

# Workplace Well-Being in Post-COVID-19 Indonesia: Workplace Loneliness and Happiness at Work with the Moderating Role of Perceived Social Support

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## Abstract

Social relationships within the workplace have been recognized to be vital for employee's well-being. In this post Covid-19 era in Indonesia, major shifts in working arrangements have the potential to impact employees' social relationships dynamics. Loneliness can emerge as a counterpoint to having positive social relationships. This non-experimental research employs a survey method to explore Workplace Loneliness (WL), Perceived Workplace Social Support (PWSS), and Happiness at Work (HAW) in post Covid-19 pandemic Indonesia. Statistical analysis is performed on responses from 201 participants representing employees with diverse working arrangements in Indonesian organizations, sampled using convenience sampling. Key research findings are as follows: 1) Comparing three employee groups with different working arrangements (WFH, WFO, and a blend of WFH and WFO) reveals no significant differences in WL levels, yet PWSS and HAW levels among the compared groups show significant variations. 2) WL has a significant negative association with HAW. 3) A moderation analysis is performed to reveal a significant negative interaction effect of WL and PWSS on HAW. These findings contribute to existing literature by shedding light on variables related to employee perceptions of social relationships and well-being in the workplace. This research delves into how employee perceptions of both negative (loneliness) and positive (perceived social support) aspects of social relationships correlate with workplace happiness. Additionally, this research highlights the post-Covid-19 disruption context in Indonesia, which impacted variations of employees' working arrangements.

**Keywords:** Workplace Loneliness, Perceived Workplace Social Support, Happiness at Work, Working Arrangements

## 1. Introduction

The Covid-19 pandemic has brought major changes in various aspects of human lives, and the changes in the workplace realm is no exception. One notable change in the workplace context is the alteration of employee's working arrangements. Prior to the pandemic, the working arrangements in general in the world, especially in Indonesia, was traditional working arrangement in a designated office

space with start and finish times already set. The heights of the Covid-19 pandemic necessitated organizations in Indonesia to mandatorily adopt work-from-home or remote working policies in compliance with governmental regulations. When the spread of Covid-19 was less severe, organizations also implemented the blended working arrangement policies that allow employees to alternate work from office and from home. Work from home and blended working are flexible working arrangements that may allow employees to tailor their work setups, timings, and approaches to complete their tasks (De Klerk et al., 2021).

The continual rise of flexible working arrangements is possible with the ever advancement of ICT (Information & Communications Technology) to support the infrastructures. In this current post-Covid-19 era in Indonesia, the altered working arrangements during the height of the pandemic are experiencing yet another transformation, as there are no longer governmental regulations regarding the spread of the virus. Based on each organization's assessments in relation to the most effective working arrangements to implement, currently some organizations in Indonesia are reverting back to implementing traditional working arrangements, while others are maintaining the flexible working arrangements policies, manifested in full remote work or working in a blended manner. Working arrangement plays a role in influencing employees' social relationships in the workplace context.

Social relationships are important for individuals for both professional and personal life (Wright, 2013). Individuals spend more than half of their lives as employees or working individuals, as stated by Murthy (2017), so the workplace has a significant relevance on employees' perceptions and emotions. There has been proof that the presence of positive social relationships at work yields its benefits to employees' happiness (Haar et al., 2019). One of the contraries of having good social relationships is perceiving loneliness. In the workplace context, negative emotions of loneliness are acknowledged by employees when their needs for genuine social relationships are not adequately met (Firoz, Chaudary, & Khan, 2020). Feeling of loneliness makes people experience subjective distress because they perceive themselves as being alone, isolated or cut off and they evaluate their interpersonal and social relationships as deficient, either qualitatively or quantitatively (Yilmaz, 2011)

With the rising trends of flexible working arrangements, extensive use of augmented technology and virtual teams in the workplace, employees get less opportunities for doing physical social interactions (Mohapatra et al., 2020). Furthermore, workplace social settings can be considered fast-paced and highly competitive in nature, which lessen employees' opportunity to have dependable social associations and sufficient social relationships (Firoz & Chaudary, 2021; Mohapatra et al., 2020). Lesser social interactions and relationships in the workplace can be intensified as perceived loneliness (Kniffin et al., 2021). When employees feel loneliness at work, it may affect work effort, performance and well-being, because loneliness in general is linked to general stress levels, poorer overall cognitive performance, negative reactivity and mood (Mäkinen et al., 2021). Loneliness is an affective emotion that can have an impact on life as a whole (Yilmaz & Altinok, 2009), and in this context, the loneliness perceived at work can impact the outcomes relating to work domains.

In this constantly changing workplace setting, especially when navigating the post-covid-19 disruption, it is important to note that the social situation in the workplace is changing as well. Employees are having relatively new experiences in navigating their social relationships at work. Since the social aspect is such an important part of the workplace as stated earlier, it is necessary to study how employees in a dynamic setting at work reflect their perspectives on their experiences regarding their social relationship that may relate to well-being. In Indonesia, the existence of flexible work arrangements is

something that has only been experienced massively after the Covid-19 pandemic. Therefore, it is important to see how employees perceive their experiences related to social relationships in this post Covid-19 pandemic which made variations regarding employee's working arrangements.

Mohapatra et al (2020) stated that research about the negative influences of interpersonal relationships at the workplace exist less than those highlighting advantages of positive relationships at work. Having negative interpersonal relationship experience can have critical consequences (Lam & Lau, 2012). One of the phenomena that lies in the negative spectrum that can arise from how employees internalize their subjective experience of social relationships is whether or not they feel lonely in the workplace. Workplace loneliness in previous research has been found to predict increased levels of negative outcomes and decreased levels of positive outcomes in the workplace. So, this research with context on the working arrangements situation in the post Covid-19 pandemic, wants to study variables about employee's social relationships that relate to their well-being.

### **Workplace Loneliness**

In general, loneliness can be described as a psychological state that arises from a perceived lack of social relationships, either qualitatively or quantitatively (Wright, Burt, & Strongman, 2006). Moreover, Mohapatra et al. (2020) mentioned that loneliness is seen as a complex set of feelings often manifested through an unpleasant, painful, and anxious desire resulting from the absence or lack of intimate and social needs. Specifically, regarding workplace loneliness, it is defined as "the distressing subjective feeling of lacking a social network or companion, and refers to a perception that one's social relationships are inadequate in light of one's preferences in a work environment" (Wright et al., 2006, Firoz et al., 2021). Wright et al (2006) conceptualized loneliness at the workplace in terms of two dimensions: emotional deprivation and social companionship. Emotional deprivation refers to the quality of the relationship among colleagues. It arises when an employee feels alienated, isolated, or disconnected from other employees at work. Social companionship refers to the quantitative aspects of relationships at work and includes the time spent with colleagues. When an individual feels that they are a part of the group at work, it depicts healthy and reliable social companionship.

Workplace loneliness is a psychological feeling or state, not a psychological trait, and is affected by the influence of the working situation, including the relationship between members of organizations, may it be social relationship or one-on-one relationship (Wright, 2009). Working relationship to an extent is a kind of economic interest based relation, that is regulated by the formal rules and regulations, that potentially leads to an absence of deeper connections (Zhou, 2018). It is also argued that the nature of relationships in the workplace is to an extent considered competitive (Mohapatra et al., 2020). Workplace loneliness is reported when there are social deficiencies perceived by employees, Wright et al (2006) argued that social deficiencies in the workplace happen more because of unmet expectations regarding quality of interpersonal relationships rather than the quantitative factors. In other words, employees perceiving subjective feelings of loneliness in the workplace environment are very likely to happen since the nature of work relationships are economically based and competitive relations in nature that are not socially based relations, that put emphasis on the work itself to be achieved and having deep social connection is not a priority.

Other than the nature of the relationships in the workplace, there are other factors that can contribute in employees perceiving loneliness, Mohapatra et al. (2020) found that the factors that contribute to workplace loneliness include less opportunities for social interactions due to augmented use of the internet,

rise in virtual teams, and other alternative work arrangements in the organizations. According to the Integrative Literature Review (ILR) by Firoz et al. (2020) workplace loneliness has been identified to predict reduced organizational commitment, job performance, organizational citizenship behavior, and job satisfaction. The ILR also stated that employees experiencing loneliness have also been found to have increased levels of emotional exhaustion, turnover intention, deviant workplace behavior, and work–family conflict.

### **Happiness at Work**

Happiness in general can be considered synonymous to subjective well-being. The concept of happiness at work is firstly explored by Fisher (2010), where she concluded that happiness at work is a broad construct that includes aspects regarding job satisfaction, work engagement, and affective organizational commitment. In the same literature (Fisher, 2010), it was mentioned that happiness in the workplace is influenced by situational dynamics (conditions of the task, job, organization) and individual differences in employees (personality and the fit of work with individual's expectations, needs, and preferences).

Fisher (2010) also mentioned previous research in her paper regarding related variables that can cause happiness at work (job satisfaction, work engagement, affective organizational commitment), which were positive interactions with colleagues and supervisors, opportunities for personal and professional growth, autonomy and control over one's tasks, fairness, engaging and meaningful work, fostering a positive organizational culture, just compensation and benefits, as well as work-life balance and flexibility.

Singh & Aggarwal (2017) developed a measurement to assess the construct of happiness at work, where they conceptualized and operationalized the concept of happiness at work based on Fisher's (2010) framework. Happiness at work is conceptualized as an experience of subjective well-being at work that involves interaction between individual employee experiences as well as organizational experiences. With that, Singh & Aggarwal (2017) operationalized happiness at work as an experience of subjective well-being at work reflected through a high amount of positive individual and organizational experiences, also a low amount of negative individual and organizational experiences.

### **Perceived Workplace Social Support**

Social support in the workplace context refers to the extent to which a job offers opportunities for guidance and assistance from others, including supervisors and co-workers (Morgeson & Humphrey, 2006). Moreover, perceived workplace social support refers to an employee's subjective evaluation of the support they feel they received from the organization, supervisor, and co-worker regarding their work (Caesens et al., 2023). Perceived social support doesn't actually measure the actual support that an employee received but also takes into account their appraisal of the workplace situation (Lindorff, 2017). Social support is critical for employee's well-being, with previous studies showing that perceived social support tends to alleviate work-related stressors rather than those from outside of work (Johnsen et al., 2018).

### **Workplace Loneliness, Happiness at Work, and Perceived Workplace Social Support in Post-Covid-19 Pandemic Indonesia**

In this post Covid-19 pandemic era, working arrangements types in Indonesia are varied, there are organizations that adopt back to the implementation of traditional working arrangement because

governmental regulations already allow employees to work back from the office. Traditional working arrangement refers to working onsite in a designated permanent office space with a set schedule for starting and ending of the workday, this arrangement includes Work From Office or WFO. Moreover, there are also organizations in Indonesia that stick to continuing the implementation of flexible working arrangements despite the ending of the pandemic. Flexible working arrangements include Work From Home (WFH) or remote working and telecommuting or blended working referring to employees alternating between WFO and WFH (Wörtler et al., 2021). The different types of working arrangements create different dynamics in social relationships at work.

With flexible working arrangements, employees having physical contact with one another is not always happening, so it can lessen the opportunity to have face-to-face social interaction. Although, with the help of the advanced use of ICT, employees can easily engage with one another in large-scale and real-time social interactions via online interactions that can potentially keep employees socially connected and can feel support from each other via those online interactions (Wang et al., 2021). However, the result of Wang et al. (2021) study in employees in China shows that online interactions that include social interactions are not sufficient to reduce perceived loneliness in the workplace.

By having flexible working arrangements, there is reduced teamwork, collaboration, and coordination among employees, also there are changes in human engagement in the work process (Boell et al., 2013). The result of a qualitative research by De Klerk et al. (2021) suggested that employees increasingly felt lonely and secluded as communication became less relational and more transactional. Stone et al (2018) also stated that the employees who spend 80-100% of their time working remotely, reported higher levels of workplace loneliness. De Klerk et al (2021) argued that although there are many advantages of flexible working, there are negative emotional outcomes which is the experience of loneliness stemming from lack of physical interaction that can be obtained through working from a traditional working arrangement. Wax et al. (2022) found that workplace loneliness and working arrangement (traditional and flexible) have an interactive effect on affective organizational commitment, perceptions of coworker support, and organizational citizenship behaviors.

Regarding the impact of flexible working arrangements on employee's happiness, Rebane et al, (2017), Golden et al. (2013), Rao et al. (2018) found that flexible workers have higher levels of happiness. By having flexible working arrangements, employees are able to exercise control over work hours and utilize flexible schedules, which contributes to increased happiness (Bekele & Mohammed, 2020). Flexible working arrangements also enhance job satisfaction and retention, thereby fostering higher productivity (Govender et al., 2018). Other than the positives, it was also found that flexible working arrangements can lead to work intensification, blurred work-home boundaries, professional isolation, and perceptions of organizational injustice, possibly leading to decreased happiness (Sanders & Karmowska, 2020).

### **The relationship of Workplace Loneliness and Happiness at Work**

According to a literature review by Uzun et al. (2020), there are previous studies that concluded loneliness is negatively correlated with employees' happiness and subjective well-being (Erdil & Ertosun, 2011). Similarly, there are studies which have concluded that there is a significantly negative relationship between satisfaction and loneliness in the work life (Çifçi & Dikmenli, 2015 in Uzun et al., 2020). Job satisfaction can also influence the perceptions and experience of subjective well-being at work. Also, a survey of loneliness of migrant workers in China shows that lonely workers are more satisfied with their



job (Chan & Qiu, 2011 in Zhao, 2018). However, there is also a study (Şişman & Turan, 2004 in Uzun et al., 2020) resulting in no significant relationship between loneliness and happiness. Overall, the study of the relationship between loneliness and happiness, particularly narrowing within the workplace context, still requires further comprehensive exploration and investigation.

### **Perceived Workplace Social Support as a moderating variable**

According to the Job-Demands Resources Model, there are personal and work-related resources that are associated with increased well-being and can protect against the adverse effects of perceived demands at work, where workplace loneliness can be considered as a personal demand of work (Mäkineniemi et al., 2021), personal demands are defined by Salmela-Aro & Upadhyaya (2018) as an individual characteristics that are reflected in employees' effort in their work. Social support (from supervisors and co-workers) is an essential workplace resource for an employee to mitigate negative work experiences (Chang et al., 2014) and is essential for the occupational health of employees (Jimenez et al., 2021). Individuals who perceive that they receive considerable social support at work will suffer less from loneliness, because social support can bring desirable social interactions to meet their needs for belonging (Bavik et al., 2020).

Previous research have studied the relationships of workplace loneliness, social relationships, and employee well-being. Research by Ramzan et al. (2021) showed that perceived social support moderated the relationship between workplace loneliness and well-being for employees in Pakistan with special needs. Another research by Chou (2015) showed that perceived supervisor and co-worker support directly associated with employee subjective well-being. However, research by Mäkineniemi et al. (2021) showed that employees perceived feelings of social belongingness at work did not moderate the relationships loneliness at work and employee's well-being measured through the level of stress and perceived exhaustion. Social support has been found to serve as a buffer against the negative impact of workplace loneliness on employee well-being (Wright et al., 2006). Particularly in this research, perceived workplace social support from co-worker and supervisor will be a potential moderator for the relationships between employee's loneliness and happiness at work.

### **Hypothesis Development**

Studies on employee perceived feeling regarding workplace loneliness are still few in Indonesia. The study also became more interesting in this post-Covid-19 era where the current state of workplace arrangements in many organizations in Indonesia is transitioning back to traditional working arrangements or maintaining the transition to the flexible working arrangements (working from home fully or incorporating blended working that combines work from home and work from the traditional offices). It is interesting to see how the different working arrangements will impact employees perceiving variables relating to their social relationship and well-being at work, namely Workplace Loneliness, Perceived Workplace Social Support, and Happiness at Work.

There are vital consequences if employees feel lonely at the workplace that need to be investigated. Happiness at the workplace context has been argued to be significantly related to the loneliness perceived by employees. However, there were still research that show no significant relationships between employee's loneliness and happiness specific in the workplace context. In this research, the relationships of the two variables are examined in Indonesian employees with varying working arrangements.

Additionally, according to the job demand-resources model, there are personal and work-related resources that are associated with increased well-being and can protect against the adverse effects of

perceived demands at work, where workplace loneliness can be considered as a personal demand of work. Meanwhile, perceived workplace social support can be considered as a resource that can mitigate the negative feelings at work and increase the positive outcomes. Previous research showed that the role of social support in moderating the relationship between employee loneliness and well-being has already existed, whereas in this research the variable used to examine employee’s well-being is Happiness at Work, which operationalized to employee’s perception regarding the combinations of high amount of positive individual and organizational experiences, and low amount of negative individual and organizational experiences.

Hence, this research has the following hypothesis:

H1: Different working arrangements in post Covid-19 pandemic significantly differs the levels of Workplace Loneliness, Perceived Workplace Social Support, and Happiness at Work of Indonesian Employees

H2: Workplace Loneliness significantly negatively associated with Happiness at Work in Indonesian Employees

H3: Perceived Workplace Social Support would moderate the relationship between Workplace Loneliness and Happiness at Work among Indonesian Employees

The following is this research model diagram:

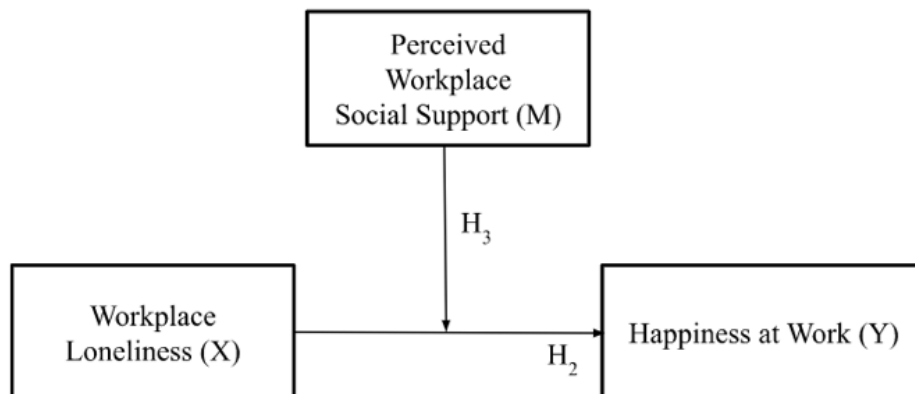


Figure 1. Research model diagram

## 2. Research Methodology

This present research employs a non-experimental quantitative approach, enabling the use of statistical methods to analyze data and examine the study’s hypothesis. Non-experimental research involves investigating relationships between variables without manipulating any variables (Creswell, 2009). This research is a correlation study design, in which the variables included are Workplace Loneliness (WL), Perceived Workplace Social Support (PWSS), and Happiness at Work (HAW). Utilizing a non-experimental quantitative approach with correlational study design, this research studies the relationships among variables through statistical inference.

The population of this research is employees from different types of organizations working in any industry in Indonesia. The total population is wide, which can lead to better generalizability of findings that can make the research more applicable and relevant (Hulley et al., 2013). It is argued that for basic correlational analysis, the minimum sample size for a study is around 100 - 150 participants to ensure a

reasonable balance between statistical power and practical feasibility (Hair et al., 2019). Additionally, to perform moderation analysis, it is discussed that recommendation for minimum sample size is 200, to adequately power tests for interaction effects (Aiken & West, 1991; Cohen et al., 2003). Based on those references, the target sample size in this study is 200 employees in Indonesia as the research participants.

The sampling technique used in this study is a non-probability sampling, namely convenience sampling, so to select a sample the researcher does not provide equal opportunity to every Indonesian employee to become a member of the sample (Christensen et al., 2011). With convenience sampling technique, the researcher takes samples in the form of target population that meet criteria that can be obtained practically, such as easy accessibility, availability of the right time, and the desire to participate in research (Etikan et al., 2016). Also, the characteristics criteria for the research sample are: a) had already worked in the same organization for minimum 6 months, b) is working full time in the organization, c) aged between 18 to 50 years old.

This research is a cross sectional study with data collection done through online surveys using Google Forms as a platform and administered in a single point in time. The researcher distributed the research information including the link of the research questionnaire via social media platforms like LinkedIn, Instagram, WhatsApp, and Twitter to reach the target sample size. The data collection period is in March of 2023 which resulted in the researcher obtaining 201 participants.

The survey questionnaire consists of an informed consent page and 2 sections. In the informed consent page, participants are informed about the topic of the research in general, what they will have to face (how many sections ahead and time estimation they might spent to participate), the freedom of participants to answer questionnaire accordingly, the freedom of whether the participants want to participate or not participate or end the participation underway, and also data confidentiality (participants are not asked about personal identity and their organization affiliation name). If they agree to participate in the research, participants would have to give their statement on the online page to move forward to the next 2 sections. The first section is to collect demographic information of participants which includes personal information (age, gender) and professional information (organization type, current working arrangements). The second section consists of 3 instruments to measure all 3 research variables with each instrument being separated by a sub-section.

The first instrument used in this research is to measure WL, through an adaptation of Loneliness at Work Scale (LAWS) developed by Wright, Burt, & Strongman (2006). LAWS contains 16 items measuring 2 dimensions namely, emotional deprivation and social companionship. The second instrument in this research is to measure PWSS, in which the researcher adopts the social support dimension from Work Design Questionnaire (WDQ) developed by Morgeson and Humphrey (2006). PWSS measurement consists of 6 items assessing the degree of how employees perceive that others are supportive and concerned about their welfare. Lastly, the third instrument used in this research is to measure HAW using the adaptation of Happiness at Workplace Scale or HAWS developed by Singh & Aggarwal (2017). HAWS consists of 12 items that measure 4 dimensions namely work repulsive feelings, flow & intrinsic motivation, supportive organizational experiences, and unsupportive organizational experiences.

All of the variables measured in this research are on a 7-point Likert scale with response options ranging from 1=strongly disagree to 7=strongly agree. The items in the three measurements are translated to Bahasa Indonesia to accommodate research participants. The internal consistency reliability of the measurements was assessed in IBM SPSS version 25 to calculate Cronbach's alpha score for sample size



of 201 participants. Out of the three scales, 2 shows high reliability (PWSS Measurement = .798, HAWS = .891) and 1 scale shows very high reliability (LAWS = .922).

The researcher uses IBM SPSS version 25 to do the data analysis for testing the hypothesis of this research. Data analysis includes comparing means, correlation analysis, and regression analysis. Prior to testing the hypothesis, a normality test with Kolmogorov-Smirnov Test is conducted. Additionally, descriptive statistics will be used to quantify the participant’s demographic data. A one-way analysis of variance or ANOVA is used to determine if there are any statistically significant differences between the means of groups. Pearson’s correlation coefficient will be calculated to quantify the strength and direction of the relationship between the research variables. Moderation analysis is performed with regression techniques to evaluate whether the moderator variable influences the relationship of two variables.

Specifically, regarding moderation analysis, the researcher is using the PROCESS Procedure for SPSS version 4.2 by Hayes (2022). In this particular study, the researcher uses PROCESS Procedure Model 1. This model allows researchers to do a moderation regression model with one independent variable, one moderating variable and one independent variable. Doing moderation analysis using PROCESS Procedure by Hayes basically is the same as doing with simple linear regression option through SPSS, but through PROCESS Procedure, the researcher can immediately see whether there are interaction effects that occur and the significance of the relationship in one process.

### 3. Data Analysis, Results, and Discussions

The data presented in this research is from data analysis of 201 research participants examining the variables of Workplace Loneliness (WS), Perceived Workplace Social Support (PWSS), and Happiness at Work (HAW). In this research, the demographic information collected from participants includes 2 domains, first one are their personal information, consisting of the gender & age information (grouped based on the year of birth; Gen Z group for individuals born after the year 1996, Gen Y for people born between 1981 - 1996, Gen X group for individuals born in 1965 - 1980). Second domain is their professional information, including type of organizations they currently work, their current working arrangements, whether they work in a traditional working arrangements (WFO) or in a flexible working arrangements, WFH and WFO (blended working) or WFH (full remote working), and lastly the participants are asked about their frequency of remote working or working out of the traditional office building. The demographics data analysis is presented in Table 1.

**Table 1. Demographics data of research participants**

Demographic Information (N = 201)		Freq.	(%)
Gender	Female	102	50.7
	Male	99	49.3
Age	Gen Z (age < 26)	109	54.2
	Gen Y (age 26 - 42)	76	37.8
	Gen X (age > 42)	16	8
Organization Type	Private Company	155	77.1
	State Owned Enterprise	27	13.4
	Governmental Institution	13	6.5
		6	3

	Others (NGO, Education Institute)		
Working Arrangements	WFH	21	10.4
	WFH & WFO	92	45.8
	WFO	88	43.8

Prior to testing the hypothesis, normality tests were performed. Kolmogorov-Smirnov test indicated that all 3 research variables are not significant with  $p\text{-value} > .05$ , indicating that WL, PWSS, and HAW are normally distributed. To test the study’s first hypothesis, all variables are analyzed based on the demographic data of their working arrangements. One-Way ANOVA is conducted to assess the difference level of WL, HAW, and PWSS on employees in Indonesia that have WFH, WFH & WFO, and WFO type of working arrangements. Before comparing the groups, the variance homogeneity assumption should be met across different groups. The result of Levene’s test shows that  $p\text{-value}$  for WL, PWSS, and HAW for different groups are not significant ( $p\text{-value}$  WL = .572;  $p\text{-value}$  PWSS = .962;  $p\text{-value}$  HAW = .945), meaning that the variance for WL, PWSS, and HAW are roughly the same for the three different groups based on their working arrangements (WFH, WFH & WFO, WFO). In this research, the ANOVA results show that there is no significant association between LAW and working arrangements type,  $F(2, 198) = .225$ ,  $p\text{-value} = > .05$ , secondly there is a significant association between PWSS and working arrangements type,  $F(2, 198) = 3.460$ ,  $p\text{-value} = < .05$ , lastly there is a significant association between HAW and working arrangements type with  $F(2, 198) = 4.071$ ,  $p\text{-value} = < .05$ .

The ANOVA results suggest that there is not a statistically significant difference in the level of WL among Indonesian employees that have differing working arrangements. Although no significant differences in WL levels were observed between groups, it is found that the employees in the traditional working arrangement (WFO) exhibited the highest mean in WL score ( $M = 48.38$ ). Nevertheless, upon considering the mean scores across all groups, it shows that employees across different working arrangements—WFO, WFH, and WFH & WFO—tended to report relatively low levels of WL.

ANOVA results also show that there are significant differences in the levels of PWSS and HAW between the employees who work WFH, WFH & WFO, and WFO. Regarding PWSS, it is found that the highest level of PWSS are among Indonesian employees with WFH & WFO or blended working arrangements ( $M = 33.42$ ). When assessing mean scores across all groups, it's evident that all groups reported relatively high levels of PWSS. Regarding HAW, the employees in the WFH group, representing fully remote working employees, reported the highest mean HAW score ( $M = 61.33$ ). When examining the mean scores, the HAW score can be categorized as high levels of HAW in all three groups (WFH, WFH and WFO, and WFO)

In this research, it is found that for employees with differing working arrangements, all participants' scores can be categorized as low in regards to WL. The low scores of WL in employees with flexible working arrangements can be explained by the possibility that although physical interaction when WFH or blended working arrangement appears to be reduced, adequate ICT can help facilitate the social interaction process so that collaboration and coordination can continue, which makes Indonesian employees mitigate feelings of loneliness at work (Wang et al., 2021; De Klerk et al., 2021). Furthermore, it is also found in this research that the highest mean score for WL is for employees with the WFO work type, this is different from previous research which stated that employees with flexible working arrangements had a higher WL level (Stone et al., 2018; Wang et al., 2021, De Klerk et al., 2021). The

higher level of WL in WFO employees can be explained by previous research which states that high working hours can make people feel lonely, and an unfit atmosphere for themselves in the office can be a factor that may cause feelings of loneliness (Wright, 2005 in Zhou, 2018).

Furthermore, the results of this study indicate that employees who work in WFH, WFO, or blended working arrangement have scores that can be categorized as high for PWSS, in which the result displays a significant difference between the mean scores across groups, also indicating that the highest score of PWSS is in the group of employees who work in a blended working arrangement (WFH & WFO). The high PWSS felt by employees refers to when individuals perceive that they are receiving adequate assistance or guidance within the workplace context and when they have positive relationships with their colleagues and supervisors (Morgeson & Humphrey, 2006; Caesens et al., 2023). By having a blended working arrangement, employees can get support from online interactions through ICT when doing WFH and can also get support and maintain friendship at work in person when meeting face-to-face at the office when doing WFO. This result differs from previous research mentioned in Wörtler et al. (2021) suggesting that blended working arrangement might raise issues regarding extensive use of technology and minimize chances to maintain relationships at work.

Regarding the variable of HAW, this research results show that Indonesian employees whether working in WFH, WFO, or WFH and WFO arrangements have relatively high scores for HAW, with significant difference between groups, and that employees who do WFH (fully remote) have higher levels of HAW. This research about employees working fully remote has higher HAW levels is in line with previous research that stated that flexible workers have higher levels of happiness (Rebane et al., 2017; Golden et al., 2013; Gudivada et al., 2018). Full remote work allow employees to work and finish their tasks wherever, whenever, and however they want to approach it (De Klerk et al., 2021), with that, it gives remote employees higher autonomy, are more able to control work hours and utilize flexible schedules, which contributes to increased happiness (Abenet & Abdurezak, 2020).

The second hypothesis of this study is tested by conducting a correlation analysis to examine the relationship between WL and HAW. The Pearson's correlation coefficient between WL and HAW is  $r = -.541$ ,  $p < .05$  which suggests that there is a significant negative relationship between the two variables. According to Cohen (1988), the strength category of the relationship for the variables examined ( $r = -.541$ ) is considered a moderate relationship ( $0.3 \leq |r| < 0.7$ ). A significantly moderate negative relationship indicates that there is a noticeable and meaningful linear negative relationship between the two variables. Although the relationship is not very strong, this category of Pearson's correlation coefficient indicates that changes in one variable are associated with corresponding changes in other variables, but indeed the relationship is at a moderate level (Rosenthal & Rosnow, 2008; Pallant, 2016). From the result found in this study, it can be inferred that if workplace loneliness increases then happiness at work tends to decrease, with the degree of change in a moderate level.

Result shows that there is a significant negative relationship between WL and HAW. Specifically, in this research WL involves capturing an employee's distressing subjective feeling of lacking social network or companion qualitatively and quantitatively within a work environment. Furthermore, HAW involves capturing the high levels of positive individual and organizational experience combined with low levels of negative individual and organizational experience. So with the result, it can be inferred that when an employee lacks social network or companion at work either qualitatively and quantitatively it can decrease the perceived positive experiences and increase the perceived negative experiences. This research

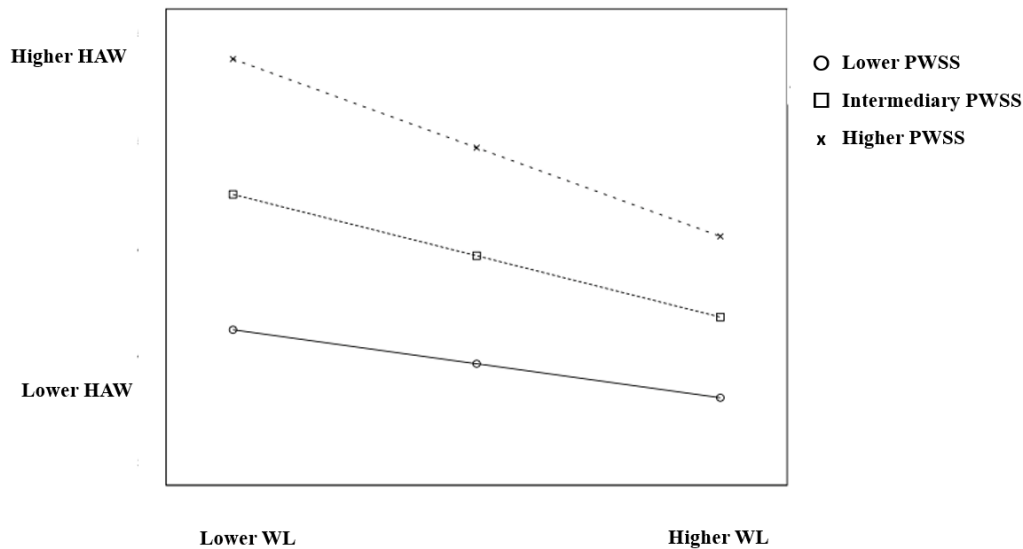
results are in line with previous research by Erdil & Ertosun (2011) and Ramzan et al. (2021) that found the significant negative relationship between workplace loneliness and employee’s subjective well-being.

For the third hypothesis in this study regarding examination of whether PWSS might moderate the relationship between WL and HAW, a moderation analysis with regression techniques is conducted via PROCESS. The results of the analysis are presented in Table 2. The PROCESS output also shows the results of the relationship between WL on HAW and PWSS on HAW which shows significant relationships with a negative relationship for the former and a positive relationship for the latter. The moderation analysis reveals a significant interaction effect between WL and PWSS on HAW with  $B = -.129$ ,  $t(198) = -2.063$ ,  $p < .05$  which support the third study hypothesis. This result indicates that the impact of WL on HAW depends on the level of PWSS. The negative coefficient (-.129) indicates that PWSS moderated the negative relationship between WL and HAW, suggesting the relationship between WL and HAW is weaker for employees who perceive high levels of social support, and stronger for those who perceive low levels of social support.

**Table 2. Results of moderated regression analysis**

Model	coeff	se	t	p	LLCI	ULCI
constant	4.459	.077	58.150	.000	4.308	4.611
WL	-.273	.087	-3.121	.002	-.446	-.101
PWSS	.535	.097	5.488	.000	.343	.727
Int_1	-.129	.063	-2.063	.040	-.032	-.006

The significant result of the regression analysis confirms that PWSS negatively moderates the negative relationship between WL and HAW, indicating that as perceived social support increases, happiness at work tends to decrease for individuals experiencing workplace loneliness. Although PWSS can potentially buffer or mitigate the negative impact of WL on HAW, the mitigating effect of perceived social support might not be strong enough to counteract the negative impact of loneliness on happiness at work. This result suggests a potential challenge in maintaining happiness at work when employees experience workplace loneliness. Figure 2 illustrates the relationship of WL and HAW that is not constant across employees in Indonesia with different levels of PWSS, this also indicates that the impact of WL on HAW depends on the level of PWSS.



**Figure 2. A significant interaction effect of WL and PWSS on HAW**

From this research, it can be highlighted that PWSS moderate the relationship of WL on HAW. From previous research, it was found that social support serves as a buffer against the negative impact of workplace loneliness on employee well-being (Wright et al., 2006). With the job demands-resources framework, where workplace loneliness might be considered as a personal demand of work, with this research showing a significant result for perceived social support as a moderating variable, the result indicates that perceived social support can also be considered as a resource from work that might mitigate the perceived demands of loneliness and increase the feeling of happiness in employees (Mäkiniemi et al., 2021). Employees perceiving adequate social support at work will suffer less from feeling lonely, because employees might feel they have enough social interaction to meet their needs that might also lead to increased positive experience at work (Bavik et al., 2020; Fisher, 2010).

The result of this research shows that there is a significant negative interaction effect of loneliness and perceived social support on employee's happiness at work. This result is similar but quite distinct from previous research by Ramzan et al. (2021) about employees in Pakistan with special needs, in which their research result showed that there was a significant positive interaction effect of workplace loneliness and social support on employee's well-being. The negative interaction effect from this research suggests that higher perceived social support reduces the negative impact of workplace loneliness on happiness at work. In the previous research, the positive interaction effect implies that higher perceived social support enhances the positive impact of well-being, even when workplace loneliness is present (Ramzan et al., 2021). The findings from this and the previous research emphasize the importance of social support in mitigating negative effects and enhancing positive effects in work-related contexts.

#### 4. Conclusions

This research yields intriguing findings in regards to Workplace Loneliness, Perceived Social Support, and Happiness at Work in Indonesian employees with varying working arrangements in post Covid-19 pandemic era. The comparative analysis of variables shows that the highest levels of WL are observed among employees following a traditional working arrangement or WFO. Conversely, the highest



levels of PWSS are reported by employees working in a blended manner (WFH and WFO), while the highest levels of HAW are identified among employees engaging in full remote work or WFH.

However, when categorizing the research variables scores as a whole, the level of WL is relatively low, and the levels of PWSS and HAW are relatively high. Meaning that from this research, it can be concluded that employees in Indonesia, no matter what their working arrangement is, experience low loneliness, perceive high social support, and subjectively feel happiness at their work.

Furthermore, this study also found that there is a significant negative relationship between WL and HAW. It is also proven in this study that there is a variable that moderates the relationship between the two variables, which is PWSS. Specifically, the results of this study indicate that there is a significant negative interaction effect of WL and PWSS on HAW, suggesting that the relationship between WL and HAW is weaker for employees who perceive higher levels of social support, and stronger for those who perceive lower levels of social support.

### **Theoretical and Practical Contributions**

The results of this research contribute to existing literature regarding variables related to employees' perceptions of the social relationships they have at work in terms of social relationships that tend to be negative and also positive, and this research also explores a variable about happiness or subjective well-being in a specific context related to the workplace. This research helps explain the phenomenon experienced by Indonesian employees in the post-covid-19 pandemic period, in which the highlight in this research is that the pandemic has created a variety of working arrangements in Indonesia.

The result of this study indicates that there is a negative interaction effect of workplace loneliness and perceived workplace social support on happiness at work. Perceived social support at work is proven to be able to mitigate employee's feeling of loneliness, in line with previous research. This reinforces the findings in existing literature that social relationships in the workplace are important for the subjective well-being of employees. The results of this research can be said to contribute to the development of organizational psychology and studies related to employee experience in the workplace.

From a practical standpoint, the identification of varying levels of loneliness at work, perceived social support, and happiness across employees with different working arrangements provides organizations with actionable insights. Organizations could develop strategies to mitigate workplace loneliness, especially for employees engaged in traditional working arrangements. Furthermore, organizations can also invest to create guided targeted programs that foster social connections and support mechanisms with specific context based on employees working arrangements. With interventions to alleviate feelings of loneliness and to cultivate social connections and support at work, the programs could have a rather positive impact on employee's well-being at work or even their overall well-being.

### **Limitations and Recommendation for Future Research**

With valuable insights gained from this research, it is not without limitations. This research employs a cross-sectional method so it cannot explain a causal relationship, while the results described in this research are a correlational relationship. For further research, if the aim is to explore cause and effect relationships, a longitudinal study can be carried out. Unlike cross-sectional studies that capture data at a single point in time, longitudinal studies enable researchers to track changes within individuals or groups over an extended period and explore how variables might influence each other over time.

This research relies entirely on self-reported data from the survey, this may introduce common method bias and subjectivity in responses. Additionally, the sample in this study, although actually quite capable of representing diverse Indonesian employees, actually does not fully reflect the large population of all employees in Indonesia. So, the results of this study may not be generalizable to all people in all places. For further research, the number of samples can be made larger to increase the potential for making broader generalizations. Also, to not rely fully on quantitative survey data, future research could extend beyond quantitative methods to incorporate qualitative approaches, capturing the richness of employees' experiences.

Furthermore, the results of this study can be a starting point for other in-depth explorations because there are several other variables that may also be related to the variables examined in this study. There are various variables that can be explored further, such as organizational culture, leadership styles, and technological interventions, to see the relationship between these variables and the variables that have been studied in this research, namely WL, PWSS, and HAW.

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