Meaning of Work as a Mediator Between the Work–Family Interface and Employee Well-Being: Evidence from Indonesian Coal Miners

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Employee well-being is increasingly recognized as a foundational component of sustainable performance, particularly in high-risk industries such as coal mining. Drawing on theories of the work–family interface and positive organizational behavior, this study examines the mediating role of meaning of work in linking work–family enrichment, work–family conflict self-efficacy to employee well-being. Cross-sectional survey data were obtained from 405 employees across multiple coal mining sites and analyzed using Structural Equation Modeling. The results indicate that both work–family enrichment and meaning of work exert significant direct effects on employee well-being, whereas work–family conflict self-efficacy influence well-being indirectly through meaning of work. Meaning of work fully mediates the relationship between work–family conflict self-efficacy and employee well-being, and partially mediates the relationship between work–family enrichment and employee well-being. These findings demonstrate that employee well-being is shaped not only by psychological resources derived from work and family experiences but also by employees' capacity to derive meaning from their work. Thus, meaning of work functions as a core psychological mechanism that transforms self-efficacy and enrichment into sustained well-being within coal mining occupations.

INTRODUCTION

Employees in the coal mining sector face demanding working conditions characterized by long hours, high-risk environments, and limited opportunities for family interaction. Previous research indicates that the hazardous nature of mining and its physically and psychologically strenuous work conditions can negatively affect employees' psychological states, potentially leading to psychological insecurity (Yin et al., 2023; Shackel, 2024). These challenges are often intensified by imbalances between work and family life, resulting in psychological strain that undermines employee well-being. Despite these challenges, the coal

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mining industry remains one of the largest contributors to national revenue outside of taxation (https://www.esdm.go.id/, 2024), prompting the government to set high productivity targets for the sector.

Organizational performance in this sector is highly dependent on employee performance, making employee well-being a critical factor for achieving sustainable productivity. Previous studies have demonstrated that employee well-being significantly influences individual performance and broader organizational outcomes (Bachtiar & Anshori, 2024; Hassan et al., 2021; Tuyet et al., 2024). Empirical evidence also indicates that well-being research increasingly informs policy decisions, with well-being indicators being used as a key foundation for social and economic policymaking (Rahmi et al., 2021). Consequently, employee well-being has become a central component of contemporary work environments, particularly in relation to balancing professional and family roles (Handayani, 2020; Marecki, 2024). In the mining sector, the demanding and hazardous nature of the work further underscores the importance of employee well-being, which encompasses life well-being, workplace well-being, and psychological well-being (Zheng et al., 2015).

A qualitative study involving five mining employees found that workers in this sector face considerable challenges in maintaining their well-being, particularly in managing the interface between work and family life. The study identified four key factors influencing their psychological well-being: family health, company facilities, connection with family, and working hours (Mukti et al., 2023). These findings highlight the pivotal role of psychological variables in shaping well-being across work and family domains, consistent with Centeredness Theory (CT), which emphasizes a systemic and integrative approach to understanding well-being (Bloch-Jorgensen et al., 2018).

In the mining sector, where work pressure and extended working hours frequently disrupt family life, the work–family interface represents two central life domains that are critical for predicting employee well-being (Carvalho & Chambel, 2016; Kim et al., 2021). A growing body of literature identifies work–family enrichment as an important factor influencing employee well-being (Annor, 2016; Aziz et al., 2021; Carvalho & Chambel, 2014; Farradinna et al., 2018; Henry & Desmette, 2018; Sarwat et al., 2021; Shuwen, 2010). Work–family enrichment operates as a positive resource-transfer mechanism between life domains, whereby positive experiences at work or within the family enhance functioning in the other domain. This dynamic fosters harmony across roles, thereby supporting overall employee well-being.

Furthermore, work–family conflict self-efficacy represents an important psychological factor influencing employee well-being in the coal mining sector. Work–family conflict self-efficacy refers to an individual's belief in their ability to manage competing demands across work and family domains (Artiawati & Astutik, 2017), functioning as a key psychological resource for sustaining well-being. Research has shown that individuals with higher levels of self-efficacy are better equipped to cope with work–family conflict, leading to enhanced psychological well-being (Balogun, 2019; Sahrah, 2023). In the mining industry, where high

job demands and long working hours often contribute to stress and burnout, self-efficacy enables employees to employ effective coping strategies that buffer against emotional exhaustion and help preserve overall well-being (Schwarzer & Hallum, 2008).

Drawing from Resource Gain Development (RGD) theory (Wayne et al., 2007), the present study proposes meaning of work as a mediating psychological mechanism linking work–family enrichment and work–family conflict self-efficacy to employee well-being. Furthermore, meaning of work has been shown to make a substantial contribution to employee well-being (Sheng et al., 2022). Moreover, meaning of work may buffer the adverse effects of work–family conflict by enabling employees to reinterpret negative experiences as purposeful and manageable (Andhini & Artiawati, 2018; Hennessy, 2005). When employees perceive their work as meaningful, they are better able to regulate negative emotions and maintain well-being despite conflicting demands. Accordingly, this study examines the mediating role of meaning of work in explaining how resource development through enrichment and self-efficacy enhances employee well-being within the high-risk context of coal mining.

Based on the above theoretical rationale, this study proposes thirteen hypotheses. The direct-effect hypotheses are as follows: (H1) work–family enrichment positively affect employee well-being; (H2) family–work enrichment positively affect employee well-being; (H3) work–family conflict self-efficacy positively affect employee well-being; (H4) family–work conflict self-efficacy positively affect employee well-being; (H5) meaning of work significantly affect employee well-being; (H6) work–family enrichment positively affect meaning of work; (H7) family–work enrichment positively affect meaning of work; (H8) work–family conflict self-efficacy positively affect meaning of work; and (H9) family–work conflict self-efficacy positively affect meaning of work. The mediation hypotheses are: (H10) meaning of work mediates the relationship between work–family enrichment and employee well-being; (H11) meaning of work mediates the relationship between family–work enrichment and employee well-being; (H12) meaning of work mediates the relationship between work–family conflict self-efficacy and employee well-being; and (H13) meaning of work mediates the relationship between family–work conflict self-efficacy and employee well-being.

The conceptual model illustrating these hypotheses is presented in Figure 1.

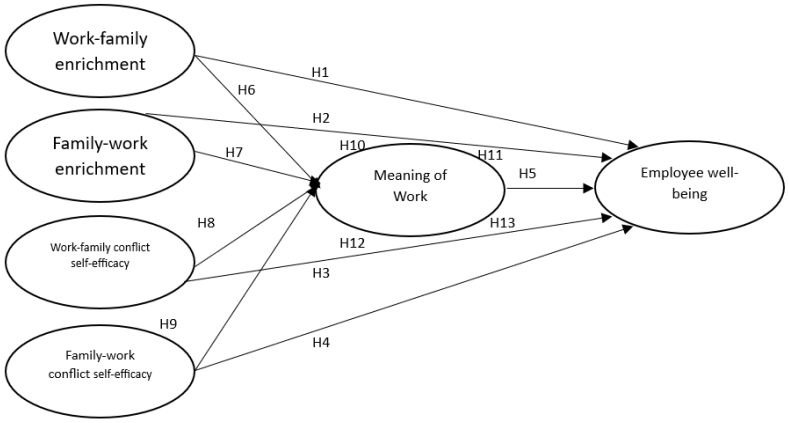

FIGURE 1. CONCEPTUAL FRAMEWORK OF THE PROPOSED HYPOTHESES

METHOD

This study involved 405 participants from 29 coal mining companies located in Kalimantan and Sumatra, Indonesia. All respondents were active employees working in coal mining operations and completed an online survey distributed through internal communication channels in coordination with their supervisors. Participants were eligible for inclusion if they met the following criteria: (1) they were active employees of coal mining companies at the time of data collection; (2) they were assigned to operational site areas operating under a roster or shift system, ensuring direct exposure to the job demands characteristic of the mining sector; (3) they were legally married, ensuring the presence of family-role demands relevant to the assessment of work–family enrichment, family–work enrichment, and work-family conflict self-efficacy; and (4) they provided informed consent prior to completing the questionnaire. An overview of the sample's demographic characteristics is provided in Table 1.

Table 1 Demographic Characteristics for Sample

Characteristic	Category (Coding)	Frequency	Percentage (%)
Gender	Male	393	97.04
	Female	12	2.96
Employment Status	Fixed-term contract	114	28.15
	Permanent contract	291	71.85
Age	17–27 years	159	39.26
	>27–38 years	157	38.77
	>38–49 years	76	18.77
	>49–59 years	13	3.21
Tenure	≤1 year	53	13.09
	>1–5 years	190	46.91
	>5–10 years	96	23.70

	>10–20 years	59	14.57
	>20–35 years	5	1.23
	>35 years	2	0.49
Job Position	Staff	187	46.17
	Non-staff	215	53.83
Point of Hire	External (Assigned from outside)	274	67.65
	Local	131	32.35
Monthly Income	≤ IDR 5 million	26	6.42
	> IDR 5–10 million	145	35.80
	> IDR 10–15 million	152	37.53
	> IDR 15–20 million	47	11.60
	> IDR 20–25 million	16	3.95
	> IDR 25 million	17	4.20
	Not reported	2	0.49
Educational Attainment	High School	215	53.09
	Diploma 1 (DI)	3	0.74
	Diploma 2 (DII)	1	0.25
	Diploma 3 (DIII)	40	9.88
	Diploma 4 (DIV)	6	1.48
	Bachelor's Degree (S1)	132	32.59
	Master's Degree (S2)	8	1.98

Note. $N = 405$.

Procedure

This study was conducted on two of Indonesia's largest coal-producing islands, Kalimantan and Sumatra. Data collection commenced following ethical clearance granted by the Research Ethics Committee of the University of Surabaya (No. 546/KE/IV/2025). Confidentiality was strictly maintained, and no personally identifiable information was collected from participants. Due to the high-security nature of coal mining sites, all data were gathered exclusively through an online survey.

The research invitation included information regarding the study's objectives, data usage, participation procedures, inclusion criteria, and survey deadlines, along with a secure link to the online instrument. Upon accessing the link, participants were presented with a detailed description of the study's purpose, confidentiality assurances, a statement of voluntary participation, and an informed consent form. Only individuals who provided consent were able to proceed to the survey items. This procedure ensured participant anonymity and minimized potential risks during data collection.

Instrumentation

The present study employed six measurement scales. To ensure measurement precision, all instruments were adapted following the standardized cross-cultural adaptation procedures outlined by Beaton et al., (2000). The adaptation process consisted of six stages: translation, synthesis, back-translation, expert committee review, pretesting, and the preparation and evaluation of a written report. In the translation phase, two

qualified bilingual experts independently evaluated the translated items to ensure linguistic accuracy and contextual alignment with the target population. The second stage involved a content validity assessment using the Content Validity Index (CVI), evaluated by a panel of six experts. Third, a readability assessment was conducted with five panelists to ensure linguistic clarity and comprehensibility. Fourth, a pilot study involving 159 participants was conducted to further verify content validity and refine the instrument. All scales used a six-point Likert-type response format (1 = strongly disagree to 6 = strongly agree). Confirmatory factor analysis (CFA) was conducted to establish the validity and reliability of the measures, followed by a structural model analysis. Data were analyzed using JASP.

Employee Well-Being Scale

The employee well-being scale used in this study was adapted from Zheng et al. (2015), which comprises three dimensions of employee well-being: life well-being, workplace well-being, and psychological well-being. Following initial testing, the short version of the Employee Well-being Scale was utilized while retaining the original three dimensions but with fewer items. The confirmatory factor analysis (CFA) yielded satisfactory model fit indices, with a Comparative Fit Index (CFI) of 0.941, a Tucker-Lewis Index (TLI) of 0.912, a Standardised Root Mean Square Residual (SRMR) of 0.038, and a Goodness of Fit Index (GFI) of 0.903. The scale also demonstrated strong reliability, with a Cronbach's alpha of 0.929. This measurement tool was validated with coal mining employees. All items were assessed using a six-point Likert scale, with responses ranging from 1 (strongly disagree) to 6 (strongly agree).

Work-Family Enrichment Scale

The work-family enrichment scale used in this study was adapted from the Work-family enrichment Scale (WFES) developed by Carlson et al. (2006), which comprises three dimensions: development, affect, and capital. The confirmatory factor analysis (CFA) demonstrated excellent model fit, with a Comparative Fit Index (CFI) of 0.992, a Tucker–Lewis Index (TLI) of 0.988, a Root Mean Square Error of Approximation (RMSEA) of 0.052, a Standardized Root Mean Square Residual (SRMR) of 0.020, and a Goodness of Fit Index (GFI) of 0.958. The scale also exhibited strong reliability, with a Cronbach's alpha of 0.952. Each item employed a six-point Likert response format, spanning from 1 (strongly disagree) to 6 (strongly agree).

Family-Work Enrichment Scale

The family-work enrichment scale used in this study was adapted from the Work-family enrichment Scale (WFES) (Carlson et al., 2006), which consists of the dimensions of development, affect, and efficiency. The confirmatory factor analysis (CFA) demonstrated satisfactory model fit, with a Comparative Fit Index (CFI) of 0.957, a Tucker-Lewis Index (TLI) of 0.935, Standardised Root Mean Square Residual (SRMR) of 0.032, and Goodness of Fit Index (GFI) of 0.905. The scale also showed strong

reliability, with a Cronbach's alpha of 0.952. This measurement tool was tested on coal mining employees. A six-point Likert scale was used for all items, with response options extending from 1, indicating strong disagreement, to 6, indicating strong agreement.

Work-Family Conflict Self-Efficacy Scale

The Work-Family Conflict Self-Efficacy Scale used in this study was adapted from the scale developed by Hennessy & Lent, (2008), namely the Work Family Conflict Self-Efficacy Scale (WFC-SES). The Work-Family Conflict Self-Efficacy Scale measurement tool showed a Comparative Fit Index (CFI) value of 0.972, a Tucker -Lewis Index (TLI) of 0.943, Standardised Root Mean Square Residual (SRMR) of 0.031, and Goodness of Fit Index (GFI) of 0.985. In addition, this measurement tool also shows good reliability, with a Cronbach's alpha value of 0.895. This measurement tool was tested on coal mining employees. Each item employed a six-point Likert response format, spanning from 1 (strongly disagree) to 6 (strongly agree).

Family-Work Conflict Self-Efficacy Scale

The family-work conflict self-efficacy scale in this study uses a scale adapted from the scale developed by (Hennessy & Lent, 2008), namely the Work Family Conflict Self-Efficacy Scale (WFC-SES). Based on CFA calculations, the Family-Work Conflict Self-Efficacy measurement tool shows a Comparative Fit Index (CFI) of 0.943, Tucker -Lewis Index (TLI) of 0.885, Standardised Root Mean Square Residual (SRMR) of 0.037, and Goodness of Fit Index (GFI) of 0.907. In addition, this measurement tool also showed good reliability, with a Cronbach's alpha value of 0.931. This measurement tool was tested on coal mining employees. A six-point Likert scale was used for all items, with response options extending from 1, indicating strong disagreement, to 6, indicating strong agreement.

Meaning of Work Scale

The Meaning of Work scale in this study employed the Work and Meaning Inventory (WAMI) scale adapted from Steger et al. (2012), which comprises three dimensions: positive meaning, meaning making through work, and greater good motivations. The confirmatory factor analysis (CFA) demonstrated adequate model fit, with a Comparative Fit Index (CFI) of 0.930, Tucker-Lewis Index (TLI) of 0.901, a Standardised Root Mean Square Residual (SRMR) of 0.047, and Goodness of Fit Index (GFI) of 0.878. The scale also showed strong reliability, with a Cronbach's alpha value of 0.946. This measurement tool was validated using responses from coal mining employees. Each item employed a six-point Likert response format, spanning from 1 (strongly disagree) to 6 (strongly agree).

RESULTS

Structural Model Analysis

The structural model testing the employee well-being with work-family enrichment, family-work enrichment, work-family conflict self-efficacy, and family-work conflict self-efficacy as antecedents, and meaning of work as a mediator, demonstrated strong empirical support. The model exhibited satisfactory fit, with the following indices: RMSEA = 0.072, SRMR = 0.030, GFI = 0.975, CFI = 0.955, and TLI = 0.947.

The results showed that work–family enrichment had a positive and significant effect on employee well-being (H1, $\beta = 0.7193$, $p = 0.001$), whereas family–work enrichment demonstrated a negative and significant effect (H2, $\beta = -0.5056$, $p = 0.016$). In contrast, neither work–family conflict self-efficacy (H3, $\beta = 0.0194$, $p = 0.872$) nor family–work conflict self-efficacy (H4, $\beta = 0.1204$, $p = 0.227$) exhibited significant direct effects on employee well-being.

Meaning of work emerged as a strong predictor of employee well-being (H5, $\beta = 0.6078$, $p < 0.001$). Additionally, work–family enrichment significantly predicted the meaning of work (H6, $\beta = 0.4906$, $p = 0.002$), whereas family–work enrichment did not (H7, $\beta = 0.2639$, $p = 0.093$). Work–family conflict self-efficacy also had a significant effect on meaning of work (H8, $\beta = 0.2705$, $p = 0.003$), while family–work conflict self-efficacy again showed no significant influence (H9, $\beta = -0.0399$, $p = 0.617$). Overall, the significant pathways were primarily associated with work–family enrichment and meaning of work, both directly and through mediating mechanisms.

Mediating Effect Analysis

The mediating effects were examined using the bootstrapping method, which does not assume normality of the sampling distribution and provides more robust estimates of indirect effects. The analysis indicated that the indirect effect of work–family enrichment on employee well-being through meaning of work was significant (H10, $\beta = 0.298$, $p = 0.003$). This result suggests that meaning of work functions as a partial mediator, as work–family enrichment also exhibited a significant direct effect on employee well-being in the structural model.

By contrast, the indirect effect of family–work enrichment on employee well-being through meaning of work was not significant (H11, $\beta = 0.160$, $p = 0.152$), indicating an absence of a mediating for this pathway.

Furthermore, the indirect effect of work–family conflict self-efficacy on employee well-being via meaning of work was significant (H12, $\beta = 0.164$, $p = 0.014$). Because the direct effect of work–family conflict self-efficacy on employee well-being was not significant, this pattern reflects full mediation, whereby meaning of work entirely transmits the influence of work–family conflict self-efficacy to employee well-being.

Meanwhile, the indirect effect of family–work conflict self-efficacy on employee well-being through meaning of work was not significant (H13, $\beta = -0.024$, $p = 0.620$), suggesting no mediating effect for this pathway.

Taken together, these findings demonstrate that meaning of work serves as a central psychological mechanism that either partially or fully mediates the relationships between work–family interface variables and employee well-being, particularly for the pathways involving work–family enrichment and work–family conflict self-efficacy.

Table 2 Results of Hypothesis Testing

Path	Std. Estimate (β)	z	p	Result
Direct Effects				
H1: WFE→EWB	0.7193	3.259	0.001	Supported
H2: FWE→EWB	–0.5056	–2.413	0.016	Supported
H3: WFCSE →EWB	0.0194	0.161	0.872	Not Supported
H4: FWCSE→EWB	0.1204	1.207	0.227	Not Supported
H5: MOW→EWB	0.6078	4.327	< .001	Supported
H6: WFE→MOW	0.4906	3.160	0.002	Supported
H7: FWE→MOW	0.2639	1.678	0.093	Not Supported
H8: WFCSE→MOW	0.2705	2.985	0.003	Supported
H9: FWCSE→MOW	–0.0399	–0.499	0.617	Not Supported
Indirect Effects				
H10:WFE→MOW→EWB	0.298	3.013	0.003	Supported
H11:FWE→MOW→EWB	0.160	1.433	0.152	Not Supported
H12:WFCSE→MOW→EWB	0.164	2.454	0.014	Supported
H13:FWCSE→MOW→EWB	–0.024	–0.495	0.620	Not Supported

Note: WFE = work–family enrichment, EWB = employee well-being, FWE = family–work enrichment, WFCSE = work–family conflict self-efficacy, FWCSE = family–work conflict self-efficacy, MOW = meaning of work

DISCUSSION

Based on the model evaluation and path estimations, the present study confirms that meaning of work (MOW) significantly mediates the relationships between work–family enrichment, family–work enrichment, work–family conflict self-efficacy, and family–work conflict self-efficacy with employee well-being (EWB). The major hypothesis is supported by the model's strong fit to the empirical data. The RMSEA value of 0.072 (CI 0.065–0.079) falls within the acceptable fit range, whereas the SRMR value (0.030) and the GFI (0.975) values indicate excellent fit. Similarly, the CFI value of 0.955 reflects excellent fit, and the TLI value of 0.947 also falls within the acceptable fit.

These results demonstrate that meaning of work makes a substantial contribution to employee well-being. The greater meaning individuals perceive in their work, the higher their experienced well-being. The positive association between work–family enrichment and employee well-being further suggests that resources and positive experiences gained from

work can enrich family life, generating psychological energy that subsequently enhances well-being at work.

An unexpected finding, however, emerges in the opposite direction: family–work enrichment was negatively associated with employee well-being. This indicates the presence of strain-based conflict (Greenhaus & Beutell, 1985), in which emotional or psychological strain originating from the family domain spills over into the work domain and disrupts role functioning. Within coal mining environments characterized by intense physical demands, long roster schedules, and prolonged separation from family high emotional involvement with family may trigger emotional strain. Consequently, family-derived resources may function not as enriching but as additional sources of psychological pressure, thereby reducing workplace well-being.

Under such demanding conditions, meaning of work serves as a psychological bridge that transforms cross-domain experiences into sources of well-being. Individuals who attribute greater meaning to their work are more likely to interpret pressure as part of a valuable and purposeful contribution rather than as a burden. This aligns with findings by Koekemoer et al.,(2020), who reported that work–family enrichment is positively associated with workplace well-being, as well as Sarwat et al., (2021), who demonstrated that meaning of work serves as an important mechanism linking enrichment to well-being.

Overall, these findings indicate that *meaning of work* functions as a key mechanism that converts the positive effects of work–family enrichment into well-being, whereas the negative effects of family–work enrichment seem to be shaped by the contextual demands of the mining industry, such as geographic separation, physical strain, and high-intensity work environments. This interpretation is consistent with literature showing that work–family enrichment is more strongly associated with outcomes such as job satisfaction and engagement (Agrawal & Mahajan, 2021; Koekemoer et al., 2020).

Another important finding is that work–family conflict self-efficacy (WFCSE) and family–work conflict self-efficacy (FWCSE) did not exert direct effects on employee well-being. However, WFCSE demonstrated a significant indirect effect through meaning of work. This suggests that self-efficacy in managing work–family conflict does not directly enhance well-being but does so indirectly through the development of meaningful work experiences. Individuals with high self-efficacy are more likely to perceive stressors as manageable challenges, strengthening their sense of competence and enhancing the personal value they attach to their work. This mechanism is consistent with Social Cognitive Theory (Bandura, 1997) and Resource Gain Development Theory (Wayne et al., 2007).

In contrast, FWCSE did not show significant direct or indirect effects. The nature of mining work long shifts, roster-based systems, and physical distance from family may limit the extent to which family-based resources can be transferred to the work domain. As a result, confidence in managing family-to-work conflict may not meaningfully increase employees' sense of meaning in work. This finding aligns with Koekemoer et al., (2020) and Sarwat et al., (2021), who reported that enrichment and self-efficacy tend

to be more influential when they originate from the work domain rather than the family domain.

From the perspective of Resource Gain Development (RGD) Theory, work–family enrichment and WFCSE function as resources that stimulate gain spirals, including developmental, affective, capital, and efficiency gains. Meaning of work acts as a catalyst that integrates these resources. When employees experience their work as meaningful, they not only sustain existing psychological resources but also generate new spirals of growth. Conversely, gain spirals may fail to emerge in the case of family–work enrichment when contextual pressures such as physical isolation and heavy work demands impede the conversion of family-based resources into productive work-related capital.

Differences observed in family–work enrichment and FWCSE can also be understood through gender and cultural perspectives. Neuropsychological evidence indicates that men tend to demonstrate higher systemizing tendencies (Moll et al., 2005), preferring independent and rational problem-solving. Excess emotional involvement or support from family may therefore be perceived as intrusive. Boundary management research Allen et al., (2024) suggests that men in patriarchal cultures often maintain stronger segmentation between work and family roles to protect work focus. In Indonesia, gender norms often place domestic and emotional responsibilities on spouses (Dayatri & Mustika, 2021), reducing the likelihood that family demansds translate into significant conflict capable of developing FWCSE. These dynamics help explain the lack of significant effects in this domain.

From a practical perspective, these findings indicate important implications for human resource management in the mining sector. The positive effect of work–family enrichment on employee well-being highlights the need to strengthen family-supportive work environments, particularly in remote and high-demand operational settings, through flexible shift systems, reliable communication access, and structured family engagement programs. It is important for the management to review shift systems in the mining sector, which taking long period for one shift, to enhance well being and work family balance.

Furthermore, the mediating role of meaning of work provides evidence-based support for leadership practices that foster purpose, recognition, and career development. Leaders who communicate the broader value of mining work, acknowledge employee contributions, and offer clear development pathways can enhance employees' perceptions of meaningful work, thereby promoting well-being. These results suggest that leadership development should incorporate pedagogical innovations such as reflective leadership training, coaching-based supervision, and value-oriented feedback, rather than focusing solely on technical performance

In addition, enhancing work family conflict self-efficacy remains essential and may be supported through resilience training, stress management, and cognitive behavioral coaching. Sociodemographic factors such as education and income should be considered in

compensation and career development systems, as they may shape access to developmental opportunities and long-term employee well-being.

In sum, the validated employee well-being model provides a valuable framework for practitioners and policymakers. An integrated approach that strengthens the meaning of work, self-efficacy, and work–family balance has the potential to enhance sustainable well-being, productivity, retention, safety, and socio emotional resilience among employees in the coal mining sector.

Limitations of the Study

This study has two primary limitations. First, its scope is restricted to the coal mining sector, which has distinct operational characteristics and organizational culture, including long roster systems, high work-related risks, and a relatively homogeneous social environment. These conditions limit the generalizability of the findings, particularly because other mining sectors such as nickel, gold, copper, and oil and gas have different work demands, risk profiles, and organizational structures. Future research should therefore include a broader range mining industries to provide a more comprehensive understanding of employee well-being across extractive sectors.

Second, data collection was conducted entirely through an online survey due to limited researcher access to mining sites, which are governed by stringent safety and security regulations. The absence of on-site data collection constrained the opportunity to gather contextual observations and conduct in-depth interviews that could have enriched the interpretation of psychosocial dynamics in high-risk work environments. Incorporating mixed-method approaches in future studies would provide deeper insight into the lived experiences of mining employees.

Recommendations for Future Research

Future research is encouraged to expand the context of this study to other mining sectors including nickel, gold, copper, and oil and gas as well as to other high-risk industries beyond mining. Such expansion is essential for examine the generalizability of the proposed employee well-being model across work environments that differ in job demands, organizational cultures, and work–family dynamics. Given that Resource Gain Development (RGD) Theory emphasizes the gradual accumulation and development of psychological resources, longitudinal research designs are also needed to capture the temporal dynamics of resource gains and to further explain why the family-to-work pathways in the present study did not generate the expected gain spiral among mining employees.

Future studies should also consider incorporating *boundary management preferences* as a moderating variable. The strong segmentation preference commonly observed among male employees in Indonesia may inhibit the transfer of resources from the family domain to the work domain, potentially contributing to the nonsignificant effects of family-work enrichment and family-work conflict self-efficacy. Integrating this construct into future theoretical models may provide a

more comprehensive understanding of cross-domain processes within high-risk occupational settings.

Additionally, experimental or intervention-based research is needed to evaluate the effectiveness of programs aimed at enhancing meaning of work and strengthening employees' role-management capabilities. The current finding that work-family conflict self-efficacy significantly predicts meaning of work but does not directly influence employee well-being suggests that interventions should prioritize fostering meaning of work as a primary psychological mechanism through which employees achieve well-being.

Future studies could also incorporate additional contextual variables such as job autonomy, family-supportive supervisor behavior, perceived organizational support, psychological detachment, and occupational identity. These factors may help explain further variations in how enrichment, self-efficacy, and meaning of work contribute to employee well-being in extreme work environments such as coal mining operations.

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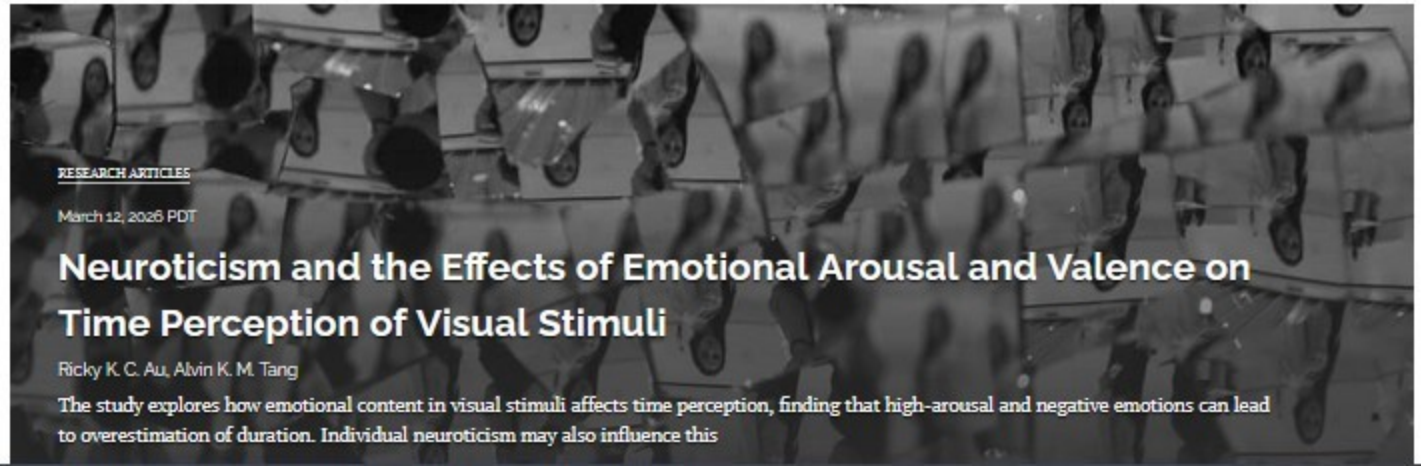

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Neuroticism and the Effects of Emotional Arousal and Valence on Time Perception of Visual Stimuli

Ricky K. C. Au, Alvin K. M. Tang

The study explores how emotional content in visual stimuli affects time perception, finding that high-arousal and negative emotions can lead to overestimation of duration. Individual neuroticism may also influence this

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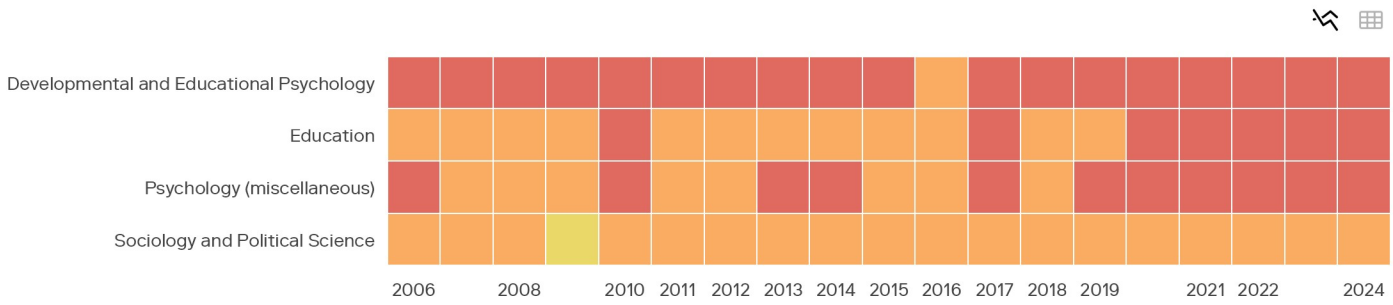

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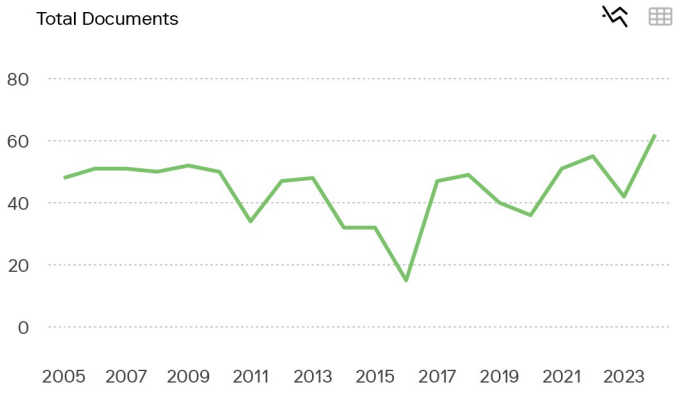

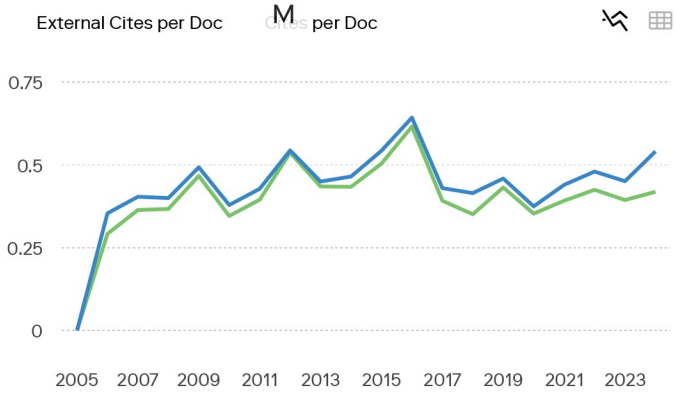

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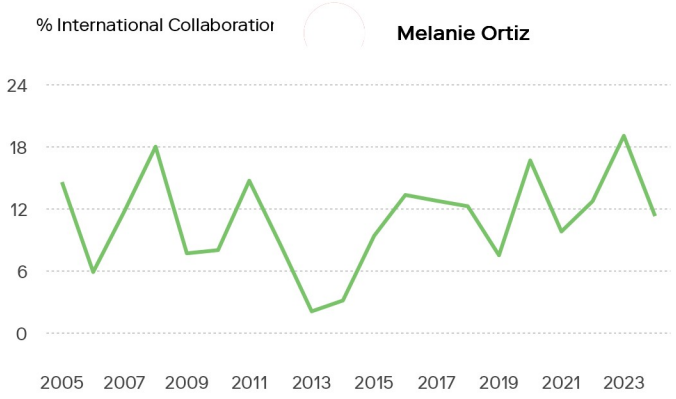

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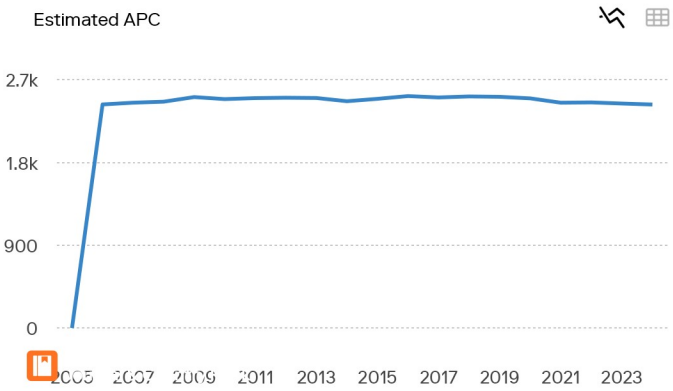

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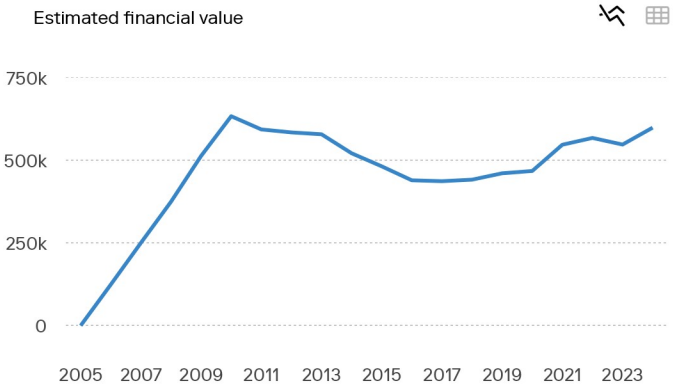

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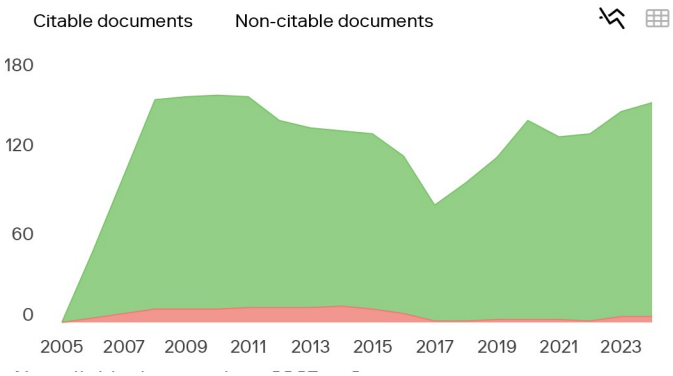

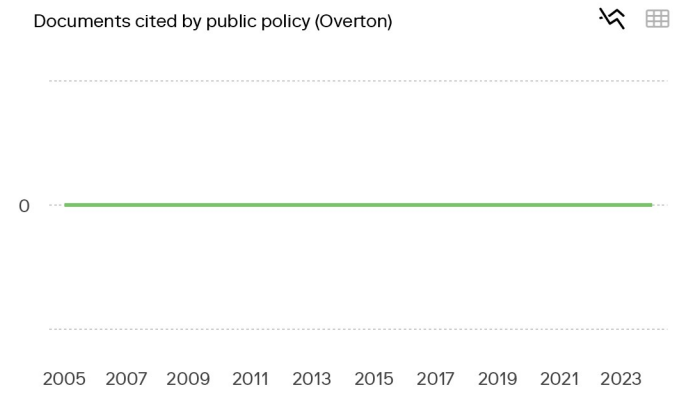

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