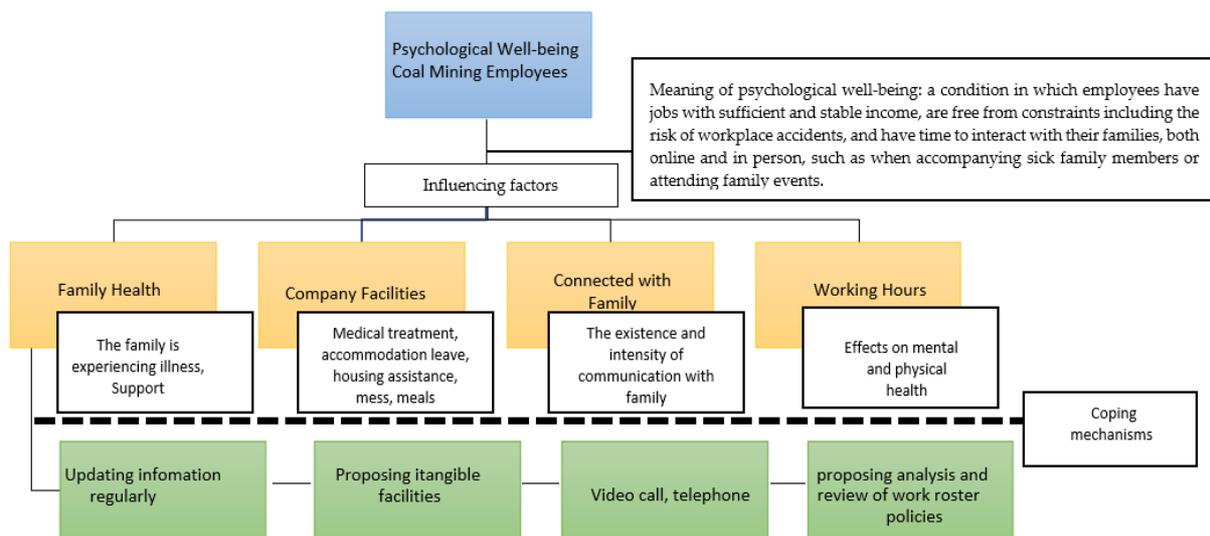
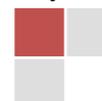


Figure 1. Overview of results

The facilities provided by the mining industry also influence employees' psychological well-being. The remuneration system in the mining sector differs from that of typical office-based occupations and is perceived as relatively more supportive. This system includes allowances, family benefits, and medical facilities, which motivate employees to work more enthusiastically. Another facility that enhances comfort is the accommodation system during leave periods. To further improve employee well-being, housing rental assistance is provided to employees who bring their families, though this benefit may depend on the family site status during leave. This finding is in line with previous research by Mahendra (2015), which demonstrated a significant relationship between compensation variables and employees' psychological well-being. These findings indicate that the level of compensation provided has a direct impact on employees' psychological happiness. Over time, companies have increasingly emphasized material benefits, such as improved facilities, higher allowances, and insurance coverage, while paying limited attention to immaterial aspects. These immaterial aspects include organizational concern for employees, such as (1) evaluating whether the 2–3 month work roster policy remains relevant, and (2) assessing whether a 12-hour workday continues to be effective and productive.

Maintaining a connection with family is also important for mining employees. While working on-site, employees often look forward to the end of the workday as an opportunity to connect with their families. To maintain these connections, they rely on



information technology, such as phone calls and video calls. Staying connected with family members, even virtually, enhances work motivation, as employees can see and communicate with their families, thereby improving their psychological readiness for work. Virtual communication also serves as a means of addressing family-related issues; although employees would prefer face-to-face interaction, geographical distance necessitates communication via video calls. The importance of connectivity and communication identified in this study aligns with the findings of Pradipto & Siahaan, (2021) those who emphasized the role of family communication in influencing psychological well-being.

Long working hours further affect employees' psychological well-being. In the mining industry, daily working hours exceed those of standard office-based jobs, which typically involve eight-hour workdays. Mining employees generally work 12 hours per day. The mining work system operates on a roster basis: staff employees work for six weeks, followed by two weeks off; non-staff employees work for eight weeks, followed by two weeks off, and in some cases, three months followed by two weeks off. Consequently, long working hours and extended stays at mining sites have both physical and psychological effects on employees, as prolonged work hours deplete energy and increase workload, thereby affecting mental and physical health. Another common issue associated with extended work rosters is employees' inability to attend important family events or participate in family decision-making.

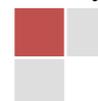
Therefore, according to the informants, it is necessary to analyze and assess employees' stress tolerance in relation to workload to develop roster policies that are not merely adopted from other industries, such as the oil and gas sector, which often uses a two-week-on, two-week-off system. These findings are consistent with those of Pencavel, (2015), who found that working more than 10 hours per day leads to decreased productivity and encourages employees to change jobs more frequently. Long working hours can also lead to extreme fatigue, resulting in neglected responsibilities, including family obligations. Employees who work long hours may experience negative effects on family life (Virick et al., 2007) and suffer from physical and psychological health problems, such as depression, anxiety, and stress-related conditions. Therefore, physical and psychological health should be a priority for management to ensure employee comfort. This comfort must be fostered by organizations so that employees can perform their duties optimally. Individuals working within organizations contribute their energy, ideas, skills, and expertise to organizational development, and happiness and well-being are universally desired across occupational sectors, including corporate environments (Wikanestri & Prabowo, 2015).

ACKNOWLEDGMENTS

Declare none

CONCLUSION

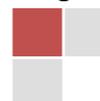
This study advances theoretical understandings of psychological well-being in extreme work environments by demonstrating how Ryff's dimensions are adaptively reconstructed among coal mining workers through technology-mediated family connectedness, proactive coping strategies, and a strong sense of purpose anchored in economic responsibility. At the organizational level, the findings support evidence-based interventions, such as roster system evaluation, improved communication infrastructure, and the integration of routine well-being assessments into occupational safety



frameworks, to promote sustainable risk management. Employees are encouraged to maintain high-quality family communication and utilize rest periods for physical and emotional recovery to enhance personal resilience. From a policy perspective, companies should move beyond financial compensation by adopting flexible work arrangements and providing access to psychological services to mitigate burnout and support work-life balance. Industry-wide, adopting progressive well-being practices, drawing on lessons from high-risk sectors like oil and gas, can improve productivity and foster healthier work environments. Future research should employ longitudinal designs across roster cycles and develop culturally grounded instruments to further validate and contextualize these findings within the Indonesian mining context.

REFERENCE

- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design*. In University of Nebraska, Lincoln. Sage Publication Ltd.
- Dagenais-Desmarais, V., & Savoie, A. (2012). What is Psychological Well-Being, Really? A Grassroots Approach from the Organizational Sciences. *Journal of Happiness Studies*, 13(4), 659–684. <https://doi.org/10.1007/s10902-011-9285-3>
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25(3), 357–384. <https://doi.org/10.1177/014920639902500305>
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43. <https://doi.org/10.1037/0003-066X.55.1.34>
- Felicia A Huppert. (2009). *Applied Psych Health Well - 2009 - Huppert - Psychological Well-being Evidence Regarding its Causes and Consequences.pdf*.
- Frechette, J., Bitzas, V., Aubry, M., Kilpatrick, K., & Lavoie-Tremblay, M. (2020). Capturing Lived Experience: Methodological Considerations for Interpretive Phenomenological Inquiry. *International Journal of Qualitative Methods*, 19, 1–12. <https://doi.org/10.1177/1609406920907254>
- Gill, M. J. (2014). The Possibilities of Phenomenology for Organizational Research. *Organizational Research Methods*, 17(2), 118–137. <https://doi.org/10.1177/1094428113518348>
- Holmqvist, K., & Frisén, A. (2012). “I bet they aren’t that perfect in reality:” Appearance ideals viewed from the perspective of adolescents with a positive body image. *Body Image*, 9(3), 388–395. <https://doi.org/10.1016/j.bodyim.2012.03.007>
- <https://www.esdm.go.id/>. (2024). Tembus Rp300,3 Triliun, PNBPN Sektor ESDM di 2023 Lampau Target.
- Immawati, S. A. (2022). Working Hours Dan Disiplin Kerja Serta Dampaknya Pada Kinerja Karyawan. *Jurnal Penelitian Ekonomi Manajemen Dan Bisnis*, 1(3), 24–33. <https://doi.org/10.55606/jekombis.v1i3.425>
- Kartono, K. (1996). *Pengantar Metodologi Riset Sosial* (Cet. ke-7). Mandar Maju.
- La Kahija, Y. F. (2017). *Jalan memahami pengalaman hidup*. Yogyakarta: PT Kanisius.
- Lincoln, Y., & Guba, E. G. (1985). *Naturalistic Inquiry*. In Sage. <https://doi.org/10.1016/B978-0-08-102295-5.10579-7>
- Mahendra, T. S. A. (2015). *Pengaruh Kompensasi, Work Engagement, Psychological Well Being Terhadap Kinerja Perawat Pada Rumah Sakit dr. Soebandi Jember*. Tesis, 1–72. Universitas Jember
- Mangkuprawira, S. T. (2002). *Manajemen Sumber Daya Manusia Strategik*.



Jakarta:Ghalia Indonesia.

- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1), 1–13. <https://doi.org/10.1177/1609406917733847>
- Pencavel, J. (2015). The Productivity of Working Hours. *Economic Journal*, 125(589), 2052–2076. <https://doi.org/10.1111/eoj.12166>
- Pradipto, N. L., & Siahaan, F. M. (2021). Peran Pola Komunikasi Keluarga Sebagai Mediator Dalam Hubungan Antara Perspesi Dukungan Sosial Dan Kesejahteraan Psikologis Pada Guru Sd Perempuan Di Masa Pandemi Covid-19. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 10(2), 418–432. <https://doi.org/10.33578/jpkip.v10i2.8193>
- Robertson, I. T., & Cooper, C. L. (2010). Full engagement: The integration of employee engagement and psychological well-being. *Leadership and Organization Development Journal*, 31(4), 324–336. <https://doi.org/10.1108/01437731011043348>
- Ryan, A. K., & Willits, F. K. (2007). Family ties, physical health, and psychological well-being. *Journal of Aging and Health*, 19(6), 907–920. <https://doi.org/10.1177/0898264307308340>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(February 2001), 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- 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. <https://doi.org/10.1037/0022-3514.57.6.1069>
- 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. <https://doi.org/10.1037/0022-3514.69.4.719>
- Schmitt, N. W., & Highhouse, S. W. I. B. (2013). *Handbook of psychology: Industrial and organizational psychology* (2nd ed). John Wiley & Sons, Inc.
- Shackel, P. A. (2024). Recovering psychological trauma in coal mining communities. *Labor History*, 1–14. <https://doi.org/https://doi.org/10.1080/0023656X.2024.2426017>
- Sonntag, S., & Ilies, R. (2011). Intra-individual processes linking work and employee well-being: Introduction into the special issue. *Journal of Organizational Behavior*, 32(4), 521–525. <https://doi.org/10.1002/job.757>
- Syakina, D., Farhanas, V. F., Rahmayanti, N. Z., Fitria, R. L., & Singadimeja, H. G. (2022). Pekerja Sif: antara Stres Kerja dan Kesejahteraan Psikologis di Tempat Kerja. *Jurnal Psikologi*, 18(1), 33. <https://doi.org/10.24014/jp.v18i1.14830>
- Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management – based on the study of Polish employees. In *International Entrepreneurship and Management Journal* (Vol. 19, Issue 3). Springer US. <https://doi.org/10.1007/s11365-023-00834-9>
- Van Manen, M. (2006). Writing qualitatively, or the demands of writing. *Qualitative Health Research*, 16(5), 713–722. <https://doi.org/10.1177/1049732306286911>
- Virick, M., Lilly, J. D., & Casper, W. J. (2007). Doing more with less: An analysis of work life balance among layoff survivors. *Career Development International*, 12(5), 463–480. <https://doi.org/10.1108/13620430710773772>



- Wikanestri, dan Prabowo, . (2015). Psychological Well-Being Pada Pelaku Wirausaha. Seminar Psikologi & Kemanusiaan, 2013, 431–439.
- Yin, J., Liu, Z., Yu, K., Kong, B., Mou, X., Zhang, X., & Ma, W. (2023). A study on the simulation of psychological and behavioral dynamics in the unsafe state of coal mine workers. *Frontiers in Earth Science*, 11(July), 1–17. <https://doi.org/10.3389/feart.2023.1085200>
- Zheng, X., Zhu, W., Zhao, H., & Zhang, C. (2015). Employee well-being in organizations: Theoretical model, scale development, and cross-cultural validation. *Journal of Organizational Behavior*, 36, 621–644. <https://doi.org/10.1002/job>

