

The Influence of Flexible Work Arrangements on Employee Innovation Moderated by Human Resource Support in the Information Technology and Telecommunications Industry: A Mixed-Methods Approach

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Article History

Received 2024-10-23

Reviewed 2024-12-10

Accepted 2024-12-13

Published 2025-01-01

Keywords

Flexible Working Hours

Telecommuting

Human Resource Support

Employee Innovation

Sustainable Work Practices

Abstract

Purpose- This study, grounded in the Demand–Resource–Individual Effects (DRIVE) Model and Social Exchange Theory (SET), explores the impact of Flexible Work Arrangements (FWAs)—namely Flexible Working Hours (FWH) and Telecommuting/Work From Home (T/WFH)—on Employee Innovation (EI), with an examination of Human Resource Support (HRS) as a potential moderating factor.

Design/Methodology- Utilizing a mixed-methods design, this research integrates quantitative results from 150 purposively and snowball-sampled respondents with qualitative insights from four detailed interviews. Statistical analyses included Correlation, Regression, and Explanatory Sequential analysis.

Findings- The study’s key findings show that both FWH and T/WFH significantly enhance EI. While quantitative findings indicated no significant moderating effects of HRS, qualitative responses underscored its vital role in fostering a supportive and innovative environment.

Practical Implications- These findings underscore the crucial role of FWAs in enhancing innovation and suggest that fostering schedule autonomy and strengthening support systems can significantly boost innovation in hybrid work setups.

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12 Introduction

13 The COVID-19 pandemic has accelerated the adoption of digital technology for flexible working arrangements
14 (FWAs), particularly evident in the Philippine telecommunications sector. These FWAs not only attract and
15 retain highly skilled workers but also demand enhanced governmental support for stable internet services, which
16 is crucial for economic progress (Gadueña et al., 2022; Philippine Statistics Authority, 2020 as cited in Hung et
17 al., 2023). Information technologies such as smartphones and computers have become indispensable in modern
18 employment, driving significant interest in remote work within IT and IT-enabled industries. These industries
19 strive to involve the workforce actively, engage stakeholders, retain talent, and reduce turnover (Prasad et al.,
20 2020).

21 Post-pandemic, FWAs have become a strategic tool for retaining knowledge-based employees (Bjarntoft et al.,
22 2021, as cited in Wang & Xie, 2023). Studies have highlighted FWAs' role in fostering innovative behaviors
23 through Human Resource Support (HRS), psychological empowerment, work-life balance, and job satisfaction,
24 thereby enhancing employee innovation performance (Berkery et al., 2017; Obrenovic et al., 2020; Wang & Xie,
25 2023). Despite their widespread use, there is a notable lack of research on the impact of FWAs on employee
26 innovation (EI) within the telecommunications and IT sectors in the Philippines. This study aims to fill this gap
27 by investigating how FWAs influence EI, considering the moderating role of HRS. It also explores the
28 prevalence of flexible work hours and the visibility of innovation-promoting practices among employees.

29 The primary research question is: *How do flexible work arrangements influence employee innovation in the IT and*
30 *Telecommunications industries in the Philippines?*

31 Sub-questions include:

- 32 • How does Human Resource Support moderate the relationship between flexible work arrangements
33 and employee innovation?
- 34 • What are the benefits and drawbacks of implementing flexible work arrangements for employee
35 innovation in these industries?
- 36 • To what extent are flexible work hours practiced, and how visible are innovation-promoting practices
37 among employees?

38 This research is poised to provide actionable insights that could influence labor policy and HR practices within
39 the Philippines. By uncovering the dynamics between FWAs and EI, it offers a comprehensive framework to
40 assist labor lawmakers and Human Resource professionals in creating a conducive environment that nurtures
41 innovation. Additionally, the findings from this study will serve as a strategic guide for IT and
42 Telecommunications companies, enabling them to optimize FWAs not just to retain talent but also to enhance
43 competitiveness and drive innovation in the sector. Such optimization is crucial for sustaining growth and
44 adaptability in an increasingly digital and flexible working environment. The following section reviews the
45 existing literature to contextualize these impacts and outline the theoretical foundations of the study.

46 Literature Review

47 The IT and telecommunications sectors are central to the economic development of the Philippines, marked
48 by significant growth due to advancements in technologies such as cloud computing, big data, and artificial
49 intelligence. These sectors not only enhance connectivity but also improve the efficiency of services, making
50 them pivotal for the nation's progress.

51 This section provides an overview of the variables and the link between the independent (FWH and T/WFH)
52 and dependent (EI) variables. EI, the dependent variable in this study, involves generating, promoting, and

53 realizing ideas, including problem identification, solution implementation, and product or service development
54 (Scott & Bruce, 1994, as cited in Vinh et al., 2019). Additionally, this section includes the moderating variable
55 used in this study.

56 **Impact of FWH on EI**

57 FWH refers to agreements between employers and employees that allow employees to determine their working
58 hours while still meeting contractual requirements (Shepard, 1996). Research by Setiyani et al. (2019) and Idowu
59 (2020) highlights that FWH supports work-life balance, which is crucial for employee engagement and
60 motivation.

61 **Impact of T/WFH on EI**

62 T/WFH has evolved to encompass remote work facilitated by modern information and communication
63 technologies (Nilles, 1994, p.109; Steidelmüller et al., 2020). It offers significant professional advantages,
64 including better performance and productivity, professional efficiency, and concentration (Biron & van
65 Veldhoven, 2016; Bloom et al., 2015; Martin & MacDonnell, 2012; McNaughton et al., 2014; Vega et al., 2015;
66 Wibowo et al., 2022, as cited in Vayre, 2022).

67 **Moderating Role of HRS**

68 HRS is a significant organizational support that increases employee morale and satisfaction (Wahab & Tatoglu,
69 2020). HRS can generally contribute to higher performance results (Truss et al., 2013) and improved employee
70 well-being (Huang et al., 2016). Additionally, when employees receive high levels of support, their emotional
71 and work resources are supplemented to enhance job autonomy, actively respond to work-family conflicts, and
72 demonstrate high work engagement (Ma et al., 2023). Wahab & Tatoglu (2020) also concluded that workers'
73 efforts at work would increase and be improved as a result of the concern Human Resources has regarding the
74 welfare of these workers. With this in mind, the researchers chose to explore the moderating effect of HR
75 Support as this could enhance and improve psychological empowerment on employees' work performance
76 (Wang & Xie, 2023).

77 **Research Gap**

78 Despite the recognized benefits of FWAs in fostering employee innovation, there is a notable lack of
79 comprehensive research exploring this relationship within the context of the Philippine IT and
80 telecommunications sectors. Most existing studies focus on generic outcomes such as job satisfaction and
81 productivity, with little emphasis on how FWAs directly influence the innovative capabilities of employees.
82 Furthermore, the moderating role of human resource support in this dynamic remains underexplored. This
83 study aims to fill these gaps by examining how FWH and T/WFH, as specific types of FWAs, impact employee
84 innovation, and how human resource support may enhance or hinder this effect. This could help aspiring IT
85 and Telecommunication business owners decide on what working arrangement would be most effective for
86 their employees to be successful in the IT and Telecommunications industry.

87 **Framework of the Study**

88 The study examines the relationship between FWAs and EI using the Social Exchange Theory (SET) and the
89 Demand–Resource–Individual Effects (DRIVE) Model. According to Sukumaran and Lanke (2021), SET
90 posits that employees reciprocate improved performance when they feel valued by their organization.
91 Meanwhile, the DRIVE model, as described by Wang and Xie (2023), assesses how work demands, resources,
92 and personal factors influence outcomes—including the impact of flexible work arrangements on innovation.
93 Furthermore, the moderating effect of HR is explored for its potential to enhance employee performance
94 through psychological empowerment (Wang & Xie, 2023).

95 **Linkage between SET and DRIVE Model**

96 **SET, DRIVE Model, and FWH**

97 Both the DRIVE model and SET explain FWH’s influence on EI. The DRIVE model poses FWH as a resource
 98 that fosters innovation, enhances autonomy, and reduces social pressure. However, if poorly implemented,
 99 FWH may also act as a demand that creates stress and reduces innovation. Meanwhile, SET implies that FWH
 100 strengthens organizational support by encouraging reciprocity through innovative behavior unless poorly
 101 implemented, which may lead to low-quality exchanges.

102 **SET, DRIVE Model, and T/WFH**

103 The DRIVE model emphasizes T/WFH as both a resource (e.g., flexibility) and a demand (e.g., isolation).
 104 T/WFH may positively impact employees by reducing stress while also negatively affecting those who may
 105 struggle with communication barriers. SET supplements this as T/WFH is viewed as a trust-building tool,
 106 promoting reciprocity and innovation.

107 **SET, DRIVE Model, and HRS**

108 In alignment with the DRIVE model’s focus on resources mitigating demands, HRS as a moderator enhances
 109 FWH’s positive impact by providing resources and addressing challenges like isolation. Similarly, SET
 110 emphasizes HRS as fostering high-quality exchanges by meeting employee needs enhances trust and innovation.
 111 However, insufficient HRS may weaken this relationship and reduce the benefits of FWH on EI. Similarly, the
 112 ability of HRS to reduce the stress associated with T/WFH by providing tools and promoting collaboration
 113 can be hypothesized using the DRIVE model as HRS allows employees to innovate in the face of challenges.
 114 SET reinforces this idea by framing HRS as essential for maintaining reciprocity and fairness in T/WFH
 115 arrangements. Perceived inequities without strong HRS may also weaken the effect of T/WFH on EI.

116 Based on these theories, Figure 1 illustrates the conceptual framework of the study, which emphasizes each
 117 variable to investigate further the relationship between the two FWAs (FWH and T/WFH) towards EI as
 118 moderated by HRS.

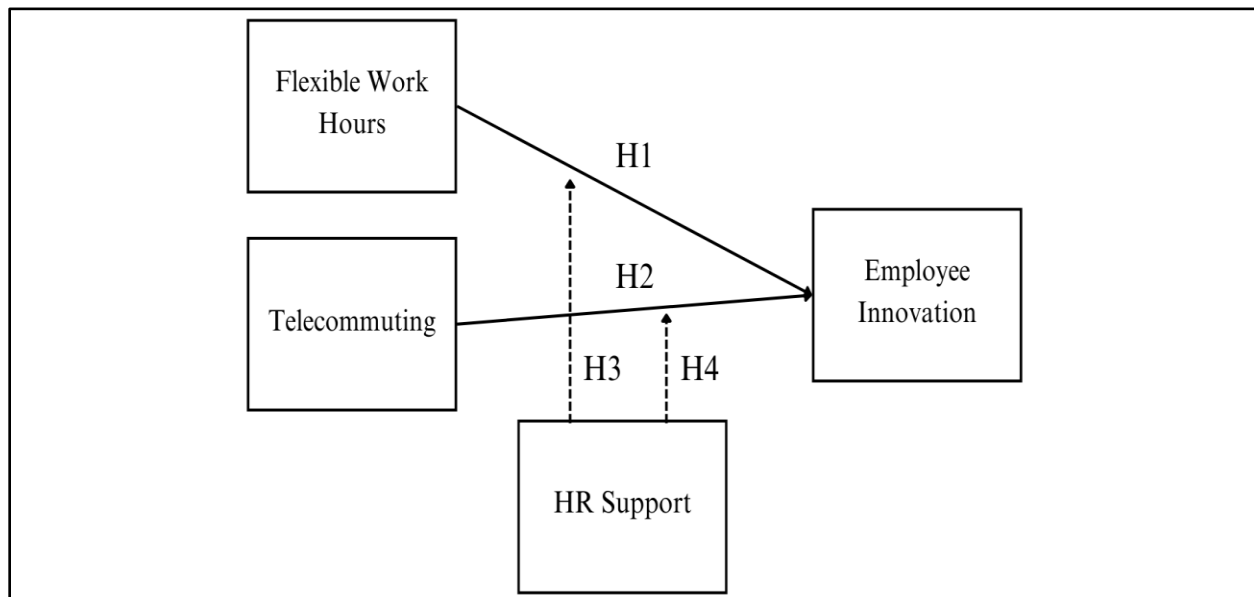


Figure 1: Operational Framework

119
120

121 In relation to the different variables stated in the literature review and the theories listed below are the
 122 hypotheses of the study:

123 **H₀₁**: FWH does not have a significant positive effect on EI.

124 **H_{a1}**: FWH does have a significant positive effect on EI.

125 **H₀₂**: T/WFH does not have a significant positive effect on EI.

126 **H_{a2}**: T/WFH does have a significant positive effect on EI.

127 **H₀₃**: HRS does not significantly moderate the relationship between FWH and EI.

128 **H_{a3}**: HRS does significantly moderate the relationship between FWH and EI.

129 **H₀₄**: HRS does not significantly moderate the relationship between T/WFH and EI.

130 **H_{a4}**: HRS does significantly moderate the relationship between T/WFH and EI.

131 **Methodology**

132 The research was conducted within the National Capital Region (NCR) of the Philippines, a hub for the IT and
133 Telecommunications industry due to its dense population and concentration of corporate headquarters.
134 Participants, all residing in the NCR, were recruited online via platforms such as Facebook Messenger,
135 LinkedIn, and Email, encompassing a diverse sample of individuals engaged in remote or hybrid work setups
136 within these sectors.

137 The study utilized a mixed-method approach combining descriptive, correlational, and explanatory sequential
138 designs to comprehensively analyze the interactions between FWAs and EI, with HRS serving as a moderating
139 variable. This innovative approach allowed for a detailed exploration of the dynamic relationships among the
140 variables, enhancing the depth of understanding regarding their interplay. In line with this, a mixed-method
141 approach was appropriate for this study as it allowed the researchers to leverage the strengths of both
142 quantitative and qualitative methodologies. The quantitative analysis provided statistical significance of the
143 direct and indirect effects between the independent and dependent variables. Meanwhile, the qualitative insights
144 added depth by capturing diverse perspectives and underlying factors that further explain the quantitative
145 findings. This integration enabled the study to address why these relationships occur, making the findings both
146 contextually relevant.

147 The initial target sample size was calculated to be approximately 384 based on a formula for an unknown
148 population. However, due to time constraints, this was pragmatically adjusted to 200 participants, using non-
149 probability methods such as purposive and snowball sampling. This adjustment has implications for the
150 generalizability of the findings as a smaller sample size, combined with non-probability methods, may limit the
151 ability to make broad inferences regarding the wider population. In addition, the lack of random sampling may
152 introduce selection bias and reduce external validity. However, this approach was appropriate for the study as
153 it ensured the inclusion of respondents who met specific criteria: Filipino citizens residing in Metro Manila, and
154 actively engaged in IT or Telecommunications roles for at least two years, either in managerial or non-
155 managerial capacities. Such targeted sampling aligns with the study's objectives, prioritizing contextual relevance
156 and depth over generalizability which provides more meaningful insights into the specific population. Future
157 research may aim for larger samples to enhance generalizability and mitigate bias.

158 The survey instrument included 52 Likert scale-rated items, distributed across sections on FWH (10 items),
159 T/WFH (12 items), EI (21 items), and HRS (9 items). Reliability testing was rigorously conducted using
160 Cronbach's Alpha, with coefficients for all variables exceeding the 0.70 threshold, indicating high internal
161 consistency and reliability of the measures used.

162 Descriptive statistics elucidated central tendencies and distributions, while Pearson Correlation Coefficients,
163 multicollinearity analysis, and multiple linear regression models were applied to quantify the relationships and
164 impacts among the study variables. Furthermore, moderation analysis was conducted to examine the influence
165 of HRS on the FWH and T/WFH effects on EI. Hierarchical regression and Structural Equation Modeling
166 (SEM) were methods considered instead of multiple linear regression. However, as hierarchical regression
167 analyzes variables of interest after controlling for other variables (University of Virginia, n.d.), it was not the
168 method appropriate for this study as the researchers were only interested in observing two to three variables at
169 a time. SEM, on the other hand, has a statistical pre-requisite that requires the variables of the study to be
170 normally distributed (Statistics Solutions, n.d.). As this study's variables fall under a non-normal distribution,
171 this method was not chosen for this study. Instead, the study chose to analyze its data using moderation analysis.

172 Qualitative insights were also gathered through Zoom interviews with four employees (two managerial and two
173 non-managerial), enriching the quantitative findings. The interviewees provided diverse insights into FWAs, EI,
174 and HRS. The researchers identified patterns and coded responses to highlight similarities and differences,
175 which were then compared to the quantitative results to deepen the study's findings. The interview questions,
176 derived from the literature review and aligned with the survey questions, covered aspects of FWH, T/WFH,
177 EI, and HRS to ensure a comprehensive understanding of the contextual dynamics influencing FWAs and their
178 effect on innovation.

179 Results

180 Respondent Demographics

181 The demographics of the 150 respondents who participated in the study offered insights into their views on
182 FWH, T/WFH, EI, and HRS. With this, the majority of respondents are identified to be male (70.67%) and
183 aged 31 or older (49.33%). Importantly, all respondents are engaged in FWAs, ensuring they meet the study's
184 criteria. Notably, the largest number of respondents are affiliated with the two telecommunications company,
185 each representing 12.67% of the sample. Additionally, the IT department is the most represented, with 28% of
186 respondents. In terms of work setup, most follow a hybrid schedule of two remote and three onsite days per
187 week. Lastly, 33.33% of respondents have been in flexible work arrangements for approximately four years,
188 highlighting their significant experience with these setups.

189 Descriptive Analysis

190 As previously mentioned, 150 respondents were able to answer the questionnaire and provide their perceptions
191 toward the independent variables. A descriptive analysis was conducted to summarize respondents' perspectives
192 on FWH, T/WFH, EI, and HRS in which the data is summarized with the calculated mean and standard
193 deviation for each variable to provide clear insights and meaningful interpretation. These values were achieved
194 through Jamovi. Respectively, the Mean of FWH, T/WFH, EI, and HRS arrived at the values of 4.371, 3.968,
195 3.878, and 3.798. As for the Standard Deviation, these are known to be 0.594, 0.530, 0.408, and 0.917. Moreover,
196 the Mean score and Standard Deviation for every question categorized under each variable were also calculated.

197 For the respondents' perceptions of FWH, its mean of 4.371 draws back to the findings of each question asked
198 about this variable in the survey questionnaire. The respondents also agree that FWH boosts their optimism
199 toward work responsibilities, provides better control over their work hours, and enables more efficient time
200 planning. Additionally, respondents believe that FWH enhances their productivity by allowing them to work
201 during their most optimal hours.

202 As for T/WFH, the findings would be that respondents partly agree that working from home offers an energetic
203 atmosphere and some freedom in choosing tasks. However, respondents also have mixed feelings about the
204 absence of idea theft and workplace humor, as they only partly agree with these aspects. Moreover, respondents

205 strongly agree that T/WFH allows time to explore new ideas and that their employers trust them in this setup.
 206 They also appreciate the cost savings from reduced commuting, with this element receiving the highest mean
 207 score (4.620) among all telecommuting-related questions. Additionally, respondents agree that WFH enables
 208 them to work during their most productive hours. Despite this, neutrality is evident in regard to power struggles
 209 and mixed views on feeling welcomed when presenting new ideas.

210 Meanwhile, the respondents' views on EI are that they strongly agree that they actively seek improvement
 211 opportunities, with a mean score of 4.607, and explore new methods and solutions. However, they only partly
 212 agree on engaging with issues outside their daily work and motivating others about their ideas. While
 213 respondents partly agree on convincing colleagues and systematically introducing innovative ideas, they strongly
 214 agree that they contribute to and develop new ideas regularly. In contrast, they strongly believe in the value of
 215 their projects, disagreeing that management is mistaken in introducing them, and strongly agree that these
 216 projects are important and necessary. Finally, respondents strongly agree that they enjoy their work, complete
 217 tasks successfully, and adhere to standard procedures.

218 Lastly, for HRS, mean scores for all questions (HRS1-HRS9) ranged from 3.653 to 3.893, thus indicating a
 219 general sense of reservation. Respondents partly agree that HR practices create a positive work environment,
 220 offer job satisfaction schemes, and motivate employees. They also partly agree that HR practices are regularly
 221 reviewed and upgraded, that training and development programs meet current needs, and that these practices
 222 boost their confidence and contribute to skill development. Additionally, they agree that HR policies are
 223 communicated clearly and that managers are aligned on implementing these policies.

224 **Correlation Analysis**

225 *Table 1. Correlation Matrix*

		FWH	T/WFH	EI	HRS
FWH	Pearson's r	–			
	df	–			
	p-value	–			
T/WFH	Pearson's r	0.590	–		
	df	148	–		
	p-value	< 0.001	–		
EI	Pearson's r	0.596	0.630	–	
	df	148	148	–	
	p-value	< 0.001	< 0.001	–	
HRS	Pearson's r	0.552	0.427	0.412	–
	df	148	148	148	–
	p-value	< 0.001	< 0.001	< 0.001	–

226 According to Akoglu (2018), the correlation between the two variables is indicated by the letter r and measured
 227 by a value ranging from -1 to +1. In line with this, zero indicates no connection, whereas 1 indicates "complete
 228 or perfect correlation" (Akoglu, 2018). As the researchers ran a correlation analysis in Jamovi, results show that
 229 there is a moderately positive correlation between FWH and T/WFH ($r = 0.590$). FWH shows a moderately
 230 positive correlation with EI ($r = 0.596$). Moreover, T/WFH also exhibits a moderately positive correlation with
 231 EI ($r = 0.630$). Furthermore, the correlations between these variables and HRS are also moderately positive,
 232 with FWH and HRS ($r = 0.552$), T/WFH and HRS ($r = 0.427$), and EI and HRS ($r = 0.412$). Furthermore, the
 233 p-values are all below the significance level (0.05), which indicates that the correlation between these variables
 234 is all significant.

235 Discussion

236 Descriptive Analysis

237 The respondents' perceptions of FWH, which had a mean of 4.371, imply that respondents strongly agree that
 238 FWH helps them maintain a healthy work-life balance and show strong support for its implementation in their
 239 organizations. The respondent's answers to the survey questionnaire suggest that FWH are well-received and
 240 contribute positively to both work-life balance and productivity. These align with the study conducted by
 241 Setiyani et al. (2019), in which FWH was found to help improve work-life balance and employee engagement.
 242 Setiyani et al.'s (2019) findings also indicated that FWH positively impacts employee motivation and
 243 engagement. Therefore, implementing FWH can lead to enhanced motivation and engagement levels among
 244 employees. These findings address the first hypothesis where FWH has a positive/ no positive impact on EI.
 245 As for the results of the second hypothesis of T/WFH positive/no positive impact on EI, it could be stated
 246 that respondents generally view T/WFH positively, especially in terms of trust, flexibility, and cost savings.
 247 Similarly, Steidelmüller et al. (2020) conducted a study that identified the benefits of Telecommuting, these
 248 being flexibility, greater autonomy, better work-life balance, higher productivity, and creating adverse working
 249 conditions for employees.

250 *Table 2. Descriptive Analysis*

Variable	N	Mean	Std. Deviation
FWH	150	4.371	0.594
T/WFH	150	3.968	0.530
EI	150	3.878	0.408
HRS	150	3.798	0.917

251 The results of EI emphasize that improvement in the clarity and transparency of their organization's
 252 compensation structure and project-related remuneration is essential, given that the majority of the respondents
 253 only partly agree with this. Overall, the findings highlight a proactive approach to innovation while having some
 254 reservations about compensation transparency and motivating others.

255 Lastly, the HRS findings suggest that HRS in the workplace has room for improvement in communication and
 256 effectiveness. Given these insights, the benefits of HRS in the workplace of the different respondents are not
 257 fully maximized despite this being a promoter of active innovation in the workplace. In relation to this, a study
 258 conducted by Park et al. mentioned that for businesses to accomplish innovation and diverse development,
 259 efficient use of internal resources, the acquisition of external resources, and their integration are necessary (Park
 260 et al., 2019).

261 Correlation

262 Pearson's correlation coefficient is commonly used to determine the strength of the relationship between two
 263 variables (Senaviratna & Cooray, 2019). According to Akoglu (2018), the correlation between the two variables
 264 is indicated by the letter r and measured by a value ranging from -1 to +1. The correlation results of the study
 265 indicate that IT or Telecommunications companies implementing FWH tend to support T/WFH, that FWH
 266 may nurture EI, and T/WFH can also positively influence EI. Lastly, the correlations between HRS and FWH,
 267 T/WFH, and EI indicate an evident association between FWH, T/WFH, and HRS.

268 Multicollinearity

269 In determining the presence of multicollinearity among each independent variable, the Variance Inflation Factor
 270 (VIF) and Tolerance were calculated. Multicollinearity is present when the VIF is higher than 5 to 10 (Kim,
 271 2019). Meanwhile, a tolerance value below 0.1 signifies a significant issue with collinearity and implies that a

272 tolerance value less than 0.2 indicates the presence of a potential collinearity problem (Senaviratna & Cooray,
 273 2019). With this, the value that was arrived at for the VIF of FWH and T/WFH to EI is 1.533, with its tolerance
 274 also being 0.652. This indicates that multicollinearity is not a concern as it is not present for the independent
 275 variables of the study since the calculated VIF is lower than 5, and its tolerance value exceeds the recommended
 276 minimum of 0.2. These results affirm that FWH does not exhibit multicollinearity with T/WFH, which ensures
 277 the reliability of its impact assessment on the dependent variable, EI.

278 **Multiple Linear Regression**

279 Multiple linear regression is used to predict the outcome of the dependent variable based on the value of two
 280 or more independent variables (Taylor, n.d.). Firstly, Cook’s distance (D_i) was used to detect influential outliers
 281 that could affect the multiple linear regression model, wherein this measures the impact of removing each
 282 observation on the residuals (Boussiala, 2020). Following PennState Ebberly College of Science (n.d.), if D_i is
 283 over 0.5, the data point warrants further investigation as the i^{th} data point may be influential, and if this is over
 284 1, this is quite likely influential. On the other hand, if D_i varies greatly from the other D_i values, it is almost
 285 certainly influential. Given this, Cook’s distance of FWH and T/WFH is equivalent to 0.215, thus implying that
 286 the data point is not influential and has no significant influence on the estimated regression coefficients.

287 *Table 3. Model Fit Measures of FWH and T/WFH to EI*

Overall Model test							
Model	R	R ²	Adjusted R ²	F	df1	df2	p
1	0.688	0.474	0.467	66.226	2	147	<.001

Model Coefficients - EI							
Predictor	Estimate	SE	95% Confidence Interval		t	p	
			Lower	Upper			
Intercept	1.538	0.205	1.133	1.943	7.502	<.001	
FWH	0.237	0.051	0.136	0.337	4.648	<.001	
T/WFH	0.329	0.057	0.216	0.442	5.761	<.001	

288 Multiple linear regression was used to analyze the relationship between FWH and T/WFH with EI. The results
 289 revealed that the model’s R² of 0.474, which shows 47.4% of the variance in EI, is predicted by FWH and
 290 T/WFH. Meanwhile, the adjusted R² of 0.467 confirms the model’s explanatory power is strong without
 291 overfitting. Considering the rule that if $F > 2.5$, the null hypothesis that all model parameters are zero is rejected
 292 (Kissell & Poserina, 2017). Provided that results show that the F-statistic is 66.226 and $p < .001$, it can be
 293 concluded that FWH and T/WFH effectively predict EI with the indicated p-value.

294 When examining the predictors, both FWH and T/WFH have p-values of <0.001, less than the standard value
 295 of $p \leq 0.05$ at a 95% level of significance. Therefore, the null hypotheses (H_{01} and H_{02}) are rejected, and the
 296 alternative hypotheses (H_{a1} and H_{a2}) stating that FWH and T/WFH have positive significant effects on EI are
 297 accepted. Furthermore, given that the coefficient of the slope for both predictor variables is positive, the
 298 multiple linear regression model shows a positive relationship between FWH, T/WFH, and EI. This indicates
 299 that increases in FWH and T/WFH are associated with increases in Employee Innovation. Specifically, this
 300 means that for every unit increase in FWH, there is a 0.237 increase in EI. Meanwhile, for every unit increase
 301 in T/WFH, there is a 0.329 increase in Employee Innovation (EI).

302 **Moderation Analysis**

303 The Moderation Analysis was used to determine whether HRS supports the relationship between FWAs and
 304 EI. Upon the execution of this, results showed that 48.9% of the variance in Employee Innovation ($R^2 = 0.488$),

with statistical significance ($F(5, 144) = 27.4, p < 0.001$), is statistically significant. However, neither FWH, Estimate = -0.135, $p = 0.533$) nor T/WFH (Estimate = 0.497, $p = 0.080$) significantly influence Employee Innovation. As for the moderator, HRS (Estimate = -0.235, $p = 0.332$) also shows no significant effect. Consequently, the interaction terms FWH*HRS (Estimate = 0.104, $p = 0.087$) and T/WFH*HRS (Estimate = -0.048, $p = 0.500$) are not significant, indicating that HRS does not moderate the relationship between FWH or T/WFH and Employee Innovation. Therefore, the null hypotheses (H03 and H04) are accepted stating that HRS has no positive moderating effect on the relationship between FWH and EI or between T/WFH and EI. Furthermore, this contradicts the study of Jyoti et al. (2017), who emphasized that innovation is brought about by high-performance human resource practices as this is vital in Organizational Learning. The study resulted in a negative moderating effect, and the reason for this may be the unequal distribution of the respondents' gender, in which the majority of them are male. Additionally, as evidenced by the lowest mean score of 3.653 for HRS4, "Our HR practices are reviewed and upgraded on a regular basis," the respondents believe that HR practices are not frequently reviewed and upgraded. In relation to Wahab and Tatoglu's (2020) study, another reason why there may not have been moderation could be that most HR departments have adopted the same practices from other companies. With this, it could be emphasized that respondents brought up comparable programs that their HR department runs, including events, incentives, online courses, and benefits. This suggests that the insignificance of HR procedures may have been influenced by HR practices' uniformity across organizations and their lack of continuous upgrades.

Table 4. Result for Moderated Multiple Linear Regression for FWH, T/WFH, and EI, as moderated by HRS

Model	R	R ²	Overall Model Test			
			F	df1	df2	p
1	0.698	0.488	27.4	5	144	<.001
Model Coefficients-EI						
Predictor	Estimate	SE	t	p		
Intercept	2.370	0.873	2.716	0.007		
FWH	-0.135	0.217	-0.624	0.533		
T/WFH	0.497	0.282	1.764	0.080		
HRS	-0.235	0.241	-0.973	0.332		
FWH * HRS	0.104	0.060	1.724	0.087		
T/WFH * HRS	-0.048	0.071	-0.676	0.500		

Qualitative Results

Respondent 1, a software engineer and founder of a software development company, has implemented FWH and T/WFH practices in his company for the past ten years. He believes FWH allows employees to work during their most productive hours, thus improving both creativity and output quality. While there are some communication delays and challenges in addressing issues outside of regular hours, the respondent trusts his employees to manage their schedules as long as the work gets done. Similarly, T/WFH boosted productivity and work quality by eliminating the mental and physical fatigue caused by commuting. Respondent 1 also noted its positive impact on employees' quality of life, although he sometimes encounters communication delays and the challenge of addressing issues outside regular hours. In his experience, employees are more confident and willing to present new ideas. With regard to employee innovation, the respondent continues to receive new ideas and high-quality work. Although his company is small without formal HR practices, the role of HR in fostering EI is also evident, as Respondent 1 believes in the importance of meetups for team building and maintaining a positive work environment. With the complete adoption and practice of FWH and T/WFH, the respondent observed that flexible work practices significantly boost employee productivity, creativity, and morale.

339 Respondent 2 is a senior manager at a major telecommunications company in the Philippines. As a manager,
340 she has observed that the implementation of FWH and T/WFH has positively influenced EI within her team.
341 She believes that FWH provides an opportunity for her and her team to improve their mood and productivity
342 in the work environment. Based on her experience, FWH helps them allocate their time towards work and
343 personal plans efficiently. As a result, there is a better work-life balance, and her team feels innovative and much
344 more productive as they work according to their respective productive schedules. With regard to T/WFH, the
345 respondent fully supports working from home as it helps save time, money, and energy. While there are
346 challenges like communication delays and connectivity issues, adjusting to the work-from-home setup came
347 easily to the team. The respondent emphasized that she encourages her team to hold activities that require
348 everyone's input and collaboration during their scheduled office days. In relation to EI, the respondent also
349 highlighted the importance of continuous improvement and innovation in the telecommunications industry by
350 detailing her team's ability to collaborate and present ideas more readily. She also greatly appreciates the efforts
351 of Human Resources, as the role of HR in EI provides the respondent and her team with numerous incentives
352 and provides an avenue for growth and continuous learning. Furthermore, FWH and T/WFH have been
353 adopted and practiced by the company for a long time, allowing for flexible and innovative work arrangements
354 that support both professional and personal growth.

355 Respondent 3 has been a part-time professor at a university for two years, teaching economics, and has worked
356 in the IT industry as a Senior Strategy Planner at a large IT company in the Philippines for three years. He
357 believes that FWH positively influences EI by reducing stress and enhancing efficiency as employees are allowed
358 to work during their most productive hours. This flexibility also benefits client management and work-life
359 balance, especially for those with demanding schedules. Similarly, the respondent noted that the adoption of
360 T/WFH creates a more conducive environment for innovation as it reduces unnecessary office noise and allows
361 introverted employees to be more confident. While there are drawbacks like communication delays and poor
362 network connections, the respondent noted that the company has trust in their employees as they submit their
363 work and remit deliverables on time. Concerning EI, the respondent also discussed how there is a natural
364 inclination towards efficiency and proactiveness in simplifying processes necessary for innovation. Meanwhile,
365 he also explained how the role of HR is pivotal in promoting a supportive environment for EI through training,
366 wellness programs, and generous bonuses. As the HR Department in his company highly supports such a work
367 setup, the employees are happier as their well-being is valued. In addition, the respondent detailed how the
368 widespread adoption and practice of FWH and T/WFH shows the company's commitment to employee well-
369 being and job satisfaction, which drives innovation and reduces turnover. Overall, Respondent 3 strongly
370 believes that the adoption and practice of a hybrid setup is beneficial as it saves time and allows the employees
371 to work when they feel most innovative and motivated.

372 Respondent 4, a graduate of a university, currently works in the telecommunications industry as a Product
373 Assistant at a telecommunications company, where he assists in business-related testing and coordinates with
374 the IT and operations team about prepaid products and services. With an improved work-life balance due to
375 FWH, the respondent has experienced positive changes in his productivity, motivation, and collaboration.
376 Specifically, he values the reduced commuting stress and overall improved work-life balance provided by FWH.
377 However, the respondent noted communication delays as a challenge. Meanwhile, the T/WFH promotes a
378 more relaxed and personalized work environment which encourages creativity and collaboration. In turn, the
379 respondent is more innovative and feels increased job satisfaction through a sense of trust and autonomy. With
380 regard to EI, the respondent's proactiveness in simplifying processes and seeking improvement, coupled with
381 practicing FWAs, are significant factors that drive his innovation. The respondent thrives in a hybrid work
382 setup that combines FWH and T/WFH. HR also plays a significant role in fostering the respondent's
383 innovation by providing incentives, benefits, and training that contribute to skill development and job
384 satisfaction. The respondent works during his most productive hours and works from home twice per week on

385 an alternating schedule. Overall, the practice of FWH and T/WFH practices are well-integrated into his work
386 routine, allowing for flexibility in managing both professional and personal responsibilities.

387 *Table 5. Interpretation of Interview Results*

Hypotheses	Interpretation
H_{a1}: FWH does have a significant positive effect on EI.	The quantitative analysis shows that FWH positively and significantly impacts EI. This is supported by qualitative findings from four respondents who highlighted that FWH improves productivity, work quality, work-life balance, and innovation by allowing employees to work during their most effective hours. The positive effects of FWH on EI can be explained through Social Exchange Theory, where employees reciprocate the flexibility provided by their company with increased performance and innovation. However, while FWH generally enhances motivation and collaboration, some respondents noted occasional communication delays.
H_{a2}: T/WFH does have a significant positive effect on EI.	According to the quantitative results, there is statistical significance between the independent variable T/WFH and the dependent variable EI. This quantitative finding is supported by the qualitative results in which the interviews reveal that the adoption of T/WFH positively impacts employee innovation. All four respondents noted improvements across various different elements pertaining to productivity, creativity, and job satisfaction. While the respondents noted there were minor drawbacks like communication delays and connectivity issues, all respondents appreciated the trust and autonomy granted by management to work from home, a factor crucial in creating motivated and innovative employees.
H_{a3}: HRS does significantly moderate the relationship between FWH and EI.	The qualitative results highlighted that various HR practices, such as providing benefits, bonuses, loans, free medicines, and engagement activities, are valued by employees for enhancing engagement, camaraderie, and skill development. However, the quantitative findings show no significant relationship between FWH or T/WFH and EI when moderated by HRS. This aligns with the study conducted by Wahab and Tatoglu (2020), suggesting that existing HR practices may already cover the benefits that could moderate this relationship, leading to no additional impact. As most HR departments may have adopted the same practices from other companies, it implies that the lack of upgrading HR practices regularly and its similarities across different companies may have contributed to no moderating effect in the study.
H_{a4}: HRS does significantly moderate the relationship between T/WFH and EI.	The respondents had positive insights into the different HR departments' initiatives. HR activities that made the respondents feel supported include face-to-face meetups, training programs, and flexible work setups. However, despite these positive perceptions, the quantitative results of the study showed that HRS holds no significant moderating effect on the relationship between T/WFH and EI. In order to explain its insignificance, the results of a study by Wahab and Tatoglu (2020) also showed no significance between its HR support moderator towards productivity as benefits and advantages of HR support only benefit employees temporarily. In addition to this, HR benefits and incentives are not long-term solutions for issues that a company's employees are experiencing (Wahab & Tatoglu, 2020).

388

389 **Conclusion**

390 Upon analyzing the quantitative and qualitative results, the researchers were able to discern the following
 391 conclusions in relation to the study's research objectives.

392 *Table 6. Summary of Research Objectives*

Research Objectives	Conclusions
<p>1. To understand how the implementation of flexible work arrangements influences employee innovation.</p>	<p>Pearson's r correlation coefficient shows moderate and positive relationships between FWH and EI with a value of $r = 0.596$. Meanwhile, Pearson's correlation coefficient between T/WFH and EI presents a moderate and positive relationship with a value of $r = 0.630$. These relationships suggest that EI increases as FWH and T/WFH increase. Further support for these findings is seen in the statistical analysis, particularly in the multiple linear regression model. Both FWH and T/WFH have p-values of $< .0001$, proving their significant positive effects on EI at a 95% level of significance. With positive coefficients for the slope of both the predictor variables, an increase in flexible work arrangements is associated with increases in EI. It can, therefore, be concluded that implementing FWAs enhances the conditions of employees and increases their innovation as it fosters a more creative and productive work environment.</p>
<p>2. To determine how Human Resource Support moderates the relationship between flexible work arrangements and employee innovation.</p>	<p>The R^2 value of 0.488 presented in the moderated multiple linear regression model suggests that 48.9% of the variability in EI is explained by the model, which is statistically significant. However, the individual predictors (FWH and T/WFH) and the moderating variable (HRS) are not statistically significant. Consequently, the interaction terms FWH*HRS and T/WFH*HRS are not significant. Previous studies (Wahab & Tatoglu, 2020) support such findings, suggesting that HR support does not offer a long-term solution for enhancing employee innovation, though it provides temporary benefits. However, qualitative feedback from the four respondents interviewed for the study emphasizes the beneficial role of HRS. They highlighted various benefits of HRS, such as improved work output, collaboration, loan assistance, bonuses, training, and free medicines, which indirectly encourage EI. While the quantitative results do not show a significant moderating effect of HRS on the relationship between FWAs and EI, the qualitative findings demonstrate that HR support plays a significant role in fostering innovation by enhancing satisfaction and overall well-being.</p>
<p>3. To determine the benefits and drawbacks of implementing flexible work arrangements towards employee innovation in the IT and</p>	<p>Implementing FWAs in the IT and Telecommunications industry provides several benefits for EI. Based on the quantitative analysis, FWH allows respondents to achieve a healthier work-life balance, efficiently plan their time, and work during their most productive hours. Additionally, the T/WFH setup allows employees to feel trusted and gives them more time to explore new ideas when working from home. Ultimately, this allows them to enhance their optimism towards work and improve productivity. Similarly, the interviewees acknowledged the same benefits. Through FWH, they are able to save money on commuting, work during their most</p>

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- Telecommunications industry.** productive times, and explore new ideas with more confidence. Meanwhile, the T/WFH setup reduces their mental and physical fatigue from traveling to the office, thus leading to higher quality outputs and increased efficiency. However, drawbacks of FWH include communication delays when employees are not online, which may hinder the immediate exchange of feedback and slow down collaboration. Additionally, the T/WFH setup limits social interactions and leads to privacy concerns and data security issues. Despite these drawbacks, the benefits of FWAs make this a valuable strategy for enhancing EI.
- 4. To determine the degree to which flexible work hours are practiced by the respondents.** FWH is actively practiced and valued by the respondents to a relatively high degree. The implementation of FWH varies as employees are encouraged to set their own work schedules depending on their optimal work hours and personal preferences. In particular, FWH extends beyond normal office hours as they accommodate diverse needs such as varying commute times, early morning starts, and late-night engagements. As a way to promote employee well-being, the degree to which FWH is adopted and practiced by the respondents emphasizes its role in enhancing factors that affect innovation, such as productivity, job satisfaction, and work-life balance.
- 5. To determine the extent to which practices that promote employee innovation are evident.** The extent to which practices promote EI in the IT and Telecommunications industry is evident but not uniformly consistent. The results show that, on average, these questions score above 4.00, indicating that the respondents partly too strongly agree with these questions. In addition, the interviewees highlighted that when employees provide innovative ideas, superiors work with the employees to enhance the ideas and establish them as policies once approved. However, the frequency and consistency of innovative ideas vary among employees. The interviewees highlighted that some employees came up with innovative ideas on a monthly basis, whereas others came up with such ideas once or twice a year. Overall, the extent to which practices promote EI is not consistent, as innovative ideas occur in an arbitrary manner as they arise when employees see an opportunity to do so.
- 6. To understand the importance of imposing flexible work arrangements in the IT and Telecommunications industry.** According to Hajar et al. (2022), the success and viability of companies in the IT and Telecommunications industry depend greatly on their ability to create new service value that satisfies the ever-changing needs of consumers. First, giving employees the flexibility to work when they feel most productive and creative empowers them to innovate and develop new solutions and technologies to stay competitive. Second, the nature of work in these industries may involve round-the-clock operations and global collaboration. Provided that flexible working hours and telecommuting enable project continuity and seamless communication across different locations, employees are able to improve responsiveness and management of project phases. Last, offering FWAs enhances employee satisfaction and improves the outputs they provide in return. Based on SET, employees reciprocate when they feel trusted and committed (Sukumaran & Lanke, 2021). Especially in a highly competitive business environment, work-life balance and trust achieved through FWAs aid in not only maintaining but
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7. **To determine the degree to which telecommuting is practiced by the respondents.**

also improving employee innovation.

Respondents partake in telecommuting to a relatively high degree. Telecommuting is dependent on their own respective schedules every week, and it was also discovered that the majority of the respondents report working remotely twice a week. To ensure continuous collaboration remotely, they are still able to collaborate by utilizing different digital platforms to stay connected to one another. With this, the sharing of ideas in this setup is encouraged, and respondents feel much more welcome to introduce these. Online meetings are commonly practiced, and collaborative platforms such as Microsoft Teams are utilized as the company's main mode of communication in the workplace. Through telecommuting, employees often accomplish tasks that can be done remotely, particularly those that require more focus during their work-from-home schedule.

393 **Theoretical Implications**

394 This study presents compelling evidence from both quantitative and qualitative analyses on the impact of FWH
395 and T/WFH on EI. Quantitatively, FWH and T/WFH were found to significantly enhance EI, with statistical
396 significance indicated by a p-value of 0.001. These findings underscore the direct positive effects of flexible
397 work arrangements on employee productivity, creativity, and job satisfaction.

398 Contrarily, the quantitative analysis did not support the hypothesis that HRS moderates the relationship
399 between FWH and EI or T/WFH and EI, with p-values of 0.087 and 0.5, respectively. This suggests that while
400 HRS practices contribute to general employee welfare, they may not directly influence the effectiveness of FWH
401 and T/WFH in enhancing innovation.

402 In most Philippine workplaces, innovative culture is cultivated by working with a purpose. For example,
403 working in an environment where staff members may collaborate across roles and departments to find
404 innovative solutions to problems (Leonardo, 2024). Rather, organizational support that promotes team-based
405 innovation practices and problem-solving workshops may be more effective in bridging the gap between
406 flexible work arrangements and employee innovation. Additionally, Filipino workers also find meaningful
407 relationships determined by the sense of belonging and the quality of relationships with co-workers important
408 in workplace dynamics (Ilagan, 2014, as cited in Tablan, 2021). While HR offers initiatives like training programs
409 and team building, they may not be sufficient to sustain long-term innovation in a T/WFH setup if employees
410 perceive these efforts as transactional rather than transformative. Especially in cultural environments that place
411 high importance on support and visible leadership, employees may value HR practices that promote support
412 and camaraderie but may not directly associate these with fostering innovation in a T/WFH setup.

413 Moreover, studies also suggest that HRS contributes to increased performance results (Truss et al., 2013) and
414 better employee well-being (Huang et al., 2016). According to Gragnano et al. (2020), women's engagement has
415 increased, and working women and dual-earner partners—especially those with children—have managed their
416 job and family responsibilities better. It is possible that the researchers found no moderating effect of HRS as
417 the study gathered more male than female respondents which may have not accurately captured women's
418 engagement in the workforce. With this, organizations may further conduct analysis on the effect of Human
419 Resource Support on Employee Innovation wherein the study gathers data where the gender of the respondents
420 are equally distributed. This may result in more accurate data.

421 Meanwhile, qualitative insights gathered from interviews with Respondents 1 through 4 further illuminate the
422 practical benefits of these flexible work arrangements. All respondents testified to significant improvements in

423 productivity and work quality due to the ability to align work hours with personal peak performance times. The
424 adoption of T/WFH specifically contributed to heightened creativity and overall job satisfaction. Additionally,
425 respondents highlighted a variety of HRS initiatives provided by their companies, such as casual face-to-face
426 meetings, robust employee engagement activities, financial support like loans and generous bonuses, and health-
427 related benefits including free medications. These initiatives, while not moderating the core relationships
428 studied, were noted for enriching the work environment and enhancing employee welfare.

429 Technological advancements are bringing about significant transformations to the Telecommunications
430 Industry, and if the employees have the right skills and knowledge, they are considered as assets to the company
431 (Jethy & Mohanty, 2022). A study conducted by Jethy and Mohanty (2022) found that HRM practices including
432 “Training, Performance Appraisal, Career Planning, Employee Participation, Job Definition, Compensation,
433 and Selection” significantly impacted employee performance and recommended that companies incorporate
434 various incentive and recognition programs. It is possible that HRS did not moderate the relationship between
435 FWH or T/WFH and EI because offering FWH or T/WFH must be supplemented with incentives and
436 recognition programs as well.

437 The results of the study show that there is a significant positive relationship between FWH and EI which is
438 also supported by the qualitative findings from the interviews. The second hypothesis which states that T/WFH
439 does have a significant positive effect on EI was found to be statistically significant and corroborated by the
440 qualitative findings as well. However, the third and fourth hypotheses found that quantitatively HRS did not
441 significantly moderate the relationships between FWH and EI or T/WFH and EI, although the qualitative
442 results contradicted these findings.

443 Together, these quantitative and qualitative findings provide a comprehensive understanding of how flexible
444 working arrangements directly contribute to fostering innovation within organizations and the supportive role
445 played by human resource practices in nurturing an engaging and productive workplace. With this, it would be
446 wise for employers in various firms to develop policies and practices geared toward promoting these aspects.
447 As such, businesses will be able to compete in the market thus allowing companies to maintain their competitive
448 advantage and adapt to the fast-changing environment.

449 Lastly, it is also advisable that future researchers may entertain methods like focus groups or interviews to gain
450 a better understanding of employee experiences with FWA and EI. They could also look into ways to solve
451 issues like communication delays and connectivity problems by using better tools and systems to further
452 discover strategic ways to increase remote work efficiency. Additionally, studying how different HRS initiatives,
453 like mental health resources, training programs, or better pay, affect EI might provide useful insights since HRS
454 didn't strongly impact the results in this study.

455 **Implications to Business and Management**

456 The research uncovered significant relationships between FWH and T/WFH on EI within the IT and
457 Telecommunications sectors. These findings illuminate the substantial impact that FWAs have on fostering
458 innovative ideas, demonstrating that when employees are granted autonomy over their schedules, they not only
459 feel more supported but also become more innovative. This increase in employee satisfaction due to flexible
460 working schedules contributes to lower turnover rates and enhances retention (John, 2017). To maximize these
461 benefits, Managers should encourage employees to identify and utilize their most effective working hours and
462 provide autonomy to manage their schedules. Additionally, companies should maintain open communication
463 channels to address occasional delays to mitigate any drawbacks associated with FWH. Additionally, IT and
464 Telecommunications companies should continue to support T/WFH and ensure employees have the necessary
465 resources and support to work effectively from home. This may include providing reliable technology

466 infrastructure, regular virtual team meetings to maintain engagement, and clear communication protocols to
467 handle any connectivity issues.

468 Previously, the role of HRS in linking FWAs and innovative behavior at work was less understood. However,
469 the study indicates that HR departments play a crucial role by aligning flexible working hours with salary and
470 allowances, thereby supporting creativity and innovation. Although the study noted a gender discrepancy in
471 respondents that might affect generalizability, especially among women, the findings still offer valuable insights
472 for enhancing employee engagement across diverse organizational contexts.

473 The analysis revealed that HRS practices are perceived neutrally to slightly positively by employees, with scope
474 for enhancing HR policies to foster a better work environment conducive to skill development and innovation.
475 There is a clear opportunity for organizations to refine their HR management strategies to boost employee
476 confidence, increase productivity, and stimulate innovative thinking. Specific strategies that could be considered
477 would be to provide employees the freedom to choose their working hours based on their peak productivity
478 times, providing employees with the necessary resources for remote work, introducing much more
479 comprehensive support programs, and utilizing regular feedback mechanisms for discovering employees' needs.

480 Meanwhile, the study is limited to 200 participants, majority of whom were male and many of which belonged
481 to the Human Resource Department of their respective companies. These limitations may have impacted the
482 results of the study. Future research will benefit from conducting surveys with more participants, who are
483 equally male and female, and equally belong to different departments.

484 FWAs have proven to be especially pivotal in sectors heavily reliant on continuous innovation, such as
485 telecommunications and IT. Employers in these sectors are encouraged to adopt flexible working policies
486 proactively. By doing so, they not only enhance individual performance but also contribute significantly to
487 organizational innovation, ensuring that firms remain competitive in a rapidly evolving market.

488 **Funding:** This research received no external funding.

489 **Conflicts of Interest:** The authors declare no conflict of interest.

490 **Data Availability Statement:** The participants of this study did not give written consent for their data to be
491 shared publicly, so due to the sensitive nature of the research supporting data is not available.

492 References

- 493 Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine*, 18(3), 91–93.
494 <https://doi.org/10.1016/j.tjem.2018.08.001>
- 495 Berkery, E., Morley, M. J., Tiernan, S., & Peretz, H. (2020). From start to finish: Flexi-time as a social exchange
496 and its impact on organizational outcomes. *European Management Journal*, 38(4), 591–601.
497 <https://doi.org/10.1016/j.emj.2020.02.003>
- 498 Boussiala, M. N. (2020). Cook's distance. <https://doi.org/10.13140/RG.2.2.18888.55049>
- 499 Gaduena, A., Caboverde, E. C., & Flaminiano, J. P. (2022). Telework potential in the Philippines. *The Economic
500 and Labour Relations Review*, 33(2), 434 - 454. <https://doi.org/10.1177/10353046221075103>
- 501 Gragnano, A., Simbula, S., & Massimo, M. (2020). Work–life balance: Weighing the importance of work–family
502 and work–health balance. *International Journal of Environmental Research and Public Health*, 17(3).
503 <https://doi.org/10.3390/ijerph17030907>
- 504 Hajar, M. A., Alkahtan, A. A., Ibrahim, D. N., Al-Sharafi, M. A., Alkaws, G., Iahad, N. A., Darun, M. R., &
505 Tiong, S. K. (2022). The effect of value innovation in the superior performance and sustainable growth

- of telecommunications sector: Mediation effect of customer satisfaction and loyalty. *Sustainability*, 14(10). <https://doi.org/10.3390/su14106342>
- Huang, L. C., Ahlstrom, D., Lee, A. Y. P., Chen, S. Y., & Hsieh, M. J. (2016). High performance work systems, employee well-being, and job involvement: An empirical study. *Personnel Review*, 45(2), 296-314.
- Hung, R. R., Villarosa, M., Vigonte, F., & Abante, M. V. (2023, May 12). Market structure trends: The changing dynamics and competitive landscape in telecommunication industries in the Philippines. <http://dx.doi.org/10.2139/ssrn.4440388>
- Idowu, S. A. (2020). Role of flexible working hours' arrangement on employee job performance and retention in manufacturing industries in Agbara, Nigeria. *Economic Insights – Trends and Challenges*, 3, 23-27.
- Jethy, J., & Mohanty, S. (2022). Impact of HRM practices on the telecom sector in Odisha. EPRA International Journal of Economics, *Business and Management Studies*, 9(1), 33–43. <https://doi.org/10.36713/epra9377>
- John, W. (2017). Flexible working hours and organizational productivity: Exploring the potential linkage. *AIMA Journal of Management and Research*, 11(4), 1-7. https://apps.aima.in/ejournal_new/articlesPDF/waseem-john.pdf
- Jyoti, J., Chahal, H., & Rani, A. (2017). Role of organizational learning and innovation in between high-performance HR practices and business performance: A study of telecommunication sector. *Vision: The Journal of Business Perspective*, 21(3), 259–273. <https://doi.org/10.1177/0972262917716766>
- Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology*, 72(6), 558–569. <https://doi.org/10.4097/kja.19087>
- Kissell, R., & Poserina, J. (2017). *Optimal sports math, statistics, and fantasy*. Academic Press. <https://doi.org/10.1016/B978-0-12-805163-4.00002-5>
- Leonardo, C., Jr. (2024). Creating a proactive workplace for the Filipinos. Unpublished manuscript. <https://doi.org/10.13140/RG.2.2.36519.93604>
- Ma, L., Zheng, Y., & Wei, Y. (2023). The double-edged sword effect of telecommuting on employees' work engagement: Evidence from China during COVID-19. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1110108>
- Nilles, J. M. (1994). Making telecommuting happen: A guide for telemanagers and telecommuters. New York: Van Nostrand Reinhold.
- Obrenovic, B., Jianguo, D., Khudaykulov, A., & Khan, M. A. S. (2020). Work-family conflict impact on psychological safety and psychological well-being: A job performance model. *Frontiers in Psychology*, 11, 1-18. <https://doi.org/10.3389/fpsyg.2020.00475>
- Ogueyungbo, O., Maloma, A., Igbinoba, E., Salau, O., Maxwell, O., & Hezekiah, F. (2019). A review of flexible work arrangements initiatives in the Nigerian telecommunication industry. *International Journal of Civil Engineering and Technology* 10(3), 934–950.
- Park, O., Bae, J., & Hong, W. (2019). High-commitment HRM system, HR capability, and ambidextrous technological innovation. *International Journal of Human Resource Management*, 30(9), 1526–1548. <https://doi.org/10.1080/09585192.2017.1296880>
- Peko, M., Komatina, N., Banduka, N., & Žižić, M. C. (2018). The assessment and ranking of failures in the information technology industry based on FMEA and MCDM. *Ekonomski Horizonti*, 20(3), 257–268. <https://doi.org/10.5937/ekonhor1803257p>
- PennState Ebberly College of Science. (n.d.). 9.5 - Identifying influential data points. <https://online.stat.psu.edu/stat462/node/173/>
- Prasad, D. K., Rao, M., Vaidya, D. R., & Muralidhar, B. (2020, May 13). Organizational climate, opportunities, challenges and psychological wellbeing of the remote working employees during COVID-19 pandemic: A general linear model approach with reference to information technology industry in Hyderabad. *International Journal of Advanced Research in Engineering and Technology*, 11(4), 372-389.

- 552 Senaviratna, N. A. M. R., & A Cooray, T. M. J. (2019). Diagnosing multicollinearity of logistic regression model.
553 *Asian Journal of Probability and Statistics*, 5(2), 1-9.
554 <http://library.go4manusub.com/id/eprint/60/1/Senaviratna522019AJPAS51693.pdf>
- 555 Setiyani, A., Djumarno, Riyanto, S., & Nawangsari, L. Ch. (2019). The effect of work environment on flexible
556 working hours, employee engagement and employee motivation. *International Review of Management and*
557 *Marketing*, 9(3), 112–116. <https://doi.org/10.32479/irmm.8114>
- 558 Shepard, E. M., Clifton, T. J., & Kruse, D. (1996). Flexible work hours and productivity: Some evidence from
559 the pharmaceutical industry. *Industrial Relations*, 35(1), 123–139. <https://doi.org/10.1111/j.1468-232x.1996.tb00398.x>
- 560
- 561 Shahirah, S., & Moi, N. (2019). Investigating the validity and reliability of survey attitude towards statistics
562 instrument among rural secondary school students. *International Journal of Educational Methodology*, 5(4),
563 651–661. <https://doi.org/10.12973/ijem.5.4.651>
- 564 Stamm, I. K., Bernhard, F., Hameister, N., Miller, K. (2023). Lessons from family firms: The use of flexible
565 work arrangements and its consequences. *Review of Managerial Science*, 17, 175-208.
566 <https://doi.org/10.1007/s11846-021-00511-7>
- 567 Statistics Solutions. (n.d.). Structural equation modeling. Statistics Solutions. Retrieved December 3, 2024,
568 from [https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/structural-](https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/structural-equation-modeling/)
569 [equation-modeling/](https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/structural-equation-modeling/)
- 570 Steidelmüller, C., Meyer, S-C., Müller, G. (2020). Home-based telework and presenteeism across Europe. *Journal*
571 *of Occupational and Environmental Medicine*, 62(12), 998-1005.
572 <https://doi.org/10.1097/JOM.0000000000001992>
- 573 Sukumaran, R., & Lanke, P. (2021). “Un-hiding” knowledge in organizations: The role of climate for innovation,
574 social exchange and social identification. *Development and Learning in Organizations*, 35(1), 7-9.
575 <https://doi.org/10.1108/DLO-08-2019-0185>
- 576 Tablan, F. (2021). Filipino Virtue Ethics and Meaningful Work. *Humanities Bulletin*, 4(1), 20–40.
577 <https://journals.lapub.co.uk/index.php/HB/article/view/1975>
- 578 Taylor, S. (n.d.). Multiple linear regression. Corporate Finance Institute. Retrieved from
579 <https://corporatefinanceinstitute.com/resources/data-science/multiple-linear-regression/>
- 580 Truss, C., Shantz, A., Soane, E., Alfes, K., & Delbridge, R. (2013). Employee engagement, organisational
581 performance and individual well-being: Exploring the evidence, developing the theory. *International*
582 *Journal of Human Resource Management*, 24(14), 2657–2669.
583 <https://doi.org/10.1080/09585192.2013.798921>
- 584 University of Virginia Library. (n.d.). Hierarchical linear regression. University of Virginia Library. Retrieved
585 December 3, 2024, from [https://library.virginia.edu/data/articles/hierarchical-linear-](https://library.virginia.edu/data/articles/hierarchical-linear-regression#:~:text=Hierarchical%20regression%20is%20a%20way,rather%20than%20a%20statistical%20method)
586 [regression#:~:text=Hierarchical%20regression%20is%20a%20way,rather%20than%20a%20statistical](https://library.virginia.edu/data/articles/hierarchical-linear-regression#:~:text=Hierarchical%20regression%20is%20a%20way,rather%20than%20a%20statistical%20method)
587 [%20method](https://library.virginia.edu/data/articles/hierarchical-linear-regression#:~:text=Hierarchical%20regression%20is%20a%20way,rather%20than%20a%20statistical%20method)
- 588 Vayre, É., Morin-Messabel, C., Cros, F., Maillot, A., & Odin, N. (2022). Benefits and risks of teleworking from
589 home: The teleworkers’ point of view. *Information*, 13(11). <https://doi.org/10.3390/info13110545>
- 590 Vinh, T. N., Siengthai, S., Swierczek, F., & Bamel, U. K. (2019). The effects of organizational culture and
591 commitment on employee innovation: Evidence from Vietnam’s IT industry. *Journal of Asia Business*
592 *Studies*, 13(4), 719-742. <https://doi.org/10.1108/JABS-09-2018-0253>
- 593 Wahab, M. A., & Tatoglu, E. (2020). Chasing productivity demands, worker well-being, and firm performance:
594 The moderating effects of HR support and flexible work arrangements. *Personnel Review*, 49(9), 1823-
595 1843. <https://doi.org/10.1108/PR-01-2019-0026>
- 596 Wang, L., & Xie, T. (2023). Double-edged sword effect of flexible work arrangements on employee innovation
597 performance: From the Demands-Resources-Individual Effects perspective. *Sustainability*, 15(13).
598 <https://doi.org/10.3390/su15130159>