

The Influence of Job Demand on Work-Family Conflict Moderated by Co-worker Support

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ABSTRACT

This study aimed to investigate the unique effects of demands and support, focusing on the interaction between job demands and co-worker support in the context of work-family conflict. Professionals often believe that balancing work and family roles only leads to issues such as time pressure, work-family conflict, guilt, and more. This research specifically focused on the influence of job demands on work-family conflict while considering the moderating role of co-worker support. The research used a quantitative approach and employed purposive sampling for data collection through questionnaire surveys. The collected data were then analyzed using the statistical method Smart PLS. The practical implications of this study are expected to assist organizations in identifying the factors causing work-family conflict among employees. The research results indicate that job demands have an impact on work-family conflict, and co-worker support does not moderate the relationship between job demands and work-family conflict.

Keywords: work family conflict; job demand; co-worker support.

1. Introduction

Work-family conflict occurs when an individual experiences difficulty in balancing their dual roles between work and family. This is often caused by job demands that may intrude into one's time outside of working hours. Naturally, issues like these can have negative impacts both within the family and at work, ultimately leading to work-family conflict.

Job demands are the primary factor that can influence individual stress (Karasek, 1979), not only in the workplace but even when an employee is at home. The pressure brought about by job demands can trigger conflicts within the family. Consequently, the employee's performance at the workplace may also decline and disrupt the company's work system.

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High job demands and pressure can lead to the depletion of other significant resources, such as a lack of energy and rest time (Karasek, 1979). Even though employees can gain job-related resources through rewards, experience, and recognition (Baral, 2019), however, this does not guarantee that employees will be free from the pressure stemming from job demands. Karasek (1979) stated that job demands trigger psychological strain within the workplace, typically associated with heavy workloads, unforeseen tasks, and job-related stress. (Hwang & Ramadoss, 2017).

A common issue that often arises is that the more successful we become in our careers, the less time we have for our families. Greenhaus and Beutell (1985) revealed that organizations and individuals make substantial efforts to achieve a crucial balance between work and family life to minimize work-family conflict. Anderson (2002) and Grotto (2010) also affirm that situational or contextual factors, such as family, supervision, and organizational support, can assist individuals in dealing with conflict (Baral, 2019).

Overall, predictors of work-family conflict stem from work and family role experiences. This may include job and family demographics (such as working hours, work schedules, the number of children, the presence of preschool children, and so on) and experiences (such as perceived support at work and at home) (Michel et al., 2010). Professionals often believe that balancing work and family roles only leads to problems such as time pressure, work-family conflict, guilt, and so on. However, previous research has shown that co-worker support can help minimize work-family conflict (Byron, 2005).

Co-workers can assist by taking the time to listen to their fellow employees' problems and providing help in problem-solving, offering advice and information whenever it's needed (Wadsworth & Owens, 2007). According to Treiber and Davis (2012), co-worker support plays a significant role due to its perceived equal and friendly nature in relationships. Therefore, this study attempts to test co-worker support as a moderating role in the relationship between job demands and work-family conflict. The aim is to investigate the unique effects of demands and support, covering job domain demands (job demand) and resources (co-worker support), with the hope of minimizing work-family conflict.

2. Literature Review

2.1 Definition of Variables

Job Demand-Resource Model

The Job Demands-Resources Model (JDR) categorizes every aspect of a job that causes job stress into two groups: job demands and job resources. Job demands represent the conditions employees face in terms of workloads, referring to various job aspects that require sustained efforts, such as psychological, physical, social, or organizational aspects of the job (Bakker & Demerouti, 2007). JDR assumes that when job demands are high, it requires a higher level of effort to achieve work-related goals. Job demands are not always considered detrimental, but when they exceed an individual's capacity, it can affect the individual, resulting in losses. Job demands are categorized into three dimensions (Bakker et al., 2003), among them are: (1) work overload, which refers to an excessive workload, where individuals experience high demands with limited completion time.

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(2) emotional load, which includes emotional reactions caused by excessive workloads and conflicts with others. Jobs that require interaction with others tend to have a high emotional load. (3) cognitive load is the burden individuals bear in terms of memory, problem-solving, and cognitive effort. This load pertains to the need for concentration and accurate memory.

Job demands are related to the pressure stemming from excessive workloads and time constraints, such as rushing to complete tasks and meeting deadlines. Family demands, on the other hand, are related to the time needed to fulfill household responsibilities. The conflicts that employees may experience from job demands and family demands can be based on time, strain, and behavior (Greenhaus and Beutell, 1985). Time-based conflict occurs when the time demands of one role conflict with those of another. Strain-based conflict occurs when the strain experienced in one role interferes with participation in another role. Additionally, behavior-based conflict arises when behavior patterns suitable for one domain do not fit in another domain (Panatik et al., 2011). Job demands, as a factor related to performance, are work stressors, particularly factors related to workload, stress related to unexpected tasks, and job-related stress associated with personal conflicts. Furthermore, they are related to work intensity, time pressure, concentration, and social pressure (Karasek in Thanawatdech et al., 2014: 275). High job demands not only increase negative interference but also lead to greater work-life conflict because they tend to consume most of the available time, energy, and effort, which could be used effectively by individuals in fulfilling different life roles (Liu et al., 2005).

Work Family Conflict

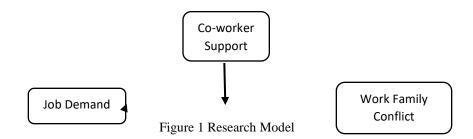
Work-family conflict can be defined as a form of role conflict between the work and family roles in which the role demands from work and family are mutually incompatible in some aspects. This occurs when an individual tries to fulfill the role demands at work, and these efforts are influenced by the person's ability to meet the demands of their family (Frone, 2000). Work-family conflict can result in highly detrimental work outcomes, such as job dissatisfaction, burnout, and turnover, as well as issues related to psychological distress, life dissatisfaction, and marital dissatisfaction (Eby et al., 2005). Greenhaus and Beutell (1985) identified three dimensions of work-family conflict, which are: (1) Time-based conflict occurs when the time required to fulfill one set of demands (either family or work) can reduce the time available to fulfill the other set of demands (work or family), (2) Strain-based conflict occurs when the strain from one role affects the performance in the other role, (3) Behavior-based conflict relates to the inconsistency of behavior patterns with the expectations of both parties (work or family).

Co-worker Support

Co-worker support reflects the extent to which colleagues behave by optimizing participants' use of learning on the job (Nijman et al., 2006). It can be described as the support and encouragement provided by coworkers to apply newly acquired skills and knowledge from training into their work. Chen (2003) measures co-worker support with the following indicators: (1) coworkers identifying and utilizing opportunities to apply skills and knowledge learned in training, (2) encouraging the use or expecting the application of new skills, (3) demonstrating patience for difficulties that may arise in implementing new skills, (4) showing appreciation for the use of new skills.



2.2 Framework



2.3 Hypothesis

Work-family conflict describes the clash between job responsibilities and family life (Frone et al., 1992). As a result, there is an increase in the dual-role conflict that employees face, and they need to balance their roles in both family and work because this can lead to negative consequences (Allen et al., 2000). One of the role pressures that can trigger work-family conflict is often caused by the job demands imposed by the company on its employees. This makes it challenging for employees to juggle dual roles (at home and in the workplace). Work-family conflict should be seen as a double-edged sword that can yield both positive and negative consequences under certain conditions, offering new theoretical insights and important managerial implications for a common phenomenon in management (Miao & Wang, 2017).

Karatepe (2006) added that when employees are confronted with excessive job demands and they cannot balance family and work, they will feel emotionally unstable and subsequently experience a decline in job performance. Therefore, job demands are stated to have a relationship with workfamily conflict. Thus, it is hypothesized that:

H1: Job demands are positively related to work-family conflict.

Job demand refers to an employee's state evaluated in terms of workload (Bakker et al., 2016:347). Given that WFC is a condition with negative consequences (Allen et al., 2000), it can be expected that the availability of resources will help individuals successfully manage the conflict between work and family roles, as is the case with co-worker support.

Co-worker support is a workplace resource that operates in various ways to facilitate the successful integration of work and family role demands. Coworkers also help by taking the time to listen to their colleagues' issues and providing assistance, advice, and job-related information when needed (Wadsworth & Owens, 2007). Thus, it is hypothesized that:

H2: Co-worker support moderates the relationship between job demands and work-family conflict.



3. Research Methodology

The study will be conducted on employees in the creative industry at Banyu Biru. The research sample will be selected using purposive sampling technique, aiming to understand how job demands in the creative industry will affect work-family conflict, with data collected from 80 individuals. Questionnaires will be distributed online through Google Forms using a 5-point Likert scale, where a score of 1 indicates "strongly disagree" and a score of 5 indicates "strongly agree." The research method employed is quantitative research, and the questionnaire data will be analyzed using the SmartPLS analysis tool.

4. Results

Respondent Profile

Respondents consist of 73.8% females and 26.3% males, among whom 47.5% are employees with employment contracts, while the remaining 52.5% do not have employment contracts. In terms of educational background, 33.8% of the employees have a high school diploma, 7.5% have a diploma, 57.5% have a bachelor's degree, and the remaining have postgraduate degrees.

Confirmatory Factor Analysis (CFA)

CFA (Confirmatory Factor Analysis) is used to assess whether a construct is consistent with a latent variable. To provide a more in-depth analysis, the researchers carefully refined the research model by excluding indicators that did not meet the validity criteria to ensure the accuracy and reliability of their findings. In Figure 2, the results of the PLS analysis on the relationships between variables are presented. Then, in Table 2, the validity test results are shown after removing the invalid question indicators, which are JD 1, CWS 3, CWS 5, and WFC3.

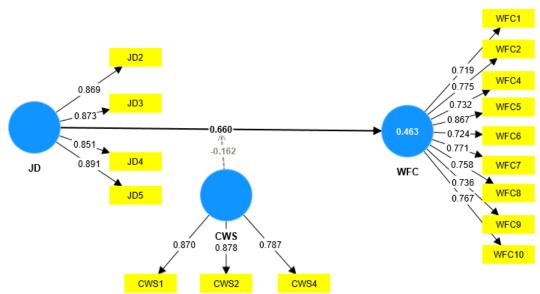


Figure 2 SEM Analysis Results



Table 1 Outer Loadings

	CWS	JD	WFC	CWS x JD
CWS1	0.870			
CWS2	0.878			
CWS4	0.787			
JD2		0.869		
JD3		0.873		
JD4		0.851		
JD5		0.891		
WFC1			0.719	
WFC2			0.775	
WFC4			0.732	
WFC5			0.867	
WFC6			0.724	
WFC7			0.771	
WFC8			0.758	
WFC9			0.736	
WFC10			0.767	
CWS x				1.000
JD				

The research findings indicate that all indicators for each variable are considered valid. The coworker support variable shows the highest factor value of 0.870 for indicator 1. For indicator 5, the job demand variable demonstrates a value of 0.891. Meanwhile, the work-family conflict variable shows a value of 0.867 for indicator 5.

Validity Test

The approach used is convergent and discriminant validity. In assessing convergent validity, factor loadings are examined to ensure that they exceed the threshold value of 0.708. In Table 1, all values meet this criterion to demonstrate their validity. Then, in Table 2, it is shown that all constructs included in the research model have Average Variance Extracted (AVE) values above 0.5. The WFC construct has the lowest AVE value at 0.581, which still exceeds the threshold.

Table 2 AVE

AVE

CWS 0.716

JD 0.749

WFC 0.581

Reliability Test

Validity and reliability criteria can also be assessed from the reliability value of a construct and the Average Variance Extracted (AVE) of each construct. A good construct has high reliability if its value is above 0.70 and an AVE above 0.50. Below is a table of the results of the composite reliability and AVE test for all variables.

Table 3 Composite Reliability & Cronbach's Alpha



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Construt	Cronbach's	Composite reliability	Composite reliability	
c	alpha	(rho_a)	(rho_c)	
CWS	0.801	0.812	0.883	
JD	0.894	0.900	0.926	
WFC	0.910	0.915	0.926	

Based on the values obtained in Table 3, it can be concluded that all constructs meet the reliability criteria. From the data above, it can be said that the constructs have good reliability.

Structural Model Testing (Inner Model)

Tests on the structural model are evaluated by paying attention to the percentage of variance explained, that is, looking at the value R^2 u for the dependent latent variable using the predictive relevance value (Q^2). Quantity Q^2 with range $0 < Q^2 < 1$, The closer the value to 1, the better the model. Likewise, if it is below 0 (zero), it shows that the model lacks predictive relevance. To assess a model with PLS output, start by looking at the R-Square of each latent variable. Change in R-Square value which is a goodness-fit-model test. Used to assess the influence of the independent variable on the dependent variable whether it has a substantive influence. The following is the coefficient of determination (R^2) of the endogenous variable which is seen in the table below.

Table 4 The R Square R-square adjusted R-square WFC 0.463

Based on the value of the coefficient of determination (R^2) presented in table 4, the value of Q^2 can be determined using the following calculation:

$$Q^{2} = 1 - (1 - R_{1}^{2})$$

$$= 1 - (1 - 0.463^{2})$$

$$= 1 - (1 - 0.214)$$

$$= 0.786 (78.6\%)$$

Based on the calculation results, it is known that the value of predictive relevance (Q2) is 0.786 or 78.6%. This means that the accuracy or truthfulness of this research model can explain 78.6% of the variability in job demand, work-family conflict, and co-worker support. The remaining 21.4% is explained by other variables that are not included in this research model. This model can be used for hypothesis testing, indicating that the Q2 obtained can be considered a well-formed model with good accuracy because the value obtained is above 70%. This indicates that the model in this research has good predictive value and is suitable for testing hypotheses.

Model Fit

The SRMR (Standardized Root Mean Square Residual) is a measure of model fit, indicating the difference between the data correlation matrix and the model-estimated correlation matrix. In Yamin (2022), this value is considered a measure of how well the model fits the data. According to Hair et al. (2021), SRMR values below 0.08 indicate a well-fitting model. However, in Karin Schmelleh et al. (2003), SRMR values between 0.08 - 0.10 are considered an acceptable model fit. The estimated model has an SRMR value of 0.092, which means the model has an acceptable fit. This suggests that the empirical data can explain the relationships between variables in the model.



Table 5 Model Fit

	Saturated model	Estimated model	
SRMR	0.093	0.092	

Hypothesis Testing

Hypothesis testing was conducted using SmartPLS 4.0 as the analytical tool, employing bootstrapping as the statistical method. This approach allows for the assessment of the direction and significance of latent variable relationships. The specific results are provided in Table 6.

Table 6 Path Analysis and Hypothesis Testing

	Original	Sample	Standard	T statistics	P
	sample (O)	mean (M)	deviation	(O/STDEV)	values
			(STDEV)		
JD -> WFC	1.403	1.383	0.573	2.448	0.014
CWS x JD ->	-0.213	-0.207	0.137	1.558	0.119
WFC					

In testing the first hypothesis (H1), the path coefficient is 1.403 with a significance value of 0.014, which is less than 0.05 or below 5%. This is indicated by a t-statistic value of 2.448. Therefore, it can be concluded that the positive path coefficient indicates that job demand has a significant positive influence on work-family conflict. Thus, the first hypothesis is accepted.

In testing the second hypothesis (H2), the path coefficient is -0.213 with a significance value of 0.119, which is greater than 0.05 or above 5%. This is shown by a t-statistic value of 1.558. Hence, it is concluded that the negative path coefficient indicates that co-worker support has an insignificant influence in reducing job demands that could weaken work-family conflict. Therefore, the second hypothesis is rejected.

5. Discussion

This investigation confirms the hypothesis statement (H1), indicating a significant positive relationship between job demands and work-family conflict among employees. Baral (2019) it reveals that higher workloads, extended working hours, overtime, shift work, flexible time policies, business travel, gender bias, lack of counseling services, complaint handling systems, and a lack of a supportive work environment contribute to increased levels of work-family conflict among employees.

This research aimed to understand how co-worker support can mitigate the influence of the relationship between job demands and work-family conflict. The results from testing the second hypothesis (H2) indicate that co-worker support has an insignificant influence on the relationship between job demands and work-family conflict. Good co-worker relationships are essential for building an effective teamwork (Ducharme & Martin, 2000). However, other research suggests that supervisor support has a stronger impact compared to co-worker support because supervisor support plays a crucial role in employees' organizational life (Wangberg et al., 2008). According

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to Kossek et al. (2011), there is significantly less empirical research on co-worker support, especially when compared to supervisor support. Therefore, future research should examine the impact of supervisor support and co-worker support to determine if supervisor support can mitigate the relationship between job demands and work-family conflict and compare the roles of both (co-worker and supervisor support).

6. Conclusion

Based on the research results above, it is concluded that there is an influence of job demands on work-family conflict, and co-worker support does not moderate the relationship between job demands and work-family conflict. The implications of this observation are extensive, especially in controlling work-family conflict among employees. It underscores the importance of organizations in addressing the challenges faced by their employees. Job demands should be balanced with the realities employees face when fulfilling their roles in their families. While our research significantly enriches the existing literature on job demands, work-family conflict, and co-worker support, we acknowledge its limitations, particularly stemming from the limited and homogenous sample size. Therefore, we suggest that future research strives to include larger and more diverse samples, allowing for the exploration of these variables in various contexts and industries, potentially yielding more universal findings.

References

- Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, 5(2), 278–308. https://doi.org/10.1037/1076-8998.5.2.278
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. https://doi.org/10.1108/02683940710733115
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356. https://doi.org/10.1016/S0001-8791(02)00030-1
- Baral, R. (2019). Comparing the situation and person-based predictors of work–family conflict among married working professionals in India. *Equality, Diversity and Inclusion: An International Journal*, 39(5), 479–495. https://doi.org/10.1108/EDI-01-2019-0040
- Byron, K. (2005). A meta-analytic review of work–family conflict and its antecedents. *Journal of Vocational Behavior*, 67(2), 169–198. https://doi.org/10.1016/j.jvb.2004.08.009

E 13

International Sustainable Competitiveness Advantage 2023

- Ducharme, L. J., & Martin, J. K. (2000). Unrewarding Work, Coworker Support, and Job Satisfaction: A

 Test of the Buffering Hypothesis. *Work and Occupations*, 27(2), 223–243.

 https://doi.org/10.1177/0730888400027002005
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior*, 66(1), 124–197. https://doi.org/10.1016/j.jvb.2003.11.003
- Frone, M. R. (2000). Work–family conflict and employee psychiatric disorders: The national comorbidity survey. *Journal of Applied Psychology*, 85(6), 888–895. https://doi.org/10.1037/0021-9010.85.6.888
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict:

 Testing a model of the work-family interface. *Journal of Applied Psychology*, 77(1), 65–78.

 https://doi.org/10.1037/0021-9010.77.1.65
- Greenhaus, J. H., & Beutell, N. (1985). Working Hours, Work-family Conflict and Workfamily Enrichment among Professional Women: A Malaysian Case. In *2011 International Conference on Social Science and Humanity* (Vol. 5, pp. 1-4).
- Hwang, W., & Ramadoss, K. (2017). The Job Demands–Control–Support Model and Job Satisfaction Across Gender: The Mediating Role of Work–Family Conflict. *Journal of Family Issues*, *38*(1), 52–72. https://doi.org/10.1177/0192513X16647983
- Karasek, R. A. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, 24(2), 285–308. https://doi.org/10.2307/2392498
- Karatepe, O. M., & Sokmen, A. (2006). The effects of work-role and family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of employees. *Tourism Management*, 27(2), 255-268.
- Miao, C. F., & Wang, G. (2017). Effects of work–family interface conflicts on salesperson behaviors: A double-edged sword. *Journal of the Academy of Marketing Science*, 45(5), 762–783. https://doi.org/10.1007/s11747-016-0492-7



International Sustainable Competitiveness Advantage

- Michel, J. S., Mitchelson, J. K., Pichler, S., & Cullen, K. L. (2010). Clarifying relationships among work and family social support, stressors, and work–family conflict. *Journal of Vocational Behavior*, 76(1), 91–104. https://doi.org/10.1016/j.jvb.2009.05.007
- Nijman, D. J. M., Nijhof, W. J., Wognum, A. A. M. (Ida), & Veldkamp, B. P. (2006). Exploring differential effects of supervisor support on transfer of training. *Journal of European Industrial Training*, 30(7), 529–549. https://doi.org/10.1108/03090590610704394
- Panatik, S. A. B., Badri, S. K. Z., Rajab, A., Rahman, H. A., & Shah, I. M. (2011). The Impact of Work Family Conflict on Psychological Well-Being among School Teachers in Malaysia. *Procedia Social and Behavioral Sciences*, 29, 1500–1507. https://doi.org/10.1016/j.sbspro.2011.11.390
- Wadsworth, L. L., & Owens, B. P. (2007). The Effects of Social Support on Work–Family Enhancement and Work–Family Conflict in the Public Sector. *Public Administration Review*, 67(1), 75–87. https://doi.org/10.1111/j.1540-6210.2006.00698.x
- Wangberg, S. C., Andreassen, H. K., Prokosch, H.-U., Santana, S. M. V., Sorensen, T., & Chronaki, C. E. (2008). Relations between Internet use, socio-economic status (SES), social support and subjective health. *Health Promotion International*, 23(1), 70–77. https://doi.org/10.1093/heapro/dam039
- Zaviršek, D., Treiber, M., Grießmeier, N., & Heider, C. (2015). Anthropology, social work and disability studies: researching diversity in Eastern Europe. V M. Treiber, N. Griessmeier in C. Heider (ur.), Ethnologie und Soziale Arbeit (str. 107–130). Opladen: Budrich UniPress.