



# The examining the relationship of telework intensity and work-family conflict: Work autonomy as moderator

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#### Abstract

*Purpose:* While telework offers many advantages during the COVID-19 pandemic, it can also increase pressure and lead to greater work-family conflict for workers. Work autonomy plays a key role in moderating the relationships of telework and work-family conflict. The purpose of this study was to examine the influence of work autonomy on the relationship between telework intensity and work-family conflict.

*Method:* This study involved participants from various e-commerce companies in Indonesia with a total of 86 workers who meet the criteria of working telework, married and having children under 18 years. The data of this study were analysed using hierarchical regression analysis that to assess the moderator role of work autonomy in the relationship between the telework intensity and work-family conflict.

*Result:* The study found telework increases work-family conflict, moderated by work autonomy, with higher autonomy reducing conflict. Gender and period of work also known to influence work-family conflict.

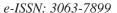
*Conclusion:* Based on the findings of this research, companies can help their workers to manage work-family conflict by giving more job autonomy within their telework systems.

Keywords: telework; work autonomy; work-family conflict

#### INTRODUCTION

The COVID-19 pandemic has led many countries to implement policies requiring people to conduct various activities from home (Bouziri et al., 2020). As a result, companies have adopted work-from-home system (Mungkasa, 2020). The telework system provides many advantages, such as flexibility in time and location, allowing individuals to manage both family and work tasks more effectively. Telework is often proposed as a method to help mitigate conflict between work and family life (Allen, Golden, & Shockley, 2015). According to Golden, et. al. (2016), -the flexibility provided by telework enables individuals to better balance time between these two domains (Delanoeije, Verbruggen, & Germeys, 2019).

However, previous studies by Golden, Veiga, and Simsek (2006) revealed the opposite (r = 0.15; p < 0.001). This flexibility offered by the telework system can also work in reverse, creating pressure to prioritize one domain over another (Golden, Veiga, & Simsek, 2006). This pressure can lead to work-family conflict for individual. This research gap prompts the current study to focus on factors that influence this relationship. Work autonomy is one of the contextual factors that contribute to the link between the telework intensity and work-family conflict. When





individuals have control over their work, they can better manage tasks in both domains. Therefore, work autonomy plays a crucial role mitigating conflicts between the work and family domains in telework systems.

Research by Golden, Veiga, and Simsek (2006) demonstrates that low work autonomy can reduce work-family conflict in telework workers. Another study by Zito, et al. (2019) revealed that work autonomy has a negative correlation with work-family conflict. However, research by Ahuja et al. (2007) indicated that the work autonomy variable has no effect on work-family conflict. The discrepancies in these findings prompted the researcher to conduct further research to examine the this variables. In addition to complementing previous study, this research is expected to be able to show the contribution of work autonomy to work-family conflicts that are owned by teleworkers.

Research by Golden, Veiga, and Simsek (2006) demonstrates that low work autonomy can reduce work-family conflict among teleworkers. Another study by Zito et al. (2019) revealed a negative correlation between work autonomy and work-family conflict. However, research by Ahuja et al. (2007) indicated that the work autonomy has no effect on work-family conflict. The discrepancies in these findings prompted the researcher to conduct further investigation into these variables. In addition to complementing previous studies, this research aims to demonstrate the contribution of work autonomy to the work-family conflicts experienced by teleworkers. Therefore, we hypothesize that work autonomy moderates the relationship between telework intensity and work-family conflict.

#### **METHOD**

Participants of this study were 86 employees from various e-commerce companies in Indonesia who were married (male 62,8% and female 37,2%) and having children with maximum under 18 years of age. The questionnaires distributed online through Linkedin and other social media apps using google forms. The Work Family Conflict Scale of Carlson, Kacmar and Williams (2000), adapted into Indonesian language by Artiawati (2012), consisting of 12 items (including time and strain based conflict dimensions), was used to measure work-family conflict ( $\alpha = 0.951$ ). Instrument from Susilo (2020), which consisted of 5 items was used to measure telework intensity ( $\alpha = 0.863$ ). Shabrina, Artiawati, and Muttaqin's (2019) adaptation of Breaugh's (1985) scale, consisting of 9 items, was used to measure the work autonomy ( $\alpha = 0.952$ ). Hierachical regression analysis was used to analysed the data using SPSS ver. 23. The data analysis began with a description of participants' demographics, followed by assumption tests for normality and linearity to ensure the appropriateness of the parametric hypotesis test.

#### RESULT

The description of the research participants is presented in Table 1. The assumption tests revealed that the distribution was normal (p = 0.200; p > 0.05) and exhibited a linear relationship (p < 0.001; p < 0.05), meeting the requirements for parametric assumption testing.



 Table 1

 The Data of Participants' Demography

Category		Total	%
Gender	Male	54	62.8%
Gender	Female	32	37.2%
A	24 - 40	72	83.7%
Age	41- 45	14	16.3%
Employment duration	< 5 years	20	23.3%
	5 - 10 years	42	48.8%
	> 10 years	24	27.9%
Department	Business development	16	18.6%
	Data	2	2.3%
	Engineering and tech	7	8.1%
	Finance and legal	6	7.0%
	Marketing	9	10.5%
	Operations	41	47.7%
	People	5	5.8%
Positions	Assistant manager	1	1.2%
	Associate	8	9.3%
	Director	1	1.2%
	Junior associate	3	3.5%
	Manager	27	31.4%
	Senior associate	4	4.7%
	Senior staff	6	7.0%
	Staff	27	31.4%
	Supervisor	4	4.7%
	Team leader	5	5.8%
Number of working hours per week	< 40 hours	7	8.1%
	40 hours	45	52.3%
	> 40 hours	34	39.5%
Length of marriage	0 - 5 years	51	59.3%
	5 - 10 years	16	18.6%
	10 - 15 years	15	17.4%
	> 15 years	4	4.7%
	Yes	48	55.8%
Does your spouse work?	No	38	44.2%
Number of children	1	61	70.9%
	2	14	16.3%
i variour or emiliaren	3	11	12.8%
With whom do you live?	Spouse	83	36.7%
	Children	81	35.8%
	House maid	16	7.1%
	Parents	22	9.7%
	In-law	14	6.2%
	Siblings	10	4.4%
	Spouse	58	47.2%
	Children	4	3.3%
	House maid	18	14.6%
I receive assistance with	Parents	23	18.7%
household chores from	In-law	11	8.9%
	Siblings	7	5.7%
	None	2	1.6%
	Work colleague	75	44.9%
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I receive assistance in office	Supervisor	39	23.4%



The results of hypothesis testing, using hierarchical regression analysis, indicated in model 1 ( $R^2 = 0.139$ ; F = 13.542; p < 0.001) a significant relationship between the telework intensity and work-family conflict. In Model 2 ( $R^2 = 0.296$ ; F = 43.477; p < 0.001) the inclusion of the work autonomy variable significantly improved the model. Model 3 ( $R^2 = 0.026$ ; F = 4.011; p = 0.049) further assessed the interaction effect. These models are showed in Table 2.

**Table 1** *Hierarchial Regression Analysis* 

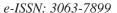
Model	Variable -	Work-Family Conflict					
Model		$\Delta R^2$	F	p	β	B	р
1.	Telework Intensity	0.139	13.542	0.001	0.373	1.089	0.001
2.	Telework Intensity Work Autonomy	0.296	43.477	0.001	0.255 -0.557	0.746 -1.153	0.003 0.001
3.	Telework Intensity Work Autonomy Telework Intensity x Work Autonomy	0.026	4.011	0.049	1000 0.222 -0.971	2.923 0.459 -0.080	0.010 0.578 0.049

These findings demonstrate the moderating role of work autonomy in the relationship between telework intensity and work-family conflict, confirming the initial hypothesis. Model 1 indicated a positive relationship between work-family conflict and telework intensity, consistent with the findings of Golden, Veiga, and Simsek (2006). Work-family conflict can arise from the loss of boundaries and the the increased demands from each domain, leading to higher workload, elevated expectations, and conflicting responsibilities between roles. Based on research by Hammer et al. (2005, as cited in Allen, Golden, and Shockley, 2015), the tendency for workfamily conflict to increase during telework is due to greater responsibilities in the home role.

#### DISCUSSION

The purpose of this study is to examine the relationship between telework intensity and work-family conflict, moderated by work autonomy. The findings in Tabel 2 demonstrate the moderating role of work autonomy in the relationship between telework intensity and work-family conflict, supporting the initial hypothesis. Model 1 indicated a positive relationship between work-family conflict and telework intensity, consistent with the findings of Golden, Veiga, and Simsek (2006). Work-family conflict may arise due to the loss of boundaries and the increased demands of both domains, leading to higher workloads, elevated expectations, and role contradiction According to research by Hammer et al., (2005 as cited by Allen, Golden, & Shockley, 2015), the tendency for work-family conflict to intensify with telework is due to increased responsibilities in the home role.

A negative value for job autonomy in Model 3 indicates that job autonomy plays a role in reducing the high level of work-family conflict in teleworkers. The high demands and crossed boundary from telework cause pressure and increasing the conflicts. However, when teleworkers are given the autonomy to determine aspects of their work, they are better able to balance their responsibilities and alleviate the perceived conflict between their roles. This autonomy allows individuals to maintain control and effectively manage their responsibilities and tasks across both roles (Golden, Veiga, & Simsek, 2006).





Findings in this study also indicate that gender and employment duration are factors influencing the level of work-family conflict. The very high category of work-family conflict was predominantly represented by female teleworks (85.7%). According to Mcelwain, Korabik, and Rosin (2005), women are more involvement in household responsibilities. This leads to female workers have more family roles which hinders responsibilities in work roles, which leads to greater family role demands that may hinder their work responsibilities. Additionally, finding in this study showed individuals with more than 10 years of work experience dominate the very low work-family conflict category (42,2%). This duration of employment places workers in the maintenance phase (Morrow & Mcelroy, 1987). Based on these results, it can be inferred that these workers have reached a stage where they are accustomed to their job and able better manage both work and family life. As a result, they are more capable of resolving conflicts that arise from both domains.

#### **CONCLUSION**

The findings of this study indicate a positive correlation that suggesting that the more frequently individuals engage in telework, the higher the work-family conflict they experience. Additionally, work autonomy found to have a moderating role in the relationship between telework intensity and work-family conflict. Work autonomy has a negative influence on the direction of the relationship between these two variables, meaning that higher levels of work autonomy are associated with lower work-family conflict among teleworkers. Lastly, gender and employment duration as the demographic factors that are associated with work-family conflict.

Suggestions for further research are include incorporating open-ended questions to explore more deeply the types of work assistance individuals receive at home and in the office. Future researchers also need to consider demographic factors, such as gender and employment duration, which may influence and may serve as predictors of work-family conflict.

#### REFERENCE

- Ahuja, M. K., Chudoba, K. M., Kacmar, C. J., McKnight, D. H., & George, J. F. (2007). IT Road Warriors: Balancing work-family conflict, job autonomy and work overload to mitigate turnover intentions. *mitigating Turnover Intentions*, 31(1), 1-17. https://doi.org/10.2307/25148778
- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40–68. https://doi.org/10.1177/1529100615593273
- Artiawati. (2012). Konflik Kerja Keluarga Pada Jurnalis di Jawa dan Bali: Model Konflik Kerja Keluarga dengan ideologi peran gender, beban peran berlebihan, dukungan sosial, dan kepribadian sebagai anteseden; rasa bersalah dan kesejahteraan psikologis sebagai konsekuensi. (Work Family Confict among Journalis in Java and Bali: Model of work family conflict with gender role ideology, role overload, social suppor and personality as antecedents; feeling guilty and psychological wellveing as consequences). Unpublished Doctoral Dissertation. Universitas Padjajaran, Indonesia

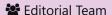


- Bouziri, H., Smith, D. R., Descatha, A., Dab, W., & Jean, K. (2020, April 30). Working from home in the time of COVID-19: How to best preserve occupational health? *Occup Environ Med*, 77(7), 509-510. https://doi.org/10.1136/oemed-2020-106599
- Breaugh, J. A. (1985). The measurements of work autonomy. *Human relations*, 38(6), 551-570. https://doi.org/10.1177/001872678503800604
- Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict. *Journal of Vocational Behavior*, 56, 249–276. https://doi.org/10.1006/jvbe.1999.1713
- Delanoeije, J., Verbruggen, M., & Germeys, L. (2019). Boundary role transitions: A day-to-day approach to explain the effects of home-based telework on work-to-home conflict and home-to-work conflict. *Human Relations*, 72(12), 1843–1868. https://doi.org/10.1177/0018726718823071
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work—family conflict: Is there no place like home? *Journal of Applied Psychology*, 91(6), 1340—1350. https://doi/10.1037/0021-9010.91.6.1340
- Mcelwain, A. K., Korabik, K., & Rosin, H. M. (2005). An examination of gender differences in work-family conflict. *Canadian Journal of Behavioural Science*, *37*(4), 269-284. http://doi/10.1037/h0087263
- Morrow, P. C., & Mcelroy, J. C. (1987). Work Commitment and Job Satisfaction over Three Career Stages. *Journal of Vocational Behavior*, 30(3), 330-346. https://doi.org/10.1016/0001-8791(87)90009-1
- Mungkasa, O. (2020, Juni). Bekerja dari rumah: Menuju tatanan baru era pandemi COVID-19 (Working from home: Towards new arrangement COVID-19 pandemic era). *The Indonesian Journal of Development Planning*, 4(2), 127-150. https://doi.org/10.36574/jpp.v4i2.119
- Shabrina, A. N., Artiawati, & Muttaqin, D. (2019). *Hubungan Persepsi Dukungan Organisasi dan Otonomi Kerja dengan Komitmen Afektif.* (Relationship of Perceived Organizational Support and Work Autonomy with Affective Commitment) *Psyche: Jurnal Psikologi, 1*, 88-100. https://doi.org/10.36269/psyche.v1i1.73
- Susilo, D. (2020). Revealing the effect of work-from-home on job performance during the covid-19 crisis: Empirical evidence from Indonesia. *The Journal of Contemporary Issues in Business and Government*, 26(1), 23 40. Retrieved from https://cibgp.com/au/index.php/1323-6903/article/view/194
- Zito, M., Colombo, L., Borgogni, L., Callea, A., Cenciotti, R., Ingusci, E., & Cortese, C. G. (2019). The nature of job crafting: Positive and negative relations with job satisfaction and work-family conflict. *International Journal of Environmental Research and Public Health*, 16, 1. https://doi.org/10.3390%2Fijerph16071176

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