Work Culture in Post-Pandemic: Role of the Temporal Flexibility and Supportive Supervisor Culture Towards Employee’s Work Stress

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Abstract. Although the Covid-19 Pandemic has abated, its effects thrive to impact other areas, including the workplace culture. Temporal Flexibility and Supportive Supervisor Culture are crucial for employees in the pandemic era, yet many contradictions remain in the research. Additionally, little is known about the relationship between Supportive Supervisor Culture and other work cultures under the pretext of employee work-life balance. This study aimed to evaluate the combination of two cultures modifying the work stress score among employees during the pandemic. The Experimental Vignette Method (EVM) was utilized through manipulation and surveys to acquire a more profound knowledge of worker stress levels. The results indicated that the group with a non-Temporal Flexibility Culture and a less Supportive Supervisor Culture reported the highest levels of work stress. Additionally, marital status governs stress levels; the amount of work stress among unmarried individuals was higher than among married adults with children. However, there was no significant contrast between job positions and employee status in terms of work stress mean. Moreover, younger employees were discovered to be more stressed at work than those of older employees. This research will assist organizations in adopting a culture that promotes the psychological well-being of their employees in the post-pandemic era.

Keywords: Experimental vignette method; supervisory support; temporal flexibility; work culture; work stress.

INTRODUCTION

The Covid-19 pandemic has triggered sudden significant transformation in the work setting, such as abrupt termination of employment to maintain business operations, a fresh normal lifestyle implemented to avoid contracting the virus, and changes in work culture requiring adaptability, such as formerly working from the office to working from home, hybrid, and shifting working hours (Kinyita, 2015; Purwanto et al., 2020; Rahma & Wardiani, 2021; Sumant & Sushil., 2016). In 2023, adjustments in work culture are still occurring (Maulana, 2023; Purba, 2023), indicating that they occurred not only when the highest rate of the pandemic happened, but also when it began to diminish (or what is now projected to be dubbed post-pandemic).

These vast changes have a considerable effect on the psychological well-being of employees, including the onset of mental confusion, tension, and depression (Saleem et al., 2021; Yildirim & Arslan, 2022; Yunita & Saputra, 2019). According to Bardoel et al. (2014), stress in the workplace

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is a result of an adaptive response to the environment that entails physical, psychological, and behavioral effects. No employee can avoid work stress and those who can must accept this fact. Unmanaged stress, however, can result in emotional weariness, in which people lose their sense of purpose and fulfillment at work. Furthermore, consistent stress at work is associated with depression, anxiety, deteriorating physical health, high absenteeism rates, and a greater propensity to quit (Bardoel et al., 2014; O’Neill & Davis, 2011; Thorsteinsson et al., 2014).

According to Bailyn (1977), three work cultures will impact employees’ psychological well-being. The first culture is Temporal Flexibility, which allows employees to manage their work schedules in terms of time and place more independently. The second one is Operational Flexibility, which refers to employee’s freedom to decide their work processes without strict supervision. Lastly, it is a Supportive supervisor in the family context, which refers to a culture where immediate superiors consider employees’ work-life balance. The culture of flexible work (Work from Home, Work from Anywhere, Hybrid Working, etc.), which Bailyn (1977) refers to as Temporal Flexibility culture, was the most prevalent of these throughout the epidemic and prior to its aftermath.

The Culture of Temporal Flexibility allows employees to work more safely and with more flexible hours during the pandemic, as well as later in the post-pandemic period (Barbara et al., 2021). The work culture of Temporal Flexibility has become prevalent throughout Southeast Asia. Employees prefer flexibility in terms of working time (49%) and working location (48%) (Team, 2021). According to a poll gathered by the World Economic Forum (2020), since the pandemic era, 91.7% of Indonesian enterprises have allowed their staff additional possibilities to enforce a Culture of Temporal Flexibility.

The implementation of the Culture of Temporal Flexibility has been auspicious for decreasing time spent on work transportation, saving fuel and transportation costs to reduce congestion, which is a dominant issue for employees traveling to the city’s business district (Nordin et al., 2016; Drašler et al., 2021). Besides boosting corporate efficiency and reducing the likelihood of turnover rate, the flexibility provided by businesses brings other positive effects (Grobler & Bruyn, 2012; Obrenovic et al., 2020). A Culture of Temporal Flexibility offers favorable implications for employee psychological well-being, such as lowering stress and favorably predisposing employee happiness (Irawanto et al., 2021; Kazekami, 2020; Utami & Supriyadi, 2013). In addition to its benefits, however, previous studies have produced contradictory findings. A culture of temporal flexibility has also been disclosed to have negative effects, such as blurring the lines between personal and professional obligations, which may lead to employees feeling overburdened by their workload and ultimately stressed (Buffer. & AngelList., 2020; Liu & Lo, 2017; Lott, 2018; Ray & Pana-Cryan, 2021; Drašler et al., 2021).

The second work culture is the Culture of Operational Flexibility. This culture focuses more on work design, work systems, and work processes, which vary considerably from one company to another and are tied to each firm’s internal values, which are likely to be stable. Therefore, it has been decided that this value does not serve as the focus of this study. In the context of work-family balance, there is a third culture, the Supportive supervisor (in work-life balance context) Culture. This is also affiliated with preventing employee stress, but it is frequently disregarded (Kossek et al., 2018; Stankevičienė et al., 2021). A supportive supervisor culture for employee work and family life is crucial to comprehending an employee’s psychological health. When supervisors are perceived as supporting their family role, employees appear to experience less stress at work (Lapierre & Allen, 2006; Pan, 2018; Stankevičienė et al., 2021).

Support from direct superiors for family situations, such as asking about family circumstances or enabling employees to leave early to care for sick family members, would help employees feel at
ease in addressing personal family issues (Bailyn, 1997; Lapière & Allen, 2006; Sue, 2001). In a more flexible work environment where employees frequently feel overburdened by job and family responsibilities, little support from supervisors can exacerbate employee stress (Heejung & Tanja, 2018; Nordin et al., 2016; Rorong et al., 2021).

Former research on Supportive Supervisor Culture concentrates heavily on leadership styles. However, little is known about how Supportive Supervisor Culture interacts with other work cultures in the employee work-life balance context (Kossek et al., 2018). Also, it is inconsistent in terms of the association between Supportive Supervisor Culture and stress levels and employee satisfaction (Kula, 2017). In addition, there is still not much research examining the influence of Supportive Supervisor Culture on the family life of employees in certain scenarios, such as pandemic situations. Therefore, the purpose of this study is to determine the impact of the Cultures of Temporal Flexibility and Supportive Supervisor Culture on employee stress in the immediate post-pandemic period. In the post-pandemic period, it is expected that this study will provide employers with a new viewpoint when evaluating a psychologically healthy work culture.

If an employee’s tasks align with the company’s objectives, he or she will receive a reward. Not only is the company’s appreciation not limited to monetary compensation, but also takes the shape of moral support, which can boost the psychological well-being of employees. In this study, superiors who are concerned about the health and family life of their employees provide moral support. In addition, this assistance may incorporate the implementation of a Culture of Temporal Flexibility to guarantee the health of employees amid and post-epidemic. With the perception that employees receive adequate compensation, employees attempt to demonstrate actions that benefit the company, such as loyalty, job satisfaction, and positive affect, which influence work performance (Greenhaus et al., 2012; Stankevičienė et al., 2021; Szu-Yu & Maria, 2010).

This corresponds to the social exchange theory, which describes a process in which individuals are involved with at least two other people in an organization and exchange physical and non-physical activities, receive rewards or reinforcement from both parties and engage in reciprocal interactions (Cook et al., 2013). Social exchange is one of the influential ideas for understanding workplace behavior in an organizational context. Previous research has examined this idea to explain the effectiveness of bonuses offered by firms and superiors in physical and non-physical forms, as well as how they affect employee satisfaction and mental health (Lee & Zhang, 2008; Russell & Marie, 2005).

Work Culture in Practice

In practice, a business comprises more than one culture. In order to acquire a comprehensive understanding of which combination of cultures has a substantial impact on employee stress levels, it is requisite to examine diverse cultures (Staines & Christensen, 1990; Thompson et al., 2015). There are several businesses whose employees are granted to work at any time; however, they have a culture of terrible relations with their superiors who rarely discuss anything but work (Kenner, 2018; Russo & Morandin, 2019). This study examined how the interaction between the Cultures of Temporal Flexibility and Supportive Supervisors affects the stress levels of employees. In order to determine the subject in a condition where the Cultures of Temporal Flexibility and Supportive Supervisor Culture are subpar, researchers establish unfavorable conditions, namely a Culture of Non-Temporal Flexibility and a Culture of Less Supportive Supervisor. In this study, therefore, there are four distinct circumstances (Figure 1).

This study’s hypothesis, therefore, is a significant difference in work stress mean among combinations of work cultures.
Demographic Control Variables that influence towards employee’s work stress: 1) Sex. Previous research has demonstrated that the differences in features between men and women modify the Culture of Temporal Flexibility in both time and place. Men are typically adept at managing their time when working from home, in part due to the lack of domestic distractions (Clawson & Gerstel, 2014; Lott, 2018; Munsch, 2016). In contrast, women tend to experience less stress when offered the opportunity to work at more flexible hours and locations (Greenhaus et al., 1989; Heejung & Tanja, 2018; Lott, 2018), 2) Marital Status. In many research examining the Culture of Temporal Flexibility, marital status is a key component to consider. Men and women who are married and have children typically feel more at ease with flexible working hours (Munsch, 2016). Older individuals are more interested in family problems; thus, the ability to work from home can help them manage their professional and personal lives (Heejung & Tanja, 2018; Johnson et al., 2007), 3) Age. According to Super and Jordaan’s (1973) research, there are three stages of professional growth. Employees between the ages of 22 and 25 are in the exploration period and are less committed to their jobs. Between the ages of 25 and 30, employees’ dedication and stability in the workplace have begun to develop. Employees will begin seeking out greater challenges between the ages of 31 and 44 and will maintain their existing positions between the ages of 45 and 64. This study will concentrate on these age categories, which correspond to the working age in Indonesia.

METHOD

This study used the Experimental Vignette Method (EVM) to conduct subject-based experiments. Participants in this study were active employees with at least two years’ worth of contract or permanent employment experience. This study included participants between the ages of 22 and 64 who had experience working from home and the office. Besides, this study has received a certificate of ethical review approval (047/FPSi.Komite Etik/PDP.04.00/2022) from the Faculty of Psychology, Universitas Indonesia.
The narratives regarding the Culture of Temporal Flexibility and the Supportive Supervisor Culture are based on elements from Bailyn’s (1997) work culture measurement instrument developed by Sue (2001). To understand the level of stress in companies that do not have the Cultures of Temporal Flexibility and Supportive Supervisor Culture, the researcher crafted a narrative with the opposite (negative) contents of the items on the work culture measurement tool, also known as ‘Culture of Non-Temporal Flexibility’ and ‘Culture of Less Supportive Supervisor’. Each group received a single narrative. Details of the combination of work culture narrative division are provided in Table 1.

<table>
<thead>
<tr>
<th>Work Culture</th>
<th>Non-Temporal Flexibility</th>
<th>Temporal Flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive Supervisor</td>
<td>Treatment 1:</td>
<td>Treatment 3:</td>
</tr>
<tr>
<td></td>
<td>Non-Temporal Flexibility x Supportive Supervisor</td>
<td>Temporal Flexibility x Supportive Supervisor</td>
</tr>
<tr>
<td>Less Supportive</td>
<td>Treatment 2:</td>
<td>Treatment 4:</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Non-Temporal Flexibility x Less Supportive Supervisor</td>
<td>Temporal Flexibility x Less Supportive Supervisor</td>
</tr>
</tbody>
</table>

Per the work culture measuring tool, namely on the Temporal Flexibility Culture narrative, employees are permitted to begin work at any time and in a location of their choosing. In contrast, in a non-temporal flexibility culture, employees will have to set working hours and places following Indonesian norms (8 hours, starting from 8 am to 5 pm, working from the office). Supportive Supervisor Culture comprises a narrative that is also adapted to the work culture measurement item, namely superiors who pay attention to their staff by asking how employees and their families are doing and who recognize the place and responsibilities of employees within their families. Contrary to a Supportive Supervisor Culture, the narrative in a Less Supportive Supervisor Culture is negative. Participants will select at random a research link that will lead them to one of the narratives.

After reading the narrative, the Job Stress Scale (Karyn & Debra, 2000) was used to assess the participant’s degree of work-related stress using 12 items. The Job Stress Scale was validated using factor confirmation analysis and a model with a high level of fitness, as indicated by an Alpha Coefficient value of 0.95. The employed narrative and scale have been back-translated into Indonesian and evaluated by subject-matter specialists in Industrial and Organizational Psychology. Demographic data such as gender, age, tenure, position, and marital status were descriptively assessed as well as subjected to a One-Way ANOVA test to determine mean differences. One-Way ANOVA was utilized as well to find the difference in mean for the primary impact. In this study, interaction analysis between factors was not performed.

RESULTS AND DISCUSSION

Before the actual study was carried out, a pilot study including 31 individuals was conducted to ensure reliability and prevent manipulation. There was a significant difference between
manipulations (F (3,27)= [3.766], p= 0.022) and the Work Stress Scale yielded strong internal reliability (r= 0.962).

Table 2. Descriptive Analytics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>104</td>
<td>33.96</td>
<td>13.72</td>
<td>.005*</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
<td>27.80</td>
<td>10.27</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-24</td>
<td>28</td>
<td>40.32</td>
<td>12.17</td>
<td>.000*</td>
</tr>
<tr>
<td>25-30</td>
<td>46</td>
<td>32.84</td>
<td>13.51</td>
<td></td>
</tr>
<tr>
<td>31-44</td>
<td>42</td>
<td>29.26</td>
<td>11.12</td>
<td></td>
</tr>
<tr>
<td>45-64</td>
<td>3</td>
<td>27.71</td>
<td>12.23</td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried</td>
<td>69</td>
<td>34.89</td>
<td>13.64</td>
<td>.035*</td>
</tr>
<tr>
<td>Married without children</td>
<td>13</td>
<td>28.15</td>
<td>9.33</td>
<td></td>
</tr>
<tr>
<td>Married and have children</td>
<td>73</td>
<td>29.80</td>
<td>12.44</td>
<td></td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract</td>
<td>28</td>
<td>34.10</td>
<td>15.07</td>
<td>.330</td>
</tr>
<tr>
<td>Permanent</td>
<td>127</td>
<td>31.45</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>Position Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>74</td>
<td>32.27</td>
<td>12.83</td>
<td>.652</td>
</tr>
<tr>
<td>Senior Staff</td>
<td>15</td>
<td>31.13</td>
<td>12.64</td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>17</td>
<td>35.82</td>
<td>12.66</td>
<td></td>
</tr>
<tr>
<td>Jr. Manager</td>
<td>13</td>
<td>30.53</td>
<td>14.37</td>
<td></td>
</tr>
<tr>
<td>Sr. Manager</td>
<td>25</td>
<td>28.84</td>
<td>13.76</td>
<td></td>
</tr>
<tr>
<td>C-Level</td>
<td>11</td>
<td>33.45</td>
<td>12.47</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 years</td>
<td>27</td>
<td>38.25</td>
<td>12.53</td>
<td>0.16*</td>
</tr>
<tr>
<td>3-5 years</td>
<td>21</td>
<td>34.09</td>
<td>15.19</td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>97</td>
<td>31.16</td>
<td>12.41</td>
<td></td>
</tr>
<tr>
<td>Above 10 years</td>
<td>70</td>
<td>29.25</td>
<td>12.98</td>
<td></td>
</tr>
</tbody>
</table>
Cronbach Alpha analysis for the 12-item Work Stress Scale obtained a value of 0.96, with a Crit score ranging from 0.591 to 0.925. There was a total of 155 participants in this study, consisting of 104 females (67%) and 51 males (33%). Most participants were aged between 25 and 30 (n = 46), followed by those between 31 and 44 (n = 42). In terms of marital status, 47% (n = 73) of participants were married and had children, while 44% of them (n = 69) were unmarried. In addition, 81% of the participants were permanent employees, and the highest employee position, with a total of 74 individuals, was staff. Most participants in this study (n = 97) had a tenure of 5 to 10 years, followed by those with more than 10 years of experience (n = 70). The findings of a descriptive study of reliability, stress mean scores, and standard deviation for all variables are presented in Table 2.

To probe the hypothesis, a one-way analysis (One-Way ANOVA) was performed to obtain the mean differences between the four treatment groups. The results of the analysis showed that there was a significant difference in the mean score of work stress between groups \(F(3,151)=13.661, p=0.000\) with the highest stress score acquired by the group with a combination of Non-Temporal Flexibility Work Culture and Less Supportive Supervisor Culture (n = 41; M = 40.04). The second highest work stress score was found in a Work Culture of Temporal Flexibility with a Less Supportive Supervisor Culture (n = 38; M = 33.78) and the lowest stress score was in a Culture of Temporal Flexibility with a Supportive Supervisor Culture (n = 36; M = 23.72). Based on these findings, it can be inferred that hypothesis 1 is accepted. This finding is in line with previous studies that a work culture of Temporal Flexibility with Supportive Supervisors enables employees to work safely and balance life between work and family (Irawanto et al., 2021; Stankevičienė et al., 2021).

**Advanced Analysis**

A one-way analysis (One-Way ANOVA) was performed on demographic data to appraise whether there was a significant difference in mean scores between groups. Women exhibited significantly higher work stress scores than men \(F(1,153)=[8.042], p=0.05\), as determined by the analyses \(F(1,153)=[8.042], p=0.05\). Moreover, there was a difference in job stress based on experience \(F(3,151)=[3.528], p=0.016\), in which those with less than 2 years of work history appeared to be more in distress than those with more than 10 years \(F(3,151)=[13.661], p=0.000\). This corresponds to the finding of a significant difference in work stress ratings by age group \(F(3,151)=[6.574], p=0.00\), with the greatest difference in work stress scores occurring between the ages of 22 to 24 and 45 to 64 \(F(3,151)=[6.574], p=0.00\). Figure 2 demonstrates that as a person ages, their work stress decreases.

### Table 3.

<table>
<thead>
<tr>
<th>Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Temporal Flexibility x Supportive Supervisor</td>
<td>29.25</td>
<td>11.31</td>
<td>25.62</td>
<td>32.87</td>
</tr>
<tr>
<td>Non-Temporal Flexibility x Less Supportive Supervisor</td>
<td>40.04</td>
<td>13.00</td>
<td>35.94</td>
<td>44.15</td>
</tr>
<tr>
<td>Temporal Flexibility x Supportive Supervisor</td>
<td>23.72</td>
<td>9.19</td>
<td>20.61</td>
<td>26.83</td>
</tr>
<tr>
<td>Temporal Flexibility x Less Supportive Supervisor</td>
<td>33.78</td>
<td>12.42</td>
<td>29.70</td>
<td>37.87</td>
</tr>
</tbody>
</table>
Figure 2.
Relationship between Age and Work Stress

According to Super and Jordaan (1973), employees between the ages of 22 and 24 years are in the trial phase, as they are exploring the workforce and are biased in their career path. Consequently, young employees frequently question themselves at work and are prone to stress. This contrasts with more senior professionals, such as those of 45 to 64 years, who have gone through different periods of their careers and have attained stable position (Cummings & Worley, 2014; Gati & Kulcsár, 2021).

The factor of marital status was similarly associated with significant work stress scores (F=(2,152)=[3.430], p= 0.035). The level of work stress among unmarried individuals was higher than those of married and had children (p= 0.05, 95% CI = 0.0080, 10.1726). For married participants, work stress appears to be higher in the group that did not have a Temporal Flexibility Work Culture, regardless of supervisor support (F=(1.71)=[20.607]. p= 0.000). Besides, there was no significant difference between job positions (p=0.652) and employee status (p=0.330) in terms of work stress mean.

This result contradicts earlier studies that found the opposite (Lawrence & Ike, 2016; Panisoara & Serban, 2013). In a study conducted by Sullivan and Gershuny (2013), it was discovered that married with children felt more engaged with their work and had higher psychological well-being, particularly when offered the option to work on a more flexible schedule. This may be the result of having more time for the family, even while working full-time (Greenhaus et al., 2012; Lott, 2018).

CONCLUSION

The findings revealed that the group with a non-Temporal Flexibility Culture and a less Supportive Supervisor Culture experienced a high level of work stress. Additionally, the marriage factor affected stress levels; the degree of work stress among unmarried individuals was greater than that of married adults with children. However, there was no substantial difference in work stress between job positions and employee status. Additionally, in terms of age, younger workers, specifically those between the ages of 22 and 24, were found to be more in distress at work than those of older workers.
This research is anticipated to aid businesses in preparing for the post-pandemic endeavors. Even though the pandemic has diminished in Indonesia and the culture of 100% working from the office has been enforced, it was discovered that employees found it challenging to return to the work culture that was there even prior to the pandemic (Fatimah, 2021; Hakim, 2022). The Culture of Temporal Flexibility has evolved into a new culture, and it will take time for it to adjust once more. Companies are encouraged to continue implementing the Work Culture of Temporal Flexibility or to establish a certain number of quotas for workers to work more flexibly to overcome this. In addition to the element of the Culture of Temporal Flexibility, the Culture of Supportive Supervisor in the family context must be a major priority. It may be possible for supervisors to develop more communicative, personal, and meaningful relationships with their team members in the post-pandemic age, as communication appeared to be hindered during a pandemic.

However, significant limitations exist in this study to inform future research. Other factors, such as the type of industry or the individual’s workload, may modify employee work stress. As previous research has disclosed, in the work culture of Temporal Flexibility, employees perceive their workload to be increasing due to technological restrictions and a lack of peer assistance.

REFERENCES


https://doi.org/10.3846/jbem.2021.14729


