

## Impact of Flexible Work Arrangements on Work Engagement in Post COVID 19 Scenario: A Case of Technology Focused Entrepreneurial Firms

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ARTICLE INFO	ABSTRACT
<p><b>Article History:</b> Received: 25 January 2023 Revised: 14 February 2023 Accepted: 22 February 2023 Available Online: 27 Feb 2023</p> <p><b>DOI:</b> <a href="https://doi.org/10.56536/jebv.v3i1.30">https://doi.org/10.56536/jebv.v3i1.30</a></p> <p><b>Keywords:</b> Flexible work arrangements, Paternalistic leadership, COVID-19, Work engagement, Employees' mindfulness, Affective commitment</p> <p><b>JEL Classification:</b> M19, J24</p>	<p>After the occurrence of COVID – 19, life has changed. Similarly, the business world has implications and many companies have allowed their employees to work from home and maintain social distancing. All this provided an opportunity for the research scholars of management to address the business issues through their research studies and present applicable recommendations to the managers for a better workplace that can potentially offer flexible work arrangements for better productivity in the future workplace. The current study is an explanatory study that has presented the potential positive outcomes of flexible work arrangements in the form of a positive work engagement resulting from two serial mediation models. PROCESS Macro tool version 3.3 was used to test serial mediation models using model 6 in SPSS for a data sample collected from technology-focused entrepreneurial firms in the post-COVID-19 scenario. Both the serial mediation models were positively significant portraying the dynamics that can enable the perceptions of flexible work engagement in employees for better work engagement.</p>

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### INTRODUCTION

In the modern era of the 21st century, organizations are increasingly adopting work-life balance programs for the optimum utilization of human capital. Worldwide, the adoption of flexible work arrangements especially after COVID – 19 is evidence of it. Flexible work arrangements provide some level of authority to the employees for work at any time and from anywhere with remote access such as through a virtual private network (VPN). Furthermore, flexible work arrangements may include flexi-timing, part-time work, telecommuting and short/compressed working weeks, etc. Flexible working is also the need of the hour as there are more single parents, dual-working couples, women in the workplace, and more employees with medical issues and disabilities, compared to the past. Past research has shown that flexible work options created job satisfaction, employees' well-being, and better work engagement. This is particularly important after COVID – 19 crises as the workplace have been badly impacted and world-over, initiatives for alternate work arrangements have been taken. However, there is a need to measure how effective the different flexible work arrangements are and what are the different mechanisms that need to be understood for optimum utilization of flexible work arrangements (Spurk & Straub, 2020; Ge et al., 2022).

Many commercial and non-commercial organizations started working online and utilizing different options of flexible work arrangements in the recent past. Considering the wide spread of COVID – 19, educational institutions were also closed and were instructed to teach online. This was a serious test for university faculty and staff to start working online even if they were fully in traditional mode (Xinhua, 2018). The retail industry, services sectors, and other industries were badly hurt and it affected the Gross Domestic Product (GDP) of many countries. However, there is a need for doing research on flexible work arrangements after COVID – 19 to understand the effectiveness of trends regarding flexible work arrangements. For that matter, it is important to research flexible work options for organizations as it had never been considered as important as it is after this crisis of COVID – 19 (Ogbonnaya, 2020). Technology-focused entrepreneurship refers to the process of developing, launching, and scaling a business that is based on a technology innovation or platform (Denning, 2017). This can include companies that develop new software, hardware, mobile apps, or digital services, as well as those that use technology to disrupt traditional industries (Entrepreneur, 2018).

Some examples of technology-focused startups include; Uber, a transportation technology company that developed a mobile app that connects riders with drivers. Airbnb, is a vacation rental platform that uses technology to enable people to rent out their homes to travelers (Forbes, 2017). Similarly, SpaceX, is a company that designs, manufactures, and launches advanced rockets and spacecraft (Entrepreneur, 2018). Square, is a mobile point-of-sale company that developed a small, portable card reader to allow businesses to accept credit card payments. Dropbox, is a company that provides cloud storage and file-sharing services (Forbes, 2017). Technology-focused entrepreneurship requires a combination of technical expertise, business acumen, and an ability to identify and capitalize on market opportunities (Denning, 2017). Many universities and business schools now offer programs and courses in technology entrepreneurship to provide students with the skills and knowledge needed to start and grow technology-based companies (Stanford Graduate School of Business, n.d.).

Work engagement is a critical factor for the productivity of technology-focused entrepreneurial firms, especially in Pakistan's resource-scarce economy that needs creative and innovative human capital with entrepreneurial startups. Work engagement is a state of positive work emotions at the workplace that have three dimensions including vigor, dedication, and absorption. Employees with work engagement feel happy and have positive emotions about the work activities. Aycan (2006) stated that paternalistic leadership is also helpful for generating work engagement and that it creates a family-like environment at the workplace by developing a close relationship with the subordinates by addressing the problems even in their non-working / personal domain as well and then expecting loyalty and authority is expected from such employees in return for the organization. A paternalistic leadership style is accepted in e.g., Pakistan, China, Turkey, India, Japan, Mexico, and America, etc. A paternalistic leadership style may also be rooted in the feudal structure and colonial mindset of the country where a leader/elder has to take care of others working under him (Aycan, 2015, Aycon et al., 2000; Wang, & Shi, 2020).

Using the theoretical underpinning of affective events theory, two serial mediation models have been proposed in this study. Serial mediation of self-efficacy and mindfulness have been proposed for this study as positive stimulants for the relationship between flexible work arrangements and work engagement. Another serial mediation model of affective commitment and paternalistic leadership as serial mediators have been presented for the same relationship flexible work arrangements and work engagement. Self-efficacy is the self-belief of an individual to achieve a particular task. Mindfulness is the cognitive ability of an individual to keep the focus at present and on the task at hand which is a challenge for employees after the crises of COVID - 19. Past research has shown that mindfulness can result in positive outcomes and those new outcomes and working mechanisms of mindfulness in the workplace need to be explored (Cheung et al., 2020). Work engagement is the proposed outcome variable of this study. Past research has not addressed this relationship of variables for technology-focused entrepreneurial firms with the theoretical contribution of the study for affective events theory.

The research question of this study is: “how do flexible work arrangements lead to work engagement through the serial mediation model of self-efficacy mindfulness (serial mediation 1) and affective commitment and paternalistic leadership (serial mediation 2) using affective events theory? The need for flexible work arrangements after COVID – 19 is the need of the hour. Different traditional organizations have developed remote working and online work options for employees to ensure their health and safety. It remains to be seen how flexible work arrangements add to positive work engagement through the two serial mediation models with the proposed use of affective events theory.

The structure of the study was designed to keep in view the gaps in literature and management practice regarding the need for flexible work arrangements even in the post-COVID – 19 times for tech-enabled entrepreneurial companies (Spurk & Straub, 2020; Ge et al., 2022). The motivation was to conduct this research for technology-enabled entrepreneurial firms only. An integrative literature review was conducted to address the research objectives and for generating relevant hypotheses from the applicable management literature. The research model was supported by the use of underpinning theory which was affective events theory. The research model was built around testing two serial mediation models. Therefore, PROCESS Macro by Preacher and Hayes was used in SPSS and serial mediation was tested using model 6. The univariate normality of data was tested through skewness and kurtosis. The results of the serial mediation model supported both serial mediation models. The useful discussion has been made keeping in view the underpinning theory, literature support, and research objectives. Finally, the study provides useful future research directions for contemporary scholars of management.

### **Motivation for the Study**

After the prevalence of COVID – 19, many commercial and business activities were closed. Offices, universities, schools, colleges, and many other types of organizations remained closed during the lockdown period. Later on, markets and businesses had to operate with limited hours in Pakistan due

to natural calamities such as floods in 2021 and the ongoing energy / economic crisis in Pakistan. This has badly affected the technology-focused entrepreneurial firms and especially the startups that require economical support with better resources of energy in the country. However, the situation in Pakistan has not improved in the last few years and COVID-19 has provided an opportunity for the tech-entrepreneurs to think differently. During this time, those businesses especially multinational companies facilitated their employees for remote work and were better able to maintain their supply lines. However, many organizations were not prepared for this change and pink slip was shown to many employees in different sectors and industries around the globe. Now, a trend has emerged in these post-COVID – 19 scenarios that organizations are adopting a hybrid mode with flexible work arrangements. This reactive strategy is meant to tackle future challenges mainly related to health and safety but still, the organizations need to do a lot in terms of policy making and implementation for flexible work arrangements as such arrangements boost the trust of the employees in organizational actions for health, safety and for career orientation. This can conserve energy, resources, time, and economy for technology-focused entrepreneurial firms in Pakistan. A consideration of these aspects was a real motivation for this study.

## LITERATURE REVIEW

Workplace after the pandemic of COVID – 19 demands an increased focus on remote working options (Ogbonnaya, 2020). It is especially relevant to the health and safety requirements and for conformity with regulatory bodies. Organizations need to develop different mechanisms of effective flexible work arrangements and it needs to be explored what kind of positive outcomes can be gained through it. Flexible work arrangements, it is also good for the mental and physical health of the employees. Of course, it is also the true reason that the remote working option is here to stay forever as a choice after the occurrence of COVID – 19 in this digital world. Therefore, there is a need to further study flexible work arrangements (Amin, 2022). Psychogios and Prouska (2019) stated that new trends of work are emerging that need to be researched. After a crisis-like situation such as COVID-19 or the economic crunch in the aftermath of it, not all economies could recover at the same level. Weaker economies take more time to recover and hence this makes implications for the workplace and the employment conditions of a country. Workplaces in such countries may also be seen as having increased levels of flexible work arrangements for better performance, changing work structures, etc., for the economic recovery of institutions. Many countries are already facing such economic crises due to COVID - 19. Entrepreneurial firms that are operating in the technology-related business have suffered a lot due to it and there have been many layoffs (Ge et al., 2022; Zafar, 2021).

Wang and Shi (2020) explained how the absence of balance in the work life can cause a conflicting situation that can affect work engagement. However, the effect of paternalistic leadership, mindfulness, and self-efficacy for better work engagement in situations of stress recovery or individual resilience needs to be understood for future studies as was proposed in the future research directions of that study. The workplace situation for the employees after COVID – 19 is a stress recovery phase and not only employees' physical and cognitive resilience is being tested but their emotional

intelligence is being tested as well. Considering all these aspects, the impact of flexible work arrangements on work engagement needs a better scholarly understanding (Ge et al., 2022).

Cheung et al. (2020) stated that mindfulness can enhance employees' creativity. However, future researchers may study mindfulness with different new mechanisms. For example, in an information-rich context, mindfulness will enhance work engagement. Therefore, it is proposed for this study that an information-rich context enhances the self-efficacy of an individual. It is also proposed that emotional intelligence can be a good moderator in the relationship between self-efficacy and mindfulness. Furthermore, it was also proposed that a humble leader can also add to mindfulness. Researchers for the current study have taken paternalistic leadership as a moderator between flexible work arrangements and self-efficacy. Paternalistic leadership is often a humble form of leadership that makes the engagement with the employees facilitating them and then expects loyalty and job performance from them under the authority of that leader.

One of the most important determining factors of behavior is self-efficacy. It contributes to the motivation and health of the workers. Therefore, it is an important factor that management needs to focus on and we propose that flexible work arrangements are a source of motivation for those employees for whom the organizations are offering such facilities to the worker (Lin et al., 2020). There may be several types of self-efficacy. For example, action self-efficacy is a belief and motivation during the pre-action phase. Maintenance self-efficacy is a belief and motivation during the post-action phase. Both these types of self-efficacy are a source of optimism for the employee. Action self-efficacy is an optimistic belief of an individual that he or she can engage in a specific task with confidence and the task has to be the one that they have not performed earlier. While, maintenance self-efficacy is a belief that individuals can maintain behavior that they have adopted earlier (Schwarzer & Hamilton, 2020; Zhang et al, 2019). Meta-analytic research has proved that self-efficacy can predict the healthy behaviors of employees. In the current study, we propose that self-efficacy can be enhanced via flexible work arrangements.

Reb et al. (2020) stated that questions such as the link between leadership, decision-making, and teamwork need to be further explored. Self-regulatory cognitive and emotional processes may also play their role in the mindfulness of employees at the workplace and this needs to be studied in future research. Therefore, it was proposed that future studies should explore individual and organizational contextual factors that can contribute to mindfulness. The current study will focus on individual mindfulness and its effect would be measured for three potential outcome variables through a proposed new causal mechanism.

Affective commitment is the loyalty of employees to the organization. For paternalistic leadership, it remains to be seen how it adds to the cognitive states (such as mindfulness in this study) by moderating flexible work arrangements. Recent events can also contribute to their employees' / respondents' viewpoints in research related to paternalistic leadership and whether they were affected positively or

negatively (Unler & Kilic, 2019). Hence considering COVID - 19 pandemic, only those organizations would be selected from this research where flexible work arrangements were made available to the employees.

As affective commitment is a source of work engagement, therefore, it is also another potential outcome of flexible work arrangements. Through effective work engagement, the emotional intelligence of the employees gets increased (Gong et al., 2020). Prouska et al. (2020) recommended that there is an urgent need for research studies on workers' experience due to macro-level turbulences of the external environment. It was stated that such macro-environmental turbulence causes social, political, economic, and technological disturbances. External environmental turbulence (such as of COVID - 19) may have a potential impact on physical and mental well-being and work-life balance. It also remains to be seen how workers respond to such challenges. For example, one negative output of this socially distanced workplace may be social undermining. Ramaci et al. (2020) stated that stigma is also attached to the psychological states of employees. Like if someone gets ill with a disease like COVID – 19. This may add to the fear of employees and may cause job burnout as well. There is a need to address such issues with flexible work arrangement which has the potential to get positive results that are not even expected. However, there is a significant need to research for this to have effective work options in the future.

Work engagement is a relatively new and rapidly growing area of research within organizational psychology. It is defined as a positive, affective-motivational state of mind that is characterized by vigor, dedication, and absorption in one's work (Schaufeli et al., 2006). Work engagement is considered to be a beneficial state for both the individual employee and the organization, as it is associated with higher levels of job satisfaction, organizational commitment, and reduced turnover intentions (Schaufeli et al., 2002). Research on work engagement has primarily focused on identifying the antecedents and consequences of this state of mind. Antecedents of work engagement include individual factors such as personality traits, job resources, and psychological need satisfaction (Bakker et al., 2004; Schaufeli & Bakker, 2004). Organizational factors, such as leadership and work-life balance, have also been identified as important antecedents of work engagement (Demerouti et al., 2001; Tims et al., 2013).

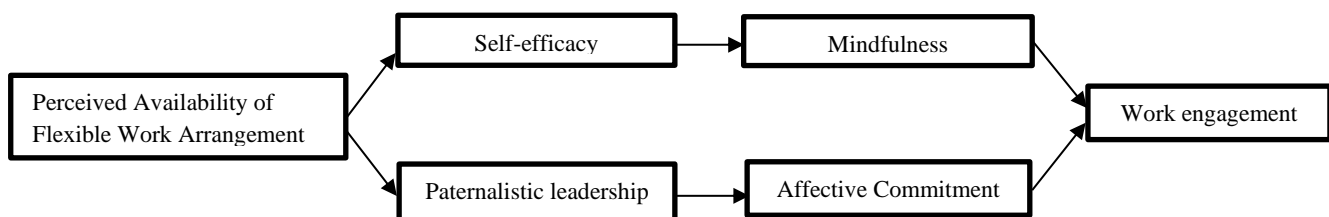
The consequences of work engagement are wide-ranging and include both positive outcomes for the individual, such as well-being and job satisfaction, as well as positive outcomes for the organization, such as increased productivity and reduced turnover (Schaufeli & Bakker, 2004). Furthermore, work engagement is related to other positive work-related outcomes such as higher levels of creativity (Bakker et al., 2004) and improved performance (Salanova et al., 2005). Despite the growing body of research on work engagement, there are still many unanswered questions. For example, more research is needed to understand the mechanisms through which work engagement leads to improved performance (Salanova et al., 2005) and to identify the specific organizational factors that are most likely to foster work engagement (Tims et al., 2013). Additionally, more research is needed to examine

the role of work engagement in different cultures and specific occupational groups (Schaufeli et al., 2010). Overall, work engagement is a promising area of research that has the potential to improve our understanding of the factors that influence employee well-being and performance. Future research in this area should continue to focus on identifying the antecedents and consequences of work engagement to develop effective interventions for fostering this state of mind in the workplace.

With the help of existing literature and the theoretical underpinning of affective events theory, the following two hypotheses are proposed for this study:

*H<sub>1</sub>: A positive serial mediation effect of self-efficacy and mindfulness exists in the relationship between flexible work arrangements and work engagement.*

*H<sub>2</sub>: A positive serial mediation effect of paternalistic leadership and affective commitment exists in the relationship between flexible work arrangements and work engagement.*



**Figure 1: Framework of the Study**

Apart from the possibility of theoretical contribution in many other theories, the author believes that affective events theory is one of the most potential underpinning theories for testing this research framework/model. Affective events theory was first developed by Howard M. Weiss and Russell Cropanzano and it primarily explains that job satisfaction, performance, and related aspects are affected by the emotions and moods of the employees due to specific situations/events at the workplace (Cropanzo et al., 1996). Affective work behaviors are explained by the feelings, emotions, and moods of the employees and cognitive behaviors decide job satisfaction and other aspects related to job satisfaction. The theory also explains that positive and negative emotional incidents at the workplace are distinguishable and they make a significant psychological impact on the employees and their work outcomes (Wegge et al., 2006).

Regarding affective events theory, paternalistic leadership positively impacts job satisfaction and affective commitment. Positive affectivity mediates this relationship. Affective events theory can also explain many other work-related outcomes and those related to the employees based on their workplace events, outcomes, situations, etc. For job-related stress, the extent of organizational citizenship behavior, turnover intentions, etc. have been studied in the past (Unler & Kilic, 2019).

However, as the theory explains, the emotions and cognitive implications for employees determine their outcomes at the workplace. Hence, considering that, mindfulness is a special positive cognitive state that can determine the positive outcomes from employees and this can potentially explain the affective events theory from a new angle for theoretical contribution.

As paternalistic leadership can be explained through affective events theory, it is a proposition that paternalistic leadership can play a positive role as a serial mediator for enabling flexible work arrangements in the organizations for the employees. Cheung et al. (2020) stated that there is a need to study information-rich contexts concerning mindfulness. Hence, employees working in organizations with information-rich contexts would be well enabled to have better self-efficacy to perform a task with mindfulness compared to those employees who are in lesser information-rich contexts since mindfulness often leads to positive work outcomes. However, in the case of flexible work arrangements like in the case of post- COVID – 19, there is a much more likely outcome of work engagement due to flexible work arrangement through the two serial mediation models as presented in the research model of the study.

Wang and Shi (2020) conducted a study that explained that the positive use of emotional intelligence can enhance workplace engagement. Furthermore, Cheung, Huang, Chang, and Wei (2020) stated that employee creativity is also dependent on mindfulness and creative process engagement. With the facilitation of flexible work engagement, one should expect that it will enhance employee creativity, work engagement, and mindful multitasking as employees get facilitated for multiple reasons like commuting, health & safety and get the advantage of working from home. This also reduces organizational costs as employees' performance on the required tasks may even increase if flexible work arrangements are provided. This is especially valid in the case of tech-focused entrepreneurial firms in Pakistan where creative employees need to be facilitated through flexible work arrangements. Measuring such a relationship would significantly add to the existing body of knowledge and would extend the affective events theory.

## **RESEARCH METHODOLOGY**

The current study is an explanatory study where the deductive approach was used for a positivistic research paradigm. This was a cross-sectional research study and data was collected from the employee of technology-focused entrepreneurial firms in Pakistan after the occurrence of COVID-19. The data were collected from June to December 2022 from the employees of medium size technology-focused entrepreneurial firms in Pakistan. The unit of analysis was an individual employee and a total of 347 questionnaires were distributed through different online and offline sources out of which 189 useful responses were returned making it a response rate of 53 %. Convenience sampling was used for data collection as no sampling frame was available for such firms and also due to the reason that data was collected from tech entrepreneurial ventures from different sectors such as software houses, freelance service providers, online educators, tech-enabled entrepreneurial firms in different industries and cities in Pakistan. 5–point Likert scale questionnaire was used for measuring the quantitative variables. Data analysis was done using Statistical Package for Social Sciences (SPSS) version 23. For



that purpose, first, the demographic statistics were found and the normality curves of the data were found. Most of the data normality curves showed a normal pattern. Pearson correlation was found using SPSS for the computed variables of the study.

For testing the indirect effects of variables/hypothesis testing for the serial mediation model of the study, Process Marco tool version 3.3 was used in SPSS, and two separate models were run using model 6. The methodology for using serial mediation Model 6 by Preacher and Hayes' PROCESS macro involves several steps. For example, defining the variables of interest, including the independent variable, the mediating variables, and the dependent variable. Usually, two mediating variables are used for the serial mediation model between the independent and dependent variables. Two separate models were developed as per the model of the study (*see figure 1*). Moreover, estimating the indirect effect of the independent variable on the dependent variable through the mediating variables using the PROCESS Macro is a common step. This can be done by specifying the appropriate model for serial mediation (Model 6) and inputting the relevant data. Testing the significance of the indirect effect using the appropriate statistical test (e.g., bootstrapping). For this purpose, the default 5000 bootstrap sample was used with a 95 % confidence interval (Preacher & Hayes, 2008). Results showed that a signification serial mediation effect existed in both models. Results were interpreted in the context of the research question and the existing literature.

## Measures

All the measurement scales were adopted from previous literature. For flexible work arrangements, the 4 items measurement scale of Allen et al. (2013) was adapted in the current study. For measuring paternalistic leadership, 4 items measurement scale of Cheng et al. (2013) was adapted. 6 items measurement scale on self-efficacy was also adopted from previous literature (i.e., Luthans et al., 2007). 5 items measurement scale on mindfulness was also adapted from previous literature (i.e., Brown & Ryan, 2003). 9 items measurement scale on work engagement was also adopted from previous literature (Schaufeli et al., 2006). Four items measurement scale on affective commitment was also adopted from previous literature (Allan & Mayer, 1990).

## RESULT AND DISCUSSION

Data were analyzed using Statistical Package for Social Sciences (SPSS) version 23. First of all, descriptive statistics were observed along with the data normality curves. Following were the results of descriptive statistics.

**Table 1: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
FlexiWA	189	3.25	4.75	4.1204	.34459
PatLeadership	189	3.50	4.75	4.1786	.33151
S.Efficacy	189	3.50	4.83	4.1093	.27842
Mindfulness	189	3.40	4.80	4.1365	.28693
Work.Eng	189	3.56	4.78	4.1393	.21982
Affective.Comit	189	3.50	5.00	4.1627	.38547
Valid N (listwise)	189				

Using Skewness and Kurtosis scores, the normality of the data was examined before the primary data analysis. The findings show that all variable scores were within the acceptable range of +1 and -1. (Hair et al., 2006). Mahalanobis distance was also used to investigate outliers. The obtained numbers were all within the acceptable range and did not contain any notable big outliers (Hair et al., 2006).

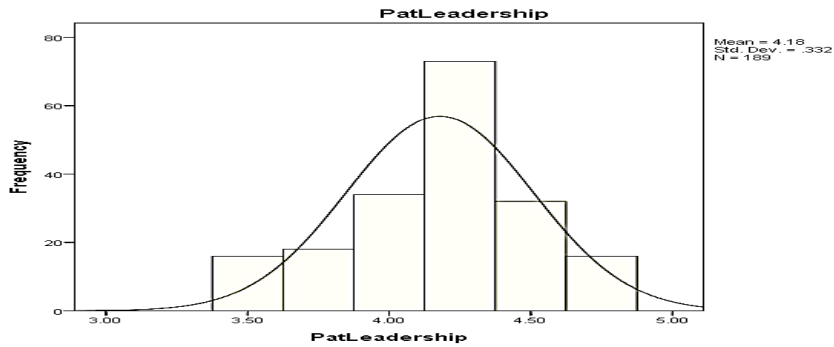


Figure 2: Data Normality Curve of Paternalistic Leadership

The data normality of paternalistic leadership variable shows a relatively normal pattern of data with a stronger concentration between 4 and 4.5 on a 5-point Likert scale. This shows that most of the respondents agreed with the existence of paternalistic leadership in their organizations.

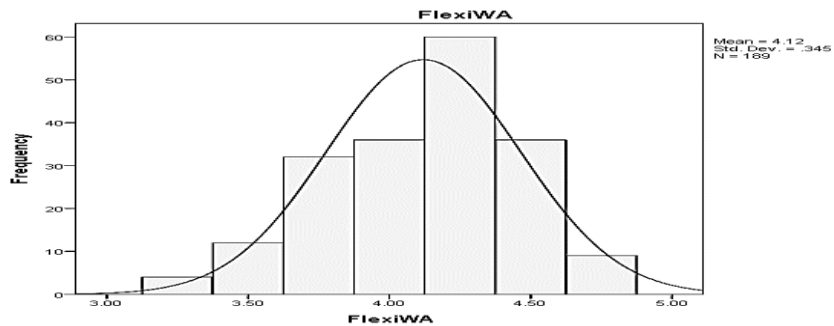


Figure 3: Data Normality Curve of Flexible Work Arrangements

The data normality of flexible work arrangement variable shows a relatively normal pattern of data with a stronger concentration between 4 and 4.5 on a 5-point Likert scale. This shows that most of the respondents agreed with the existence of flexible work arrangement in their organizations.



Figure 4: Data Normality Curve of Self Efficacy

The data normality of self-efficacy variable shows a relatively normal pattern of data with a stronger concentration between 4 and 4.5 on a 5-point Likert scale. This shows that most of the respondents agreed with the existence of self-efficacy in their organizations.



Figure 5: Data Normality Curve of Mindfulness

The data normality of mindfulness variable shows a relatively normal pattern of data with a stronger concentration between 4 and 4.5 on a 5-point Likert scale. This shows that most of the respondents agreed with the existence of mindfulness in their organizations.

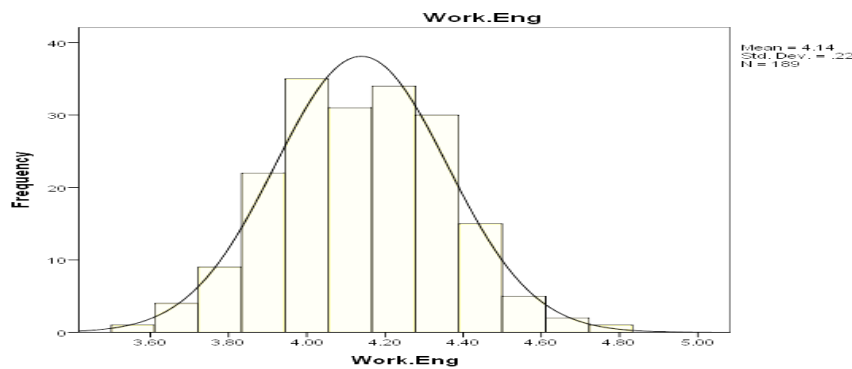


Figure 6: Data Normality Curve of Work Engagement

The data normality of work engagement shows a relatively normal pattern of data with a stronger concentration between 4 and 4.5 on a 5-point Likert scale. This shows that most of the respondents agreed with the existence of work engagement in their organizations.

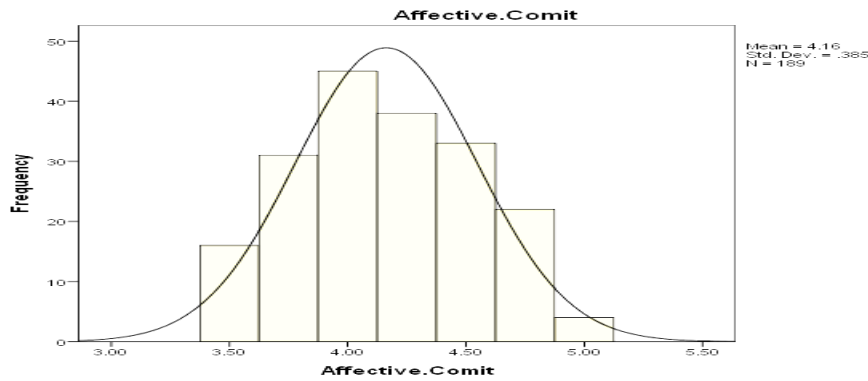


Figure 7: Data Normality Curve of Affective Commitment

The data normality of affective commitment shows a relatively normal pattern of data with a stronger concentration between 4 and 4.5 on a 5-point Likert scale. This shows that most of the respondents agreed with the existence of affective commitment in their organizations.

Table 1: Correlations

		FWA	PL	SE	MND	AC	WE
FWA	Pearson Correlation	1					
	Sig. (2-tailed)						
PL	Pearson Correlation	.576**	1				
	Sig. (2-tailed)	.000					
SE	Pearson Correlation	.465**	.477**	1			
	Sig. (2-tailed)	.000	.000				
MND	Pearson Correlation	.298**	.286**	.257**	1		
	Sig. (2-tailed)	.000	.000	.000			
AC	Pearson Correlation	.298**	.286**	.257**	1.000**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
WE	Pearson Correlation	.298**	.286**	.257**	1.000**	1.000**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The table of Pearson correlation among variables shows that most of the variables have a moderate and positive correlation. This is an early indication of a positive relationship among the variables of the study. Pearson correlation ranges between the value of -1 to +1 which shows the strength and direction of the variables. If a correlation value of a variable comes as negative, then shows the negative direction of the variable where it may get its relationship with other variables in a negative direction. However, a positive correlation shows that the values of the variable are tilted in positive direction (Shahzad et al., 2019).

## Indirect Effects using Process Macro by Preacher and Hayes

For testing the direct and indirect effects of variables, Process Macro Tool by Preacher and Hayes (version 3.3) was used in SPSS for analyzing the effect of serial mediation through model 6.

**Table 2: Serial mediation effect of FWA on work engagement through self-efficacy and mindfulness**

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	.1779	.0427	.1071	.2488
Ind1	.0000	.0000	.0000	.0000
Ind2	.1360	.0491	.0579	.2196
Ind3	.0419	.0262	-.0010	.0848

Table 2 shows the direct and indirect effects of the first serial mediation model. The total effect in process macro refers to the overall change in a dependent variable (outcome) that is caused by an independent variable (treatment or intervention) when all other variables are held constant. It is also known as the "main effect" or "average treatment effect." (Kraemer et al., 2002) In this case, it shows that there comes out a 0.17 change in the dependent variable due to one unit change in the independent variable. The upper-level confidence interval and lower-level confidence interval values are also positive which shows that it is a significant direct effect. All three indirect values upper-level confidence interval and lower-level confidence interval values are also positive which shows that it is a significant indirect effect of serial mediators for the relationship of the independent and dependent variable.

Serial mediation refers to a scenario in which the effect of an independent variable on a dependent variable is mediated by multiple mediators, rather than just one. In other words, the independent variable has an indirect effect on the dependent variable through a series of mediating variables (MacKinnon et al., 2007). Through the use of bootstrap confidence intervals (subsamples = 5000), the indirect effect can be properly assessed. Zero represents the null impact of the hypothesis in that situation. Researchers maintain the null hypothesis if the value of zero falls inside the upper and lower bounds of the confidence range. Alternatively, it is accepted that the serial mediators' indirect effect on the model significantly exists (Hayes, 2017, Shahzad et al., 2019). The first hypothesis, that team mindfulness modulates the association between task conflict and felt stress, is correct in this situation because 0 falls outside of that key zone. This was the case here in the first serial mediation model as depicted in the values of table 2 which also supports our first hypothesis. The indirect effect at the first and second levels is significant.

Here, the serial mediation model is statistically significant ( $p < 0.05$ ) at the 95 % confidence interval ( $\beta = .1779$ ,  $SE. = .0427$ ,  $p = .0483$ ,  $LLCI = .1071$ ,  $ULCI = .2488$ ). The first hypothesis is likewise supported by this, demonstrating the existence of the serial mediation effect in this instance. The R square change value was.0148. R square change is the moderator's supplementary contribution to the change in DV (Hayes, 2017).

**Table 3: Serial mediation effect of FWA on work engagement through paternalistic leadership and affective commitment**

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	.1779	.0426	.1093	.2503
Ind1	.0000	.0000	.0000	.0000
Ind2	.1191	.0553	.0297	.2119
Ind3	.0588	.0308	.0111	.1122

Table 3 shows the direct and indirect effects of the second serial mediation model. In this case, it shows that there comes out a 0.17 change in the dependent variable due to one unit change in the independent variable. The upper-level confidence interval and lower-level confidence interval values are also positive which shows that it is a significant direct effect. All three indirect values upper-level confidence interval and lower-level confidence interval values are also positive which shows that it is a significant indirect effect of serial mediators for the relationship of the independent and dependent variable (Kraemer et al., 2002).

**Table 4: Results of Hypotheses Testing**

Hypothesis	Hypothesis Statement	Results
H <sub>1</sub>	A positive serial mediation effect of self-efficacy and mindfulness exists in the relationship between flexible work arrangements and work engagement.	Supported
H <sub>2</sub>	A positive serial mediation effect of paternalistic leadership and affective commitment exists in the relationship between flexible work arrangements and work engagement.	Supported

## CONCLUSION AND RESEARCH IMPLICATION

This section elaborates on the study's implications and is followed by the overall conclusion of the study.

### Theoretical Implications

Studies of this kind are the need of the hour. Many journals of HRM have issued a call for papers on flexible working after the crisis of COVID - 19. The proposed relationship of variables in the model of the current study is expected to significantly add to the body of knowledge by explaining how paternalistic leadership and flexible work arrangements can play a role in developing work engagement along with self-efficacy and mindfulness of the individuals ultimately resulting in positive work outcomes. Hence, these new serial mediation models would not just add to the existing body of knowledge in the management literature but have the potential for theoretical contribution in affective events theory concerning the role of new relevant variables like the positive use of self-efficacy with mindfulness, organizational commitment and paternalistic leadership with their relative models of serial mediation to enhance work engagement.

Research has shown that flexible work options positively add to job satisfaction, employees' well-being, and better work engagement, etc. This is particularly important after COVID – 19 crises as the workplace has been badly impacted and the world over, initiatives for alternate work arrangements have been taken. However, there is a need to study different mechanisms of flexible work arrangements for greater effectiveness of these options at the workplace (Spurk & Straub, 2020). Practitioners would better understand that the provision of flexible working is not just a regulatory requirement to have better compliance with governmental rules but it may also add to the motivation of workers, their mindfulness, affective commitment, and work engagement, etc. This also reduces the operating expenses of organizations as employees don't necessarily have to come to the offices and online means of information and communication technology may be helpful in day-to-day reporting of work progress, and meetings and for deciding the agenda of the future.

### **Practical Implications**

With the increased awareness of flexible work arrangements and their popularity, many organizations had already adopted such practices. Women, dual-earning couples, people with illness and disabilities, part-time workers, consultants, psychological contract employees, and contractual workers not just in private sector organizations but in government organizations need to use flexible but performance-based work arrangements and this needs a revision of institutional policies, rigid service rules, organizational norms, and organizational culture. It was the COVID – 19 crisis when governments had to impose lock down and even after the lockdown, concerns at the workplace, such as health & safety of workers, social distancing, etc., require policymakers and governments to make clear policy parameters for flexible work arrangements such as remote working, telecommuting, social distancing in a traditional workplace, etc., for better preparing a workplace and for a future that can well be called as a new normal for organizational work affairs in this digitalized world, especially for technology-focused entrepreneurial firms including all types of other institutions.

### **Limitations and Directions for Future Research**

This empirical study needs further exploration for establishing the role of flexible work arrangements and their implications in different sectors, cultures, and organizational contexts. It is also a great opportunity for scholars to get themselves engaged with inductive research for theory development along with the possibilities of theory testing for further establishing such research variables as proposed in the current study. For example, empirical studies may test this model with the underpinning use of different other theories such as contingency theory, paradox theory, institutional theory, job-demands resource theory (JD-R theory), and theory of planned behavior, etc.

Future researchers may also propose different other models and there are possibilities of conducting exploratory studies as well because work in a post-COVID – 19 is a relatively new phenomenon. Future researchers may also want to replicate the same model in other countries and longitudinal research studies may also be conducted with a bigger dataset for further validating this serial mediation-based research model.

## Conclusion

There is no doubt that the workplace is having changing trends after COVID – 19. The health and safety of the employees, customers, and stakeholders have become most important not just as a policy matter for the organizations but also as a regulatory requirement. Those organizations that can offer flexible work arrangements are in the best possible position to get engaged in sustainable business for themselves and carry a positive image in society. This study has proposed a few relationships of the variables that can potentially enhance the workers' productivity in terms of affective commitment, work engagement, and emotional intelligence. Hence, organizations need to devise such measures that can offer the optimum level of flexible work arrangements. This can also enhance work-life balance and can reduce negative outcomes like work-family conflict and social undermining.

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