

THE EFFECT OF TELEWORK AND SOCIAL ISOLATION ON JOB SATISFACTION MEDIATING JOB STRESS AND WORK-LIFE BALANCE IN INDONESIA

Putra Iranto Kevin Siregar¹, Riani Rachmawati¹

¹Faculty of Economics and Business, University of Indonesia

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Abstract

The implementation of telework in organizations is growing rapidly due to the development of technology and information. In addition, the COVID-19 pandemic has also increased the number of organizations implementing telework. However, there are several problems in the implementation of telework that need to be a concern for organizations. Many people feel socially isolated from their workplace, which can affect their increased stress. In addition, based on the results of empirical research and surveys conducted by various institutions concluded that it is also necessary to consider telework influencers on work stress, work-life balance, and job satisfaction, This study investigates how telework and social isolation affect job satisfaction with the mediating effects of work stress and work-life balance in Indonesia. This study was conducted using an online-based questionnaire. Model analysis was conducted with Structural Equation Modeling (SEM) on 280 respondents. The results showed that the implementation of telework had a positive effect on job satisfaction. Telework has been shown to positively impact work-life balance and reduce job stress. Social isolation is proven to have a negative impact on job satisfaction. This study proves that job stress and work-life balance can mediate the relationship between telework and social isolation. From this research, it can be concluded that the implementation of telework that provides autonomy and flexibility can have positive implications for employee job satisfaction. Organizations also need to provide good support and communication media so that employees do not feel isolated from their work environment.

Keyword:

Job Satisfaction, Job Stress, Social Isolation, Telework, Work-life Balance

Abstrak

Implementasi telework pada organisasi tumbuh secara pesat karena perkembangan teknologi dan informasi. Selain itu pandemi COVID-19 juga turut meningkatkan jumlah organisasi yang menerapkan telework. Namun, terdapat beberapa masalah dalam implementasi telework perlu menjadi perhatian organisasi. Banyak pekerja merasa terisolasi secara sosial dari tempat kerja mereka, yang dapat mempengaruhi peningkatan stres mereka. Selain itu berdasarkan hasil penelitian empiris dan survey yang dilakukan oleh berbagai institusi menyimpulkan perlu juga dipertimbangkan pengaruh telework pada stres kerja, work-life balance, dan job satisfaction. Studi ini menyelidiki bagaimana telework dan isolasi sosial mempengaruhi kepuasan kerja dengan efek mediasi stres kerja dan keseimbangan kehidupan kerja di Indonesia. Penelitian ini dilakukan dengan menggunakan kuesioner berbasis daring. Analisis model dilakukan dengan Structural Equation Modelling (SEM) terhadap 280 orang responden. Hasil penelitian menunjukkan bahwa implementasi telework berpengaruh positif terhadap job satisfaction. Telework terbukti berdampak positif terhadap work-life balance dan menurunkan job stress. Social isolation terbukti memberikan dampak negatif terhadap job satisfaction. Penelitian ini membuktikan bahwa job stress dan work-life balance dapat memediasi hubungan antara telework dan social isolation. Dari penelitian ini dapat disimpulkan bahwa implementasi telework yang memberikan otonomi dan fleksibilitas dapat berimplikasi positif terhadap job satisfaction

* Corresponding Author.

putra.iranto@ui.ac.id. Putra Iranto Kevin Siregar

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karyawan. Organisasi juga perlu memberikan dukungan dan media komunikasi yang baik sehingga karyawan tidak merasa terisolasi dari lingkungan kerjanya.

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INTRODUCTION

The implementation of telework in organizations has been driven by various conditions. One of the main driving factors is the rapid growth of technology and internet connectivity around the world (Brett, 2019). This condition also applies in Indonesia. Based on a study by the Central Statistics Agency (2021), internet penetration in households until 2021 was 62.1 percent, an increase of 8.37 percent compared to 2019. The occurrence of the COVID-19 pandemic over the past three years limiting physical interaction has also taken an important part in the application of technology in the workplace (Adamovic, 2022). According to a survey conducted by Bayu (2020), as many as 86 percent of workers in Indonesia are affected by the COVID-19 pandemic. The pandemic has also proven to be an accelerator of telework adoption after a stagnant trend over the past ten years before the pandemic occurred (European Union, 2020).

Although restrictions on public activities have been relaxed, many organizations still implement telework policies for their employees. This condition is supported by several studies that prove that telework has a positive effect on work-life balance (Chandra Putra et al., 2020), autonomy and job satisfaction (Athanasidou & Theriou, 2021), and life satisfaction (Kazekami, 2020). Not only for employees, the results of the study also show that telework schemes have a positive impact on the effectiveness, efficiency, and performance of the company (Illegems & Verbeke, 2004).

Although it provides many benefits, there are still many employees who do not feel confident to work with telework schemes. Based on a survey conducted by McKinsey (2021), as many as 52 percent of respondents prefer hybrid work schemes, 37 percent choose to work on-site, and only 11 percent choose to be able to work with telework schemes. Similar findings were also found in Indonesia. Based on the results of a survey conducted by Bayu (2020), where 53 percent of respondents want less telework time compared to conditions during the COVID-19 pandemic.

One of the main problems that arises is the stress experienced by remote workers. Stress can be defined as a form of non-specific response of the human body to the demand that causes it to occur. While Job stress (or also called work-related stress, occupational stress) is a condition where when the demand of a job exceeds what he can bear (Toscano & Zappalà, 2020). In the context of telework there is a condition namely technostress, where a person cannot control the stress resulting from activities using technology in healthy levels (Brod, 1984 in Ayyagari et al, 2011). During the COVID-19 period, as many as 50 percent of workers in Indonesia experienced an increase in working hours due to the loss of the limit between working time and outside working hours, but at the same time there was a decrease in income during the WFH period when compared to working from the office (Bayu, 2020). These factors can cause stress which can have an impact on the productivity and well-being of these employees (Heiden, Widar, Wiitavaara & Boman, 2020; Toscano & Zappalà, 2020).

Another condition that can be felt by employees in this work scheme is social isolation (or commonly also referred to as professional isolation). Social Isolation itself occurs when an employee feels separated from his work environment, thus feeling deprived of moral support and from the organization (Gallatin, 2018). Meanwhile, according to Golden et al (2008), social isolation relates to the inability of these employees to interact with other parties in the organization, feeling they do not have relevant information and knowledge in carrying out their duties. The feeling of social isolation increases with the increasing amount of work intensity in remote work schemes (Cooper & Kurland, 2002; Green et al., 2020). This is supported by the findings of Predotova & Vargas Llave (2021) on employees in Europe that an increase in the number of telework working hours affects the number of employees who feel isolated from the work environment.

Another debate that arises in the implementation of telework is whether telework can support work-life balance. Basically, telework policies are expected to provide flexibility, both time and place to employees (Khateeb, 2021). This flexibility is expected to make it easier for employees to balance various roles in their lives (Athanasidou & Theriou, 2021). However, this flexibility also encourages the exploitation of working hours, so that employees lack time to carry out roles outside of work (Aguilera et al., 2016; Bellmann & Hübler, 2020; Konrad & Mangel, 2000; Sandoval-Reyes., Idrovo-Carlier., & Duque-Oliva 2021). This is supported by a study conducted by Deloitte (2015), where even though they are outside the workday employees tend to still receive E-mail and messages from the office and one-third of respondents feel uncomfortable with it. Issues related to work-life balance must be considered, especially for younger generation employees (Gen-Z & Millennials). According to a study conducted by Microsoft (2022), around 22 percent of generation Z and millennial employees leave their jobs due to work-life balance reasons that are not optimal.

If work-life balance, job stress and work environment factors such as feelings of social isolation in employees are not controlled, it is feared that the emergence of negative impacts on employees or commonly called anxiety. One of the impacts that can occur with increased stress in employees is a decrease in employee satisfaction with their work, or commonly referred to as a decrease in job satisfaction. Based on a survey conducted by Jobstreet (2022) conducted on 17,623 respondents, it was found that 73 percent of employees in Indonesia do not feel job satisfaction. Furthermore, the survey also explained that 85 percent of employees stated that the cause of job dissatisfaction was due to not having a work-life balance.

Previously, there have been several studies related to the implementation of remote working and its implications for employees and organizations. In research conducted by Adamovic (2022), it was found that the telework work scheme will not cause job stress if employees do not feel social isolation. In the research of Heiden, Widar, Wiitavaara & Boman (2020), it was found that there was an increase in job stress along with an increase in working hours in academics in Sweden. Another study conducted by Tuscano & Zapala (2021) found that social isolation has an impact on increasing job stress. Meanwhile, in the Indonesian context, research conducted by Irawanto, Novianti & Roz (2021) shows the results that work from home / telework has an impact on decreasing job satisfaction due to an increase in job stress.

Research on social isolation in telework, especially in developing countries such as Indonesia still needs further research. According to Adamovic (2022), differences in culture and background can cause different perceptions of social isolation, which can then have a different effect on job stress in remote workers. In addition, it is also necessary to examine the effects of telework and perceptions of social isolation on job satisfaction. There are different views regarding the effect of telework on work-life balance also needs further investigation. Moreover, this study wants to provide an overview to organizations related to how employee perceptions in Indonesia. Therefore, in this study, the author will conduct an analysis study on the effect of telework and social isolation on job satisfaction by mediating job stress and work-life balance.

Problem statement

Based on the conditions presented above, the problems to be analyzed in this study can be formulated as follows: (1) Do telework and social isolation affect job satisfaction among remote workers in Indonesia? (2) Does telework affect job stress & work-life balance in remote workers in Indonesia? (3) Does social isolation affect job stress for remote workers in Indonesia? (4) Does job stress and work-life balance affect job satisfaction among remote workers in Indonesia? (5) Does job stress mediate the effect of telework and social isolation on job satisfaction among remote workers in Indonesia? (6) Does work-life balance mediate the effect of telework on job satisfaction among remote workers in Indonesia?

Research Objectives

Based on the background and formulation of the problem above, the purpose of this study is to analyze the relationship model between telework and social isolation and job satisfaction with the effect of job stress mediation and work-life balance in the context of remote workers in Indonesia.

LITERATURE REVIEW

Telework

Telework (or also referred to as remote work, telecommuting, flexiwork) is a condition in which employees do their work outside the conventional office by using the help of technology to coordinate with their colleagues (Gallatin, 2018). With the rapid development of computer computing since the 1980s, many practitioners and academics predict telework as a method of working in the future (Athanasidou & Theriou, 2021; Huws, 1991). According to Grant et al. (2019), there are 4 dimensions that need to be considered in the telework construct. The first dimension is work-life interference, which is how the implementation of telework can affect other aspects of employee life. Next is productivity, which is how telework schemes can support employee work productivity. The third dimension is organizational trust, which describes how the company's support and trust in employees. The last dimension is flexibility which describes how flexible the work scheme offered by the company in the telework work scheme.

Social Isolation

Social Isolation can be interpreted as a condition in which employees feel that they have been separated from their coworkers, resulting in feelings of loss of physical and emotional support from their work environment. (Ward & Shaba, 2001). This feeling of social isolation is believed to increase with the increasing amount of work intensity in remote work schemes (Cooper & Kurland, 2002; Green et al., 2020). The main cause of this feeling of isolation is the lack of direct contact with colleagues, especially in workers who were previously accustomed to working with traditional work schemes (Heiden, Widar, Wiitavaara & Boman, 2020). This happens because workers have previously become accustomed to a busy work climate and high intensity of interaction with other employees, becoming working alone, and without direct interaction (Cooper & Kurland, 2002; Gallatin, 2018).

Advances in technology and the increasingly extensive internet network cause more and more conventional workers who want to transition to remote workers / work from home, then the issue of social isolation is also increasingly raised. The existence of social isolation has an impact on the emergence of feelings of loneliness, which leads to heavier psychological aspects such as depression (Pietrabissa & Simps on, 2020). This feeling of social isolation can have a negative impact on work. According to research conducted by (Mann et al., 2000) often employees are not aware of feelings of social isolation. But symptoms of social isolation appear in their work, where employees find it difficult to establish communication with other employees. This causes employees to be less likely to have role models/examples. This often makes it difficult for employees to build optimal performance within the company.

Job Stress

Job stress (or commonly also called work-related stress, occupational stress) is a condition where the demand of a job exceeds what can be borne (Toscano & Zappalà, 2020). When associated with the Job Demand-Resources (JD-R) Model, stress conditions can occur if job demand (in this case job stressors) is greater than job resources (Irawanto, Novianti & Roz, 2021; Peters et al., 2014). In the context of telework, the issue of stress is also an important concern. This began with the term technostress, where a person cannot control the stress resulting from activities using technology in healthy levels (Brod, 1984 in Ayyagari et al., 2011). In this content condition, it turns out that some studies show the presence of stressors similar to work overload. However, in the moderator aspect, there are new aspects such as technological support, telework effectiveness and social isolation (Adamovic, 2022).

In various studies that have been conducted before, there are still differences in the results in the effect of telework on job stress. In a study conducted by Kapoor et al. (2021), working mothers in India tend to experience increased job stress due to the scheme there is often a clash between office tasks and the emergence of additional household tasks. This also has an impact on decreasing the well-being of these employees. Similar findings were also reported from research conducted by Song & Gao (2020). In the study, it was found that telework schemes tend to increase job stress in office workers, both on weekdays and weekends. This

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is due to the clash between work, family, and other distractions that occur in the home. Stress levels were also found to be higher in employees who were married and had children.

On the other hand, there are also several studies that support the original goal of telework which is to reduce job stress. Research conducted by Adamovic (2022), As long as employees assume that telework policies and implementation have been going well, telework will eliminate stressors so that employees do not experience stress due to work. Furthermore, according to research conducted by Delanoëje & Verbruggen, (2020), telework is able to reduce things that can become daily stressors such as traveling to work and co-worker interactions that interfere with work. Perry, Ubino R& Hunter. (2018) states that if employees are given high autonomy in the implementation of telework, the negative strain felt by employees will also be smaller.

Work-Life Balance

Work-life balance is a condition that describes how well a person manages his life to carry out professional aspects (career) and other aspects of life such as personal responsibility, lifestyle, family, and other activities (Haar, 2013; Kunsjaka, 2022). Meanwhile, according to GreEnhaus et al. (2003) stated that work-life balance describes a person's orientation / view of the various roles he has in life along with the phenomenon of interaction between roles. Furthermore, in the study, it was stated that there are three components in the construction of work-life balance, namely time-balance, role-balance and satisfaction balance.

The existence of flexi-place and flexi time is a policy that underlies the application of telework in companies to encourage work-life reinforcements. But in fact, the results of the study still show conflicting results regarding the effect of telework implementation on work-life balance. Several studies support the fact that telework actually decreases the perception of work-life balance towards employees. In research conducted by Sandoval-Reyes, et al. (2021) & Palumbo (2020), it was found that the decrease in perceptions of work-life balance in telework occurred due to reduced work-life boundaries. Employees tend to lose the limit of working hours, this can have an impact on role ambiguity which ultimately has an impact on decreasing work-life balance. Further according to other studies (Bellmann & Hübler, 2020; Konrad & Mangel, 2000), telework causes a phenomena work-life imbalance due to employees' inability to balance working hours and time for other aspects of life. Zhang et al. (2020) also stated that telework tends to increase work-family conflict. According to Kunska j a (2022) research, work-family demand is the main factor that causes a decrease in perceptions of work-life balance. While factors that can improve work-life balance in remote workers are managerial & co-worker support, job autonomy and job control.

But on the other hand, there is also research that supports the original goal of telework, which is to support work-life balance. According to research by Chung & van der Lippe (2020), telework work schemes that provide flexibility cause employees to manage work-life boundaries more freely. The flexibility and autonomy given to telework can also help employees better divide their roles, so they can perform other tasks such as family, hobbies, and other activities (Sitorus et al., 2018; Song & Gao, 2020). By being able to master the various roles owned by individuals, these employees can increase intrinsic motivation, which supports increased job satisfaction.

Job Satisfaction

Job satisfaction is a response to satisfaction from an employee based on his assessment of his job situation with a standard that is considered good or beneficial from the condition. Just like other job attributes, job satisfaction has 2 components, namely affective and cognitive. The affective component of job satisfaction is related to the emotional feelings / manifestations of a person towards his work. While the cognitive component speaks related to beliefs or thoughts (perceptions) that people have at the job, such as perceptions related to job autonomy, conflict and others (Bentley et al., 2016; Judge et al., 1998; Schleicher et al., 2004).

Previous research on job satisfaction in teleworkers has yielded mixed results that tend to be contradictory. Some studies believe that one of the advantages offered by the telework work scheme is the increase in job satisfaction (Athanasidou & Theriou, 2021; Irawanto et al., 2021; Kazekami, 2020). The existence of telework work schemes that tend to provide flexibility in work leads to an increase in work-life balance, thereby increasing employee satisfaction with the work he does.

But on the other hand, some recent studies tend to show opposite results. According to some studies, flexible working hours tend to remove work-life barriers. In addition, research also shows an increase in working hours due to telework schemes, and lack of interaction with colleagues tends to increase stress, which leads to a decrease in job satisfaction in remote workers (Toscano & Zappalà, 2020).

In fact, job stress does not always have an impact on job satisfaction. According to Mc Gee, Goodson & Cashman (1987), the effect of job stress is strongly influenced by the level of stress that can be tolerated by each employee. For employees, they will still be able to feel relatively high job satisfaction when the stress they face is still in the reasonable category. Employees generally feel that stress is part of work that has become a consequence of their role.

Another factor that can influence the decline in job satisfaction is social isolation. This fact was found in several studies that have been conducted previously (Bauer & Brazer, 2013; Orhan et al., 2016; Toscano & Zappalà, 2020). Feelings of separation from the work environment, lack of support from the organization and colleagues can cause employees to feel dissatisfied with their work environment. In addition, without guidance, employees will also not feel satisfied with the results of their work and ultimately reduce overall job satisfaction.

Based on this review, this study proposed the following research framework:

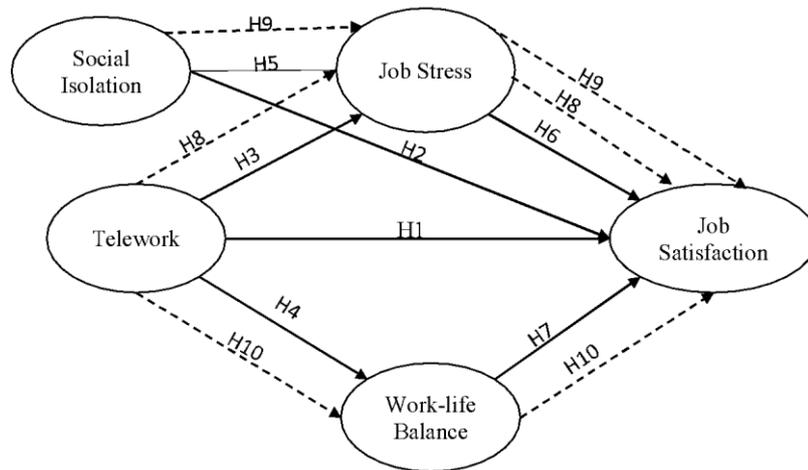


Figure 1 Research Framework
Source: Author (2021)

The hypotheses to be tested in this study are:

- H1: Telework has a positive influence on job satisfaction for remote workers in Indonesia.
- H2: Social Isolation has a negative and significant influence on job satisfaction with remote workers in Indonesia.
- H3: Telework has a negative and significant effect on job stress for remote workers in Indonesia.
- H4: Telework has a positive and significant effect on work-life balance for remote workers in Indonesia.
- H5: Social isolation has a positive and significant effect on job stress in remote workers in Indonesia.
- H6: Job stress negatively and significantly affects job satisfaction.
- H7: Work-life Balance has a positive and significant effect on job satisfaction.
- H8: The relationship between telework and job satisfaction is mediated by job stress.
- H9: The effect of social isolation and job satisfaction is mediated by job stress.
- H10: The effect of telework and job satisfaction is mediated by work-life balance.

RESEARCH METHODS

In this study, a quantitative approach was used to analyze the relationship between the five variables (telework, social isolation, job stress, work-life balance, job satisfaction). This study used primary data types as analysis material. Data collection was collected by questionnaires distributed online. The criteria for respondents in this study are employees who work telework at least 1 working day every week regularly. There were 280 respondents involved in this study.

Telework variables are measured by adapting a measuring instrument developed by Grant et al. (2019), consisting of four dimensions and 17 indicators. Social isolation measurement is carried out using a measuring instrument developed by Golden et al. (2008), which consists of seven indicators. Job stress was examined using Lait & Wallace (2002) measuring instruments consisting of six indicators. Work-life balance measuring instrument adapted from (Haar, 2013) contains three items. While job satisfaction is measured using measurements developed by Tsui et al. (1992), consisting of six indicators. All questionnaires were measured using a Likert scale of 1-5 (scale 1: strongly disagree, 2: agree, 3: neutral, 4: agree, 5: strongly agree). The results of the data collection were then analyzed using structural equation modeling (SEM) in the LISREL For Windows Version 8.8 application.

RESULTS AND DISCUSSION

Demographic Profile of Respondents

Based on the results processed by researchers in table 1, it can be seen that 58.6 percent of respondents in this study are female. About 86.4 percent of respondents were in the age range of 15-35 years. This shows that remote work schemes are mostly found in relatively younger employees. Majoritas respondents are also unmarried and have no dependents. In addition, it was also obtained that 77.9 percent of respondents had an S1 / D4 educational background. The majority of remote workers in Indonesia also still work telework in a certain portion of time. It can be seen that only 38.2 respondents work telework full-time. This is consistent with the results of a survey conducted by McKinsey, where the majority of workers still prioritize hybrid work schemes over full-time. Of the 280 respondents, about 97 percent did their work using computer/laptop devices.

Table 1. Demographic Profile of Respondents

Attribute	Category	Sum	Percentage (%)
Gender	Male	116	41.4%
	Female	164	58.6%
Age	15-25	144	51.4%
	26-35	98	35.0%
	36-45	22	7.9%
	45-55	14	5.0%
	>55	2	0.7%
Status	Unmarried	205	73.2%
	Ever Married	8	2.9%
	Married	67	23.9%
Recent Education	High school equivalent	27	9.6%
	Diploma	15	5.4%
	Bachelor	218	77.9%
	Master	18	6.4%
	Doctor	2	0.7%
Number of days worked telework	1	27	9.6%
	2	58	20.7%
	3	42	15.0%
	4	46	16.4%
	5	107	38.2%
Devices used	Computer/Laptop	272	97.1%
	Tablets	33	11.8%
	Smartphones	187	66.8%

Source: Author (2021)

Measurement Test Analysis

The initial stage in conducting Structural Equation Modeling (SEM) is to analyze the measurement model. In this analysis, each indicator and variable will be tested for validity and reliability. Validity testing is done by looking at the value of Standardized Factor Loading (SFL) on each indicator. An indicator can be expressed correctly in measuring a variable if the SFL value ≥ 0.5 .

Meanwhile, to find out the consistency of the measuring instrument used, it is necessary to know the reliability of the measuring instrument. The reliability in the analysis a measurement model seen from the Construct Reliability (CR). A measuring instrument is declared consistent if the $CR \geq 0.7$ value. Actually, if the measuring instrument has met the CR criteria, it can be said to be reliable. However, there is one more parameter that dapat used i.e. Average Variance Extracted (AVE) value which shows discriminant validity. The AVE criteria are met if the AVE value is ≥ 0.5 (Hair et al., 2018).

Table 1. Measurement Test Results

Variable	Indicators	LF	CR	AVE
Telework	TWL11	0.76	0.93	0.45
	TWL12	0.53		
	TWL13	0.67		
	TWL14	0.59		
	TWL15	0.55		
	TWL16	0.57		
	TWL17	0.55		
	TP1	0.7		

	TP2	0.84		
	TP3	0.51		
	TP4	0.79		
	TOT2	0.73		
	TOT3	0.54		
	TF1	0.64		
	TF2	0.81		
	TF3	0.83		
Social Isolation	SI1	0.84	0.85	0.59
	SI2	0.83		
	SI3	0.79		
	SI5	0.6		
Job Stress	STR1	0.88	0.95	0.75
	STR2	0.82		
	STR3	0.88		
	STR4	0.94		
	STR5	0.78		
	STR6	0.9		
Work-life Balance	WLB1	0.84	0.92	0.80
	WLB2	0.95		
	WLB3	0.89		
Job Satisfaction	SAT1	0.79	0.88	0.55
	SAT2	0.75		
	SAT3	0.74		
	SAT4	0.55		
	SAT5	0.72		
	SAT6	0.85		

Source: Author (2021)

Based on the results of the measurement test, it was found that there were 4 indicators that did not meet the validity criteria, so they were not used in further testing. While all variables meet the criteria of reliable. The five variables in this study showed CR results above 0.7. This shows that constructively the measuring instrument has consistently measured each variable tested. As for the AVE value in the variables of social isolation, work-life balance and job satisfaction showed values that met the criteria, but overall the variables studied met the reliability criteria and can be continued to the next stage of testing.

Test the hypothesis.

The model that has been tested for compatibility is then analyzed further to determine the causality relationship between the variables tested in this study. Hypothesis testing can be seen through the output of path diagram analysis. The two main outputs in this analysis are the loading coefficient value of each path and also the t-value. This analysis uses the Confirmatory Factor Analysis method based on Structural Equation Modeling. The confidence level established in this analysis is 95 percent. Based on this, the criteria are significant. The established relationship $kansi \leq -1.96$ or ≥ 1.96 . The positive and negative values indicated by the output indicate the direction of influence of each latent. Value t-value which positively shows that exogenous latent variables have a positive effect on endogenous latent. While vice versa, if the t-value obtained is negative, it is the negative influence given by exogenous variables on endogenous variables.

Table 3. Hypothesis Test Results

Hypothesis	Relationship	t-Value	Supporting hypotheses
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H1	TW-SAT	3.04	Yes
H2	SI-SAT	-3.35	Yes
H3	TW-STR	-6.68	Yes
H4	TW-WLB	7.4	Yes
H5	SI-STR	12.63	Yes
H6	STR-SAT	-1.03	Not
H7	WLB-SAT	2.16	Yes
H8	TW→STR→SAT	2.28	Yes
H9	SI→STR→SAT	-1.02	Not
H10	TW→WLB→SAT	2.28	Yes

Source: Author (2021)

Based on the results of hypothesis testing, 6 out of 7 direct relationship hypotheses are considered significant. Telework is proven to have a positive and significant effect on job satisfaction, as for the second hypothesis, social isolation has a significant and negative effect on job satisfaction. Similarly, telework also negatively and significantly affects job stress. The fourth hypothesis is also accepted because the results showed that telework has a positive and significant effect on Work-life balance. Social isolation also has a positive and significant effect on work stress. The only rejected hypothesis for a direct effect on job stress-job satisfaction mediated effect and work-life balance limited relationship between telework and job satisfaction proved to have a significant effect, which was supported by the eighth and tenth hypotheses. In contrast, job stress has not been shown to mediate the relationship between social isolation and job satisfaction.

Discussion

Based on the results of the analysis conducted, it was found that telework proved to have a positive and significant effect on job satisfaction with remote workers in Indonesia. With this, it can be concluded that basically the implementation of telework in Indonesia can increase job satisfaction, especially for remote workers. The results of this study are also reinforced by the suitability of the results in previous studies, that basically telework work schemes are generally positively associated with supporting increased job satisfaction (Athanasidou & Theriou, 2021; Irawanto, Novianti & Roz., 2021; Kazekami, 2020; Sousa-Uva et al., 2021). Overall, these studies agree that the existence of telework work schemes that offer flexibility in time and workplace is one of the important factors that increase job satisfaction in employees.

The relationship between social isolation and job stress proved to be significant and negative. This finding can strengthen the conclusion that the perception of social isolation experienced by employees can have an impact on decreasing job satisfaction in employees. The results of this test are consistent with previous research (Bauer & Brazer, 2013; Bentley et al., 2016; Orhan et al., 2016; Toscano & Zappalà, 2020). According to Bauer & Brazer (2013), if social support is not provided by the organization, there will be negative effects in various aspects of work, which leads to job dissatisfaction.

This study also discusses how implementing telework can affect the level of job stress in remote workers in Indonesia. The test results showed that telework significantly had an impact on reducing job stress. Benefits such as more flexible working time and location arrangements, productivity that can be achieved more effectively, and the trust given by organizations to their employees can be factors that actually reduce the stress experienced due to performing their job duties. This finding is in accordance with the results of research conducted by (Kim et al., 2020). Furthermore, according to Delanoeije & Verbruggen (2020), telework can reduce stressors that are felt daily by employees such as congestion when driving to work, interruptions / distractions received from colleagues or the work environment. This can reduce the likelihood of accumulated stressor effects that can impact unexpected strains of both the organization and individual employees.

From this research, it was also found that the implementation of telework in Indonesia helps employees to achieve a balance between their role in the organization and other aspects of their lives. These findings are consistent with previous studies (Chung & van der Lippe, 2020; Ferdous et al., 2021; Rodríguez-Modroño & López-Igual, 2021; Sitorus et al., 2018; Song & Gao, 2020). In these studies, flexibility is the main factor that causes increased work-life balance. Employees are generally freer in allocating their time and roles, both within the organization and other aspects of their lives. Based on this fact, then the fourth hypothesis in the study is acceptable.

This study also indicates a very strong effect of social isolation on increasing job stress. These results are in line with the initial guesses of the study so that this hypothesis can be accepted. This finding is consistent with research conducted by Toscano & Zappalà (2020) and Killgore et al. (2020). Both studies suggest that feelings of occupational isolation are proven to create a state of severe stress. The feeling of social isolation can be a very strong form of stressor in remote workers, in this case in Indonesia.

The results of the next analysis show that job stress does not have a significant effect on job stress in Indonesia. This finding contradicts previous studies, where job stress generally has a significant effect on decreasing job satisfaction (Irawanto, Novianti & Roz., 2021; Kim, Henry, Golden & Lambert., 2020; Toscano & Zappalà, 2020). However, according to Mc Gee, Goodson &

Cashman (1987) job stress does not always have an impact on job satisfaction in employees. The effect of job stress on job attributes such as job satisfaction is greatly influenced by how strong a person's perception of the level of stress he experiences.

Work-life balance can significantly increase job satisfaction with remote workers. This research is consistent with various studies previously conducted (Cohen & Liani, 2009; Irawanto, Novianti & Roz, 2021; Konrad & Mangel, 2000).

In terms of the relationship between telework and job satisfaction, this study also proves that job stress and work-life balance can act as mediators. However, both of these mediating effects are partial, because the direct relationship between telework and job satisfaction has proven to be more significant. Another fact found in this study is that although it can mediate the relationship between telework and job satisfaction, it turns out that job stress cannot mediate the interaction between social isolation and job satisfaction in remote workers in Indonesia. According to Fonger & Roloff (2010), telework work schemes minimize work-life conflict. With this, there will be an increase in the perception of work-life balance, and at the same time it can also reduce stress caused at work. With this condition, employees will feel comfortable with their work and achieve job satisfaction. This discovery can be an interesting point for companies that are currently implementing telework work schemes, both fully and in a certain proportion of time (hybrid). Basically, even though the relationship between job stress and job satisfaction is not significant, job stress is still able to mediate the relationship between the two variables. But with this finding, basically the relationship between telework and job satisfaction can occur directly. This happens because basically, work-life balance and job stress are also a consequence of how well the implementation of telework is felt by employees.

CONCLUSION AND ADVICE

Based on the results of this study, it can be concluded that Telework and social isolation have proven to have a significant effect on job stress, work-life balance and job satisfaction in remote workers in Indonesia. The implementation of telework that provides flexibility, autonomy and supports increasing employee productivity more effectively is proven to eliminate daily stressors so as to reduce the level of work stress felt by employees. In addition, the flexibility of time and place offered by telework work schemes can help employees to set work-family barriers more flexibly so as to increase work-life balance in employees.

Job stress and work-life balance have also proven to be mediators between telework and job satisfaction. The mediating relationship that occurs is partial mediation, where the direct relationship between telework and job satisfaction proves to be more significant than the mediation relationship. The flexibility and autonomy in the implementation of telework affects the work-life balance in employees which can and has an impact on job satisfaction in employees as a whole. On the other hand, job stress has not mediated the relationship between social isolation and job satisfaction

Based on this research, there are several suggestions as managerial implications and future research directions. Managerially, this study can provide an overview of employee perceptions of telework implementation. Companies that have implemented a telework policy need to ensure that employees are given a sufficient level of autonomy and work flexibility so that employees can manage daily work patterns according to the conditions of each employee. But to be able to achieve this, the company must build trust in employees.

Companies need to intervene in things that can cause employees to feel isolated from their work environment. The company must also ensure that employees have received adequate support, both from the organization and from their colleagues. With limited direct interaction, the company must also be able to be a liaison between employees, both in the context of work and non-work. Companies can do team building, hold regular town hall meetings, and build effective communication patterns between teams so that employees do not feel lonely and separated from their colleagues.

The suggestion for the next research is to enrich the model that has been discussed in this study, it can be added an analysis related to the effect of perceived organizational support, human resource practice and social support on the perception of telework and social isolation. This is so that future research can find out how the role of organizational support and the work environment on the perception of telework and social isolation implementation. In addition, to determine the effects of telework implementation, further research can develop research directions on job performance by mediating job satisfaction. This aims to find out the benefits that are not only felt by employees, but also the benefits felt by the organization towards the implementation of telework work

BIBLIOGRAPHY

- Adamovic, M. (2022). How does employee cultural background influence the effects of telework on job stress? The roles of power distance, individualism, and beliefs about telework. *International Journal of Information Management*, 62(November 2020), 102437. <https://doi.org/10.1016/j.ijinfomgt.2021.102437>
- Aguilera, A., Lethiais, V., Rallet, A., & Proulhac, L. (2016). Home-based telework in France: Characteristics, barriers and perspectives. *Transportation Research Part A: Policy and Practice*, 92, 1–11. <https://doi.org/10.1016/j.tra.2016.06.021>
- Athanasiadou, C., & Theriou, G. (2021). Telework: systematic literature review and future research agenda. *Heliyon*, 7(10), e08165. <https://doi.org/10.1016/j.heliyon.2021.e08165>
- Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological Antecedents and Implications. *MIS Quarterly*, 35(4), 831–858.
- Bauer, S. C., & Brazer, S. D. (2013). The Impact of Isolation on the Job Satisfaction of New Principals. *Journal of School Leadership*, 23(1), 152–177. <https://doi.org/10.1177/105268461302300106>

- Bayu, D. J. (2020). Covid-19 Job Report. Databox, 1–36. <https://www.jobstreet.co.id/en/cms/employer/wp-content/themes/jobstreet-employer/assets/report/covid-19-job-report-id/JobStreet-COVID-19-JOB-REPORT-INDONESIA-FINAL-27082020.pdf>
- Bellmann, L., & Hübler, O. (2020). Working from home, job satisfaction and work–life balance – robust or heterogeneous links? *International Journal of Manpower*, 42(3), 424–441. <https://doi.org/10.1108/IJM-10-2019-0458>
- Bentley, T. A., Teo, S. T. T., McLeod, L., Tan, F., Bosua, R., & Gloet, M. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics*, 52, 207–215. <https://doi.org/10.1016/j.apergo.2015.07.019>
- BPS. (2021). Indonesia Telecommunication Statistics 2021. <https://www.ptonline.com/articles/how-to-get-better-mfi-results>
- Brett, J. (2019). Evolving Digital Leadership. In *Evolving Digital Leadership*. <https://doi.org/10.1007/978-1-4842-3606-2>
- Chandra Putra, K., Aris Pratama, T., Aureri Linggautama, R., & Wulan Prasetyaningtyas, S. (2020). The Impact of Flexible Working Hours, Remote Working, and Work Life Balance to Employee Satisfaction in Banking Industry during Covid-19 Pandemic Period. *Journal of Business Management Review*, 1(5), 341–353. <https://doi.org/10.47153/jbmr15.592020>
- Chung, H., & van der Lippe, T. (2020). Flexible Working, Work–Life Balance, and Gender Equality: Introduction. *Social Indicators Research*, 151(2), 365–381. <https://doi.org/10.1007/s11205-018-2025-x>
- Cohen, A., & Liani, E. (2009). Work-family conflict among female employees in Israeli hospitals. *Personnel Review*, 38(2), 124–141. <https://doi.org/10.1108/00483480910931307>
- Cooper, C. D., & Kurland, N. B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior*, 23(SPEC. ISS.), 511–532. <https://doi.org/10.1002/job.145>
- Delanoeije, J., & Verbruggen, M. (2020). Between-person and within-person effects of telework: a quasi-field experiment. *European Journal of Work and Organizational Psychology*, 29(6), 795–808. <https://doi.org/10.1080/1359432X.2020.1774557>
- Deloitte. (2015). Hyper-connectivity inhibits work-life balance. <https://www2.deloitte.com/us/en/pages/about-deloitte/articles/the-wonders-of-work-life-balance-and-well-being.html>
- European Union. (2020). Telework in the EU before and after the COVID-19 : where we were , where we head to. *Science for Policy Briefs*, 2009, 1–8. https://ec.europa.eu/jrc/sites/jrcsh/files/jrc120945_policy_brief_-_covid_and_telework_final.pdf
- Ferdous, T., Ali, M., & French, E. (2021). Use of flexible work practices and employee outcomes: The role of work-life balance and employee age. *Journal of Management and Organization*, May. <https://doi.org/10.1017/jmo.2020.44>
- Fonner, K. L., & Roloff, M. E. (2010). Why teleworkers are more satisfied with their jobs than are office-based workers: When less contact is beneficial. *Journal of Applied Communication Research*, 38(4), 336–361. <https://doi.org/10.1080/00909882.2010.513998>
- Gallatin, K. A. (2018). *Teleworker Isolation : Possible Effects Of Workplace Relationships And Support*. ProQuest Dissertations and Theses, 125.
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The Impact of Professional Isolation on Teleworker Job Performance and Turnover Intentions: Does Time Spent Teleworking, Interacting Face-to-Face, or Having Access to Communication-Enhancing Technology Matter? *Journal of Applied Psychology*, 93(6), 1412–1421. <https://doi.org/10.1037/a0012722>
- Grant, C. A., Wallace, L. M., Spurgeon, P. C., Tramontano, C., & Charalampous, M. (2019). Construction and initial validation of the E-Work Life Scale to measure remote e-working. *Employee Relations*, 41(1), 16–33. <https://doi.org/10.1108/ER-09-2017-0229>
- Green, N., Tappin, D., & Bentley, T. (2020). Working From Home Before, During and After the Covid-19 Pandemic: Implications for Workers and Organisations. *New Zealand Journal of Employment Relations*, 45(2). <https://doi.org/10.24135/nzjer.v45i2.19>
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, 63(3), 510–531. [https://doi.org/10.1016/S0001-8791\(02\)00042-8](https://doi.org/10.1016/S0001-8791(02)00042-8)
- Haar, J. M. (2013). Testing a new measure of work – life balance : a study of parent and non-parent employees from New Zealand. 5192. <https://doi.org/10.1080/09585192.2013.775175>
- Heiden, M., Widar, L., Wiitavaara, B., & Boman, E. (2020). Telework in academia : associations with health and well-being among staff Content courtesy of Springer Nature , terms of use apply . Rights reserved . Content courtesy of Springer Nature , terms of use apply . Rights reserved . 707–722.
- Huws, U. (1991). Telework: Projections. *Futures*, 23(1), 19–31. [https://doi.org/10.1016/0016-3287\(91\)90003-K](https://doi.org/10.1016/0016-3287(91)90003-K)
- Illegems, V., & Verbeke, A. (2004). Telework: What does it mean for management? *Long Range Planning*, 37(4), 319–334. <https://doi.org/10.1016/j.lrp.2004.03.004>
- Irawanto, D. W., Novianti, K. R., & Roz, K. (2021). Work from home: Measuring satisfaction between work–life balance and work stress during the covid-19 pandemic in indonesia. *Economies*, 9(3). <https://doi.org/10.3390/economies9030096>
- Jobstreet. (2022). 73 % of Employees Are Dissatisfied with Their Jobs. <https://www.jobstreet.co.id/career-resources/plan-your-career/73-employee-dissatisfied-with-the-job-them/>
- Jr, J. F. H., Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E. (2018). *Multivariate Data Analysis*. <https://doi.org/10.1002/9781119409137.ch4>

- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83(1), 17–34. <https://doi.org/10.1037/0021-9010.83.1.17>
- Kapoor, V., Yadav, J., Bajpai, L., & Srivastava, S. (2021). Perceived stress and psychological well-being of working mothers during COVID-19: a mediated moderated roles of teleworking and resilience. *Employee Relations*, 43(6), 1290–1309. <https://doi.org/10.1108/ER-05-2020-0244>
- Kazekami, S. (2020). Mechanisms to improve labor productivity by performing telework. *Telecommunications Policy*, 44(2), 101868. <https://doi.org/10.1016/j.telpol.2019.101868>
- Khateeb, F. (2021). Work Life Balance - a Review of Theories, Definitions and Policies. *CrossCultural Management Journal*, XXIII(1), 27–55.
- Killgore, W. D. S., Cloonan, S. A., Taylor, E. C., & Dailey, N. S. (2020). Loneliness: A signature mental health concern in the era of COVID-19. *Psychiatry Research*, 290(May), 113117. <https://doi.org/10.1016/j.psychres.2020.113117>
- Kim, J., Henly, J. R., Golden, L. M., & Lambert, S. J. (2020). Workplace Flexibility and Worker Well-Being by Gender. *Journal of Marriage and Family*, 82(3), 892–910. <https://doi.org/10.1111/jomf.12633>
- Konrad, A. M., & Mangel, R. (2000). The Impact of Work-Life Programs on Firm Productivity Author (s): Alison M . Konrad and Robert Mangel Published by : Wiley Stable URL : <https://www.jstor.org/stable/3094455> REFERENCES Linked references are available on JSTOR for this article : You may n. *Strategic Management Journal*, 21(12), 1225–1237.
- Kunskaja, S. (2022). Strengthening of work-life balance while working remotely in the context of COVID-19 pandemic. 41, 221–235. <https://doi.org/10.3233/HSM-211511>
- Lait, J., & Wallace, J. E. (2002). Stress at work: A study of organizational-professional conflict and unmet expectations. *Relations Industrielles*, 57(3), 463–490. <https://doi.org/10.7202/006886ar>
- Mann, S., Varey, R., & Button, W. (2000). An exploration of the emotional impact of tele-working via computer-mediated communication. *Journal of Managerial Psychology*, 15(7), 668–690. <https://doi.org/10.1108/02683940010378054>
- Mc Gee, G. W., Goodson, J. R., & Cashman, J. F. (1987). Job stress and job dissatisfaction: Influence of contextual factors. *Psychological Reports*, 61(2), 367–375. <https://doi.org/10.2466/pr0.1987.61.2.367>
- Microsoft. (2022). Great Expectations: Making Hybrid Work Work. <https://www.microsoft.com/en-us/worklab/work-trend-index/great-expectations-making-hybrid-work-work>
- Orhan, M. A., Rijnsman, J. B., & Van Dijk, G. M. (2016). Invisible, therefore isolated: Comparative effects of team virtuality with task virtuality on workplace isolation and work outcomes. *Revista de Psicología Del Trabajo y de Las Organizaciones*, 32(2), 109–122. <https://doi.org/10.1016/j.rpto.2016.02.002>
- Palumbo, R. (2020). Let me go to the office! An investigation into the side effects of working from home on work-life balance. *International Journal of Public Sector Management*, 33(6–7), 771–790. <https://doi.org/10.1108/IJPSM-06-2020-0150>
- Palumbo, R., Flamini, G., Gnan, L., Pellegrini, M. M., Petrolo, D., & Fakhar Manesh, M. (2022). Disentangling the implications of teleworking on work-life balance: a serial mediation analysis through motivation and satisfaction. *Journal of Organizational Effectiveness*, 9(1), 68–88. <https://doi.org/10.1108/JOEPP-08-2020-0156>
- Perry, S. J., Rubino, C., & Hunter, E. M. (2018). Stress in remote work: two studies testing the Demand-Control-Person model. *European Journal of Work and Organizational Psychology*, 27(5), 577–593. <https://doi.org/10.1080/1359432X.2018.1487402>
- Peters, M. C. W., Jonge, J. De, & Taris, T. W. (2014). An Introduction to Contemporary Work Psychology. Wiley Blackwell.
- Pietrabissa, G., & Simpson, S. G. (2020). Psychological Consequences of Social Isolation During COVID-19 Outbreak. *Frontiers in Psychology*, 11(September), 9–12. <https://doi.org/10.3389/fpsyg.2020.02201>
- Predotova, K., & Vargás Llave, O. (2021). Workers want to telework but long working hours, isolation and inadequate equipment must be tackled <https://www.eurofound.europa.eu/publications/article/2021/workers-want-to-telework-but-long-working-hours-isolation-and-inadequate-equipment-must-be-tackled>
- Rodríguez-Modroño, P., & López-Igual, P. (2021). Job quality and work-life balance of teleworkers. *International Journal of Environmental Research and Public Health*, 18(6), 1–13. <https://doi.org/10.3390/ijerph18063239>
- Sandoval-Reyes, J., Idrovo-Carlier, S., & Duque-Oliva, E. J. (2021). Remote work, work stress, and work-life during pandemic times: A Latin America situation. *International Journal of Environmental Research and Public Health*, 18(13). <https://doi.org/10.3390/ijerph18137069>
- Schleicher, D. J., Watt, J. D., & Greguras, G. J. (2004). Reexamining the Job Satisfaction-Performance Relationship: The Complexity of Attitudes. *Journal of Applied Psychology*, 89(1), 165–177. <https://doi.org/10.1037/0021-9010.89.1.165>
- Sitorus, D. R. H., Raharjo, K., & Kusumawati, A. (2018). The Influence of Work-Life Balance on Job Satisfaction, Organizational Commitment, and Turnover Intention. *Discourse*, 21(5), 181–187. <https://doi.org/10.34283/ksgs.2018.12.2.15>
- Song, Y., & Gao, J. (2020). Does Telework Stress Employees Out? A Study on Working at Home and Subjective Well-Being for Wage/Salary Workers. *Journal of Happiness Studies*, 21(7), 2649–2668. <https://doi.org/10.1007/s10902-019-00196-6>
- Sousa-Uva, M., Sousa-Uva, A., e Sampayo, M. M., & Serranheira, F. (2021). Telework during the COVID-19 epidemic in Portugal and determinants of job satisfaction: a cross-sectional study. *BMC Public Health*, 21(1), 1–11. <https://doi.org/10.1186/s12889-021-12295-2>

- Toscano, F., & Zappalà, S. (2020). Social isolation and stress as predictors of productivity perception and remote work satisfaction during the COVID-19 pandemic: The role of concern about the virus in a moderated double mediation. *Sustainability (Switzerland)*, 12(23), 1–14. <https://doi.org/10.3390/su12239804>
- Tsui, A. S., Egan, T. D., & Reilly, C. A. O. (1992). Being Different: Relational Demography and Organizational Attachment. *Administrative Science Quarterly*, 37(4), 549–579.
- Zhang, S., Moeckel, R., Moreno, A. T., Shuai, B., & Gao, J. (2020). A work-life conflict perspective on telework. *Transportation Research Part A: Policy and Practice*, 141(July), 51–68. <https://doi.org/10.1016/j.tra.2020.09.007>