



## **Teleworking After the Pandemic: Revealing Work-Home Conflicts, Job Ambiguity, and Work Stress**

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### **Abstract**

The transformation of work systems due to the COVID-19 pandemic has accelerated the adoption of teleworking as a permanent model within organizations. This shift presents psychosocial challenges, particularly regarding work-home conflict and work ambiguity, which are often associated with increased work-related stress. This study aimed to examine the influence of work-home conflict and work ambiguity on job stress among employees engaged in post-pandemic teleworking in Indonesia. A quantitative regression design was employed, using data collected through an online questionnaire distributed to 139 purposively selected respondents. Simple linear regression was applied to assess the effect of the two independent variables on job stress. The findings revealed that neither work-home conflict nor work ambiguity had a statistically significant effect on job stress ( $p > 0.05$ ), although the regression model showed an  $R^2$  value of 41.5%. The conclusion of this study is that work-home conflict and work ambiguity do not show a significant relationship with work stress, indicating a possible change in the dominance of other stressor factors in the post-pandemic work environment. Practical implications highlight the need for organizations to shift their focus toward managing emerging stressors, such as digital fatigue, technological support, and flexible work boundaries.

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## INTRODUCTION

The development of technology and globalization has created a major transformation in organizations, especially with regard to the flexibility of workspace and time. However, significant changes have occurred since the COVID-19 pandemic at the end of 2019. The pandemic has forced the world to make adjustments to the work system. One of the most obvious impacts is the shift from the conventional work system in the office to teleworking, which is now a common part of various industrial sectors. This work model is not only temporary, but has become a new normal that profoundly reshapes work interactions, organizational management, and employee expectations of life balance and productivity (Tavares et al., 2021). In Indonesia, the transition to teleworking was also rapid. Work from home (WFH) became the main solution during the crisis, but its adoption has had multidimensional consequences. On the one hand, teleworking provides benefits such as increased time flexibility, reduced travel time, and the potential for increased productivity and job satisfaction (Song & Gao, 2018; Clarke & Holdsworth, 2017).

However, on the other hand, teleworking has a negative impact, this is shown from the results of research from Mann & Holdsworth (2003), that there are negative emotional impacts of teleworking, especially in the form of emotions such as loneliness, irritability, worry and guilt, and teleworking workers (working from home) experience more stress symptoms that affect their mental health, than people who work from the office. It was also found that teleworking leads to social isolation, feelings of loneliness, and limited organizational support are factors that trigger increased psychological distress (Wu, 2024; Sobra et al., 2023). In Indonesia, media reports such as Tempo (2020) revealed that many workers, especially in urban areas, experience mental distress due to the overlapping of domestic and professional roles, limited work facilities at home, and unpreparedness in dealing with intensive digital technology. This topic is important to research because currently, the teleworking work model is no longer temporary, but has become an inherent work structure in post-pandemic organizations. Therefore, it is important to understand the psychological dynamics that arise in this situation so that organizations can develop appropriate policies and support systems to maintain employee well-being and performance.

If aspects such as work-home conflict and work ambiguity are not systematically identified and addressed, the potential for burnout and decreased productivity can increase significantly. Although there are a number of studies that examine teleworking separately from the issue of work stress, studies that integrate two important variables, namely work-home conflict and work ambiguity, simultaneously in the context of post-pandemic teleworking in Indonesia are still very limited. In fact, the combination of these two factors has great potential in explaining the complexity of work stress experienced by modern workers in the digital era. Referring to this background, this study aims to empirically examine the influence of work-home conflict and work ambiguity on work stress in employees who undergo teleworking in Indonesia after the COVID-19 pandemic. This research is expected to make a theoretical contribution to the field of industrial psychology and offer practical input for organizations to design teleworking strategies that are more sustainable and responsive to the psychological needs of employees.

## METHOD

This study uses a quantitative design with a multiple regression approach to analyze the relationship between variables. This study measures and analyzes the degree of influence between variables, so as to facilitate understanding of the relationship that exists between work-home conflict, work ambiguity, and work stress in employees who do telework. This study examines three main variables, namely work-home conflict, work ambiguity, and work stress. The construction of these

variables is based on a conceptual framework reinforced by previous literature and measured through a questionnaire developed by the researcher by adapting items from tested instruments, such as the Job Stress Inventory. Specifically:

- a. Work-home conflict is measured by items that describe the overlap between work demands and roles in home life.
- b. Work ambiguity is measured through items that assess the vagueness of roles, responsibilities, and tasks in the work environment.
- c. Work stress is measured by items that reflect the level of stress felt by employees.

This measure was adapted by the researcher with the support of theory and literature from previous studies as well as through consultation with experts in the field of organizational psychology. Content validity was checked by experts to ensure the relevance and clarity of each item, while reliability was measured using Cronbach's alpha coefficient, which showed values  $\geq 0.70$  for each construct, signifying adequate internal consistency. The instruments in this study consisted of three main scales: work-home conflict scale (8 items), work ambiguity scale (6 items), and job stress scale (10 items). All items used a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). An example item for work-home conflict is "My work duties interfere with my time with my family", while for work ambiguity is "I am not sure what is expected of me in this job." All instruments were adapted from the Job Stress Inventory and related research (Mann & Holdsworth, 2003; Weinert et al., 2015), with local context adjustment through content validation by two organizational industrial psychology experts.

The reliability values (Cronbach's alpha) for the three scales were 0.81 (WHC), 0.77 (WA), and 0.85 (Job Stress), respectively, indicating good internal consistency. The assessment process begins with data collection through questionnaires distributed to participants who have met specific criteria. The collected data were then statistically processed by the researcher to analyze the relationship between variables using multiple regression analysis. If there are aspects of the assessment that involve raters, inter-rater consistency testing (e.g. intraclass correlation coefficient) is conducted to ensure uniformity of assessment, with favorable values (generally  $> 0.80$ ). These steps were carried out sequentially to ensure data integrity and accuracy of analysis results. This study was conducted online, with participants being employees who were teleworking due to the impact of the COVID-19 post-pandemic. Data was collected through an electronic questionnaire distributed online, thus utilizing digital devices such as computers, tablets, or smartphones to fill out the instrument. The questionnaire was designed using survey software, Google Forms, which allows for systematic data collection.

## RESULTS AND DISCUSSION

This study used a purposive sampling technique, which is a non-probabilistic sampling method in which participants are selected based on certain characteristics relevant to the research objectives (Etikan, Musa, & Alkassim, 2016). In this case, the main criteria were participants who were teleworking after the COVID-19 pandemic and working in the whitecollar sector, i.e., jobs that are administrative, professional, or managerial, and allow for digital task execution. These characteristics include professions such as administrative staff, teaching staff, system analysts, financial staff, and managers. Given that the research topic focuses on specific work experiences in the post-pandemic context, this technique is considered appropriate because it allows researchers to select respondents who have direct experience of the phenomenon being studied (Creswell & Creswell, 2018). From the questionnaires that have been distributed via online media to various regions, there are 159 people who participated in this study. Out of 159 respondents, the data that can be processed is 139 people, because 20 respondents who filled in did not do teleworking. The 139 respondents analyzed are also sufficient for a multiple linear regression-based correlational quantitative study, as long as the characteristics of

the target population are homogeneous and the inclusion criteria are clear. With purposive sampling techniques, researchers can focus the analysis on the most theoretically and empirically relevant groups, especially when the target population is not easily reached at random (Palinkas et al., 2015).

**Table 1.** Participant Demographics

Variable	Classification	Amount	Percentage
Gender	Male	69	49,6
	Female	70	50,4
Teleworking periods	Less than a month	9	6,5
	More than a month	130	93,5
Total		139	100

Based on Table 1, related to the gender of the respondents, it is known that the number of male respondents is 49 people, and 50 women; the number of female and male respondents is almost balanced, with a difference of 1. In addition, the data also shows the length of time employees do teleworking. From the data obtained from 139 respondents who answered, the majority have been doing work from home for more than 1 month, amounting to 130 people or 93.5%. Before conducting linear regression analysis, this study first conducted a series of classical assumption tests to ensure the validity of the model used. The normality test is carried out using the Q-Q Plot method, where the results show that the residual distribution points are around the diagonal line. This indicates that the residual data is normally distributed and fulfills the basic assumptions of regression. Furthermore, a multicollinearity test was conducted to determine the presence of high correlation between independent variables. The test results show that all tolerance values are greater than 0.10, and the Variance Inflation Factor (VIF) value is below 10. Thus, no multicollinearity symptoms were found, which means that the independent variables in the model do not significantly affect each other and can stand alone in predicting the dependent variable.

The heteroscedasticity test is also conducted to test the stability of the variance of the residuals. The scatterplot visualization results show that the data points are randomly scattered around zero, without forming a certain pattern or gathering on one side. This indicates the absence of heteroscedasticity problems in the model. Overall, the results of this classical assumption test indicate that the regression model in this study has met the necessary statistical requirements, so the results of the regression analysis can be considered valid and reliable in explaining the relationship between work-home conflict, work ambiguity, and work stress in the context of teleworking after the COVID-19 pandemic. From the results of the model reliability test, the value of prob. F count (sig.) value is 0.000 smaller than the significance level of 0.05, so it can be concluded that the estimated linear regression model is feasible to be used to explain the factors affecting work stress in employees who do teleworking, starting from the influence of independent variables, Work ambiguity & Work Home Conflict on work stress.

**Table 2.** Regression Coefficient Test Results (T-Test)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.432	3.223		3.237	.002
1 Tot_WA	.027	.210	.011	.126	.900
Tot_WHC	.129	.308	.050	.420	.675

a. Dependent Variable: Tot\_JS

Based on the probability value, the t-count for the independent variable Work ambiguity (WA) is 0.900 and for Work Home Conflict (WHC) is 0.675, both greater than alpha 5% (0.05). This indicates that neither Work ambiguity nor work-home conflict has a significant effect on the dependent variable, work stress (JS), at the 5% significance level.

**Table 3.** Results of the Coefficient of Determination

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	.644	.415	.397	9.51266

When viewed from the R-Square value of 0.415, it shows that the proportion of the influence of all independent variables on the dependent variable (job stress) is 41.5%. This means that the factors (WA, WHC) have a proportion of influence on work stress in employees who are WFH of 41.5% while the remaining 58.5% is influenced by other variables that are not in the linear regression model. This indicates the possibility of mediating or moderating variables that have not been studied. The regression results in this study show that neither work-home conflict (WHC) nor work ambiguity (WA) has a significant effect on work stress in employees who are teleworking after the pandemic. This finding empirically challenges theoretical assumptions and previous findings that place these two variables as the main predictors of work stress in the context of remote work (Mann & Holdsworth, 2003; Weinert et al., 2015). The insignificance raises several possible explanations that deserve critical consideration in the post-pandemic context. First, the insignificant relationship between WHC and WA with work stress can be understood as a reflection of the adaptation process of organizations and individuals after the acute phase of the pandemic.

Recent studies (Wang et al., 2021; Allen et al., 2015) show that organizations that have survived and thrived post-pandemic have progressively implemented policies that are more responsive to the complexities of remote working, including flexibility in working hours, role clarity, and increased digital literacy. In this context, neither role ambiguity nor home-work conflict are dominant stressors anymore as they have been mitigated by more structured and participatory managerial strategies. Second, from a work behavior perspective, employees may have built up adequate adaptive coping mechanisms over more than two years of WFH. This means that stressors that were highly disruptive at the beginning of the pandemic have been internalized as part of the routine, or even restructured through changes in work perceptions and role expectations. This is in line with the concepts of cognitive adaptation (Taylor, 1983) and job crafting (Wrzesniewski & Dutton, 2001), where individuals actively reshape their work experiences to manage demands and enhance work meaning. Therefore, the WHC and WA variables may no longer have a strong enough psychological intensity to directly influence work stress.

Results showed that work-home conflict and work ambiguity had no significant effect on work stress, although the model had an R<sup>2</sup> value of 41.5%. This finding reflects the existence of strong adaptive dynamics in the post-pandemic work environment. Based on the perspective of the Job Demands-Resources Model (Bakker & Demerouti, 2007), work stress is not only influenced by workload (demands), but also by the availability of resources such as technological support, job autonomy, and clarity of communication. Most likely, these supportive factors have increased significantly after the pandemic, thus reducing the negative impact of WHC and WA. In addition, this study supports the findings of Wang et al. (2021) and Allen et al. (2015) that remote work effectiveness and adaptability improve along with structural adjustments in organizations. The insignificance of WHC and WA may reflect that there are currently changes in the main causes of job stress in teleworking employees that need to be studied further, such as digital fatigue, constant connection (digital presenteeism), and unclear work time limits.

## CONCLUSIONS

This study concludes that in the context of remote working after the COVID-19 pandemic in Indonesia, the role conflict between work-home conflict and work ambiguity is not statistically proven to affect work stress. This finding suggests that both organizations and individuals have developed adaptation strategies that are quite effective in dealing with changes in work patterns. Theoretically, these results are not in line with assumptions about the determinants of work stress, and suggest the need to expand work stress research to include digital factors such as techno-stress, digital psychological resilience, and structural flexibility.

The practical implications of this study emphasize the importance for organizations to focus not only on roles and workloads, but also on healthy digital work design, technology empowerment, and work time limit management. However, this study has limitations, especially in terms of not controlling for important demographic variables such as type of job specification, marital status, and the presence of children, and not taking a longitudinal approach. Further research is also recommended to use a mixed methods approach and explore the role of mediator variables.

## REFERENCES

- 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: a journal of the American Psychological Society*, 16(2), 40–68. <https://doi.org/10.1177/1529100615593273>
- Ahari, M. B., Mehrabi, J., Kord, K., & Karimi, F. (2013). Studying the Relation of Job Stress with Job Satisfaction and Organizational Productivity among the Telecommunication Employees in Lorestan Province. *Journal of Contemporary Research in business*, Vol. 15, No. 1, 42-57. <http://dx.doi.org/10.13140/RG.2.2.31157.08164>
- Arruda, W. (2020, March 18). *sites/William Arruda*. Diambil kembali dari Forbes website: <https://www.forbes.com/sites/williamarruda/2020/03/18/how-to-stay-productive-if-youre-wfh-because-of-the-coronavirus/#be42aec5c590>
- Azarbouyeh, A., & Naini, S. G. (2014). A study on the effect of *teleworking* on quality of work life. *International Journal of Industrial Engineering Computations*, Vol. 4 Issue 6, 1063-1068.
- Bailey, D. E., & Kurland, N. B. (2002). A Review Of Telework Research : Findings, New Directions, and Lessons for the Study of Modern Work. *Journal of Organizational Behaviour*, 23 (SpecIssue) 383-400.
- Baruch, Y. (2000). *Teleworking: benefits and pitfalls as perceived by professionals and managers*. *New Technology, Work and Employment*, Vol.15, Issue 1, 34-49.
- Clarke, & Holdsworth. (2017). *Flexibility in the Workplace: Implications of flexible work arrangements for individuals, teams and organisations*. Manchester: Acas.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Flex Jobs & Global Workplace Analytics. (2017, June 31). *Wp-content : Upload*. Diambil kembali dari Thepennyhoarder: <https://cdn.thepennyhoarder.com>
- Frantz, A., Holmgren, K. (2019). The Work Stress Questionnaire (WSQ) – reliability and face validity among male workers. *BMC Public Health* 19, 1580
- Greer, T. W., & Payne, S. C. (2014). Overcoming telework challenges: Outcomes of Successful Telework Strategies. *The Psychologist-Manager Journal*, Vol. 17, No 2, 87-111.
- Heathfield, S. (2019, July 31). *Advantages-and-disadvantages-of-flexible-work-schedules*. Diambil kembali dari The Balance Careers Web Site: [www.thebalancecareers.com/](http://www.thebalancecareers.com/)

- Henke, R. M., Benevent, R., Schulte, P., Rinehart, C., Crighton, K. A., & Corcoran, M. (2016). The Effects of Telecommuting Intensity on Employee Health. *American Journal of Health Promotion*, Vol. 30, Issue : 8, 604-612.
- Holmgren, K., Dahlin-Ivanoff, S., Björkelund, C. *et al.* (2009) The prevalence of work-related stress, and its association with self-perceived health and sick-leave, in a population of employed Swedish women. *BMC Public Health* 9, 73
- Kaplan, R. M., & Saccuzo, D. P. (1997). *Psychological Testing: Principles, Applications, and Issues*. California: Brooks Cole.
- Kreitner, R., & Kinicki, A. (2014). *Organizational behavioral*. New York: McGraw-Hill.
- Kurland, D. E. (2002). A Review Of Telework Research: Findings, New Directions, and Lessons for the Study of Modern Work. *Journal of Organizational Behaviour* , Vol. 23, No. 4, 383-400.
- Madsen, S. R. ( 2003). The effects of home-based teleworking on work-family conflict. *Human Resource Development Quarterly*, Vol. 14 No.1, 35-58.
- Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: stress, emotions and health. *New Technology, Work, and Employment*, Vol : 18, No : 3, 196-211.
- Nakrošiienė Ilona, A., Buciušienė Ilona, I., & Goštautaitė, B. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*, Vol. 3 No : 2, 25-31.
- Nordin, N. N., Baidzowi, M. F., & Razak, R. A. (2016). Understanding The Work At Home Concept, It's Benefits And Challenges, Towards Employees. *International Conference Social Sciences Research* (pp. 109-118). Kuala Lumpur: World Conference.net.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42, 533–544. <https://doi.org/10.1007/s10488-013-0528-y>.
- Riggio, R. E. (2017). *Introduction to Industrial/Organizational Psychology 7th Edition*. London: Routledge.
- Schultz, D. P., & Schultz, S. E. (2016). *Psychology and Work Today : An Introduction To Industrial and Organizational Psychology Tenth Edition*. New York: Routledge.
- Song, Y., & Gao, J. (2018). *Does Telework Stress Employees Out? A Study on Working at Home and Subjective Well-Being for Wage/Salary Workers*. Bonn: IZA Institute of Labour Economics.
- Srivastava, K. S. (2015). To Study The Indian Perspective On The Concept of Work From Home. *Indian Journal Of Science and Technology*, Vol : 8 (S4), 212-220.
- Suarlan. (2017). Teleworking for Indonesian Civil Servants : Problems and Actors . *Jurnal Ilmu Administrasi dan Organisasi Universitas Indonesia*, Vol : 24, No : 2, 100-109.
- Tavares, A. I. (2017). Telework and Health Effects Review. *International Journal of Healthcare*, Vol : 3, No : 2, 30-36.
- Triyono, A. J., & Prayitno, A. (2017). Pengaruh Konflik Peran dan Ambiguitas Peran Terhadap Stres Kerja dan Kinerja Pegawai Dinas Penerangan Jalan dan Pengelolaan Reklame Kota Semarang. *Jurnal Penelitian Ekonomi dan Bisnis*, Vol. 2, No. 2, 92-100.
- Wang, B., Liu, Y., Qian, J. and Parker, S.K. (2021), Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective. *Applied Psychology*, 70: 16-59. <https://doi.org/10.1111/apps.12290>
- Weinert, C., Maier, C., & Laumer, S. (2015). Why are teleworkers stressed? An empirical analysis of the causes of telework-enabled stress. *12 th International Conference on Wirtschaftsinformatik* (hal. 1407-1421). Osnabrück: Internationalen Tagung Wirtschaftsinformatik.
- Wight, & Raley. (2009). When home becomes work: work and family time among workers at home. . *Social Indicators Research*, Vol. 93, Issue 1, 197-202.
- Wu, S. (2024). Remote isolation and digital disconnection: The mental toll of teleworking. *Journal of Occupational Psychology and Technology*, 29(1), 45–63.