



# Work from home - A new virtual reality

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Accepted: 21 December 2021

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## Abstract

The present study aims to contribute to the research of future possibility of Work from Home (WFH) during the pandemic times of Covid 19 and its different antecedents such as job performance, work dependence, work life balance, social interaction, supervisor's role and work environment. A structured questionnaire was adopted comprising of 19 questions with six questions pertaining to work related infrastructure at home. Data was collected from 138 full time employees working from home which revealed the influence of work dependence, work environment and work life balance which were hypothesized to be directly related to the willingness to work from home in future if given an opportunity. Qualitative analysis revealed that job performance, social interaction and supervisor's role related hypothesis are refuted. The study tries to bridge the gap between the existing research done in past during normal course of time and current pandemic. The current research of WFH during the Covid 19 in employees working from home in India is an attempt to assess the antecedents in current situation. These results have important theoretical and practical implications.

**Keywords** Work from home · Virtual workspace · Lockdown · Cataclysm · COVID 19

**JEL Classification** M1 · M5 · Z0 · Y0 · R5

## Introduction

The threat of a Covid 19 cataclysm has greatly increased over the past few months. The recent Covid 19 outbreak has brought the world to a standstill. Soon after the emergency was declared by the World Health Organization (WHO), all the nations including India began to enforce stringent rules of lockdown in order to curtail the spread of the deadly virus. All the offices, schools, manufacturing units, organizations, shopping malls, markets except health-care and essential services were shutdown with a view to

break the chain of spread. World is reeling in the midst of the novel corona-virus (COVID-19) pandemic with fear of rising death toll due to the deadly virus. Soon after WHO declared the COVID 19 as a pandemic, the Government of India has announced a complete lockdown. In this pandemic situation people from all over the world are facing difficulty to do work in the work place. It has advised companies to implement work from home policy for their staff as part of encouraging social distancing to curb spread of novel corona virus infection.

Due to the unprecedented circumstances, the employees from all the sectors have been impacted significantly. The social distancing and the self-isolation measures imposed by the Government has brought basic structural changes in the way employees work in organizations. Work from home these days has become the need of the hour for most of the working population in the contemporary way of work life and has become common for many employees around the globe (Vilhelmson & Thulin, 2016). The office workspace is now combined with the personal space. This has brought a mammoth change in the way employees work. The digital transformation and the virtual workspace have made the employees work together despite located in distinct

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places. The research conducted by Windeler et al. (Windeler et al., 2017) shows that maintaining a certain level of social interaction is important for employees' functioning when they work from home. Extensive research has been done earlier which centred on the influence of work from home on employee performance (Allen et al., 2015; Bailey & Kurland, 2002; De Menezes & Kelliher, 2011; Gajendran & Harrison, 2007; Martínez Sánchez et al., 2007). Whereas some studies have also shown that working from home leads to better performance (Allen et al., 2015; Vega et al., 2014), others warn that working from home leads to social and professional isolation that confines knowledge sharing (Crandall & Gao, 2005; Arun Kumar & Shekhar, 2020) and leads to the intensification of labour (Felstead & Henseke, 2017; Kelliher & Anderson, 2009).

Previous researchers focused on working from home (Baker et al., 2007). Due to strong surge in employment of women and growing dual earners, flexible working has become important for balanced work and personal life (Russell et al., 2009). In modern times, employees have started to adopt various technologies to interconnect devices at home. The influence of technology on the routine home life is studied in earlier research (Grinter et al., 2005). Innovative technology and telecommunication have increased the possibility of working from the home. Work from home settings for the employee's quality of working life were discussed in the earlier studies (Shamir & Salomon, 1985). The extensive review of literature has revealed that home office has positive influence and traditional office has negative influence on work life balance when job related factors and family related factors in three work settings namely traditional office, virtual office and home office was studied (Hill et al., 2003). Research of work from home during pandemic or emergency is limited due to the sudden upheaval it has created in the recent times.

In this paper an attempt is made to study the various factors related to willingness to work from home in future and its impact on performance, supervision, social interactions with teams. This study also attempts to study the relationship between various factors relating to WFH during the pandemic. It even attempts to study the effect of isolation from the physical workspace and the challenges encountered by the employees working in virtual workspace during the pandemic.

The corona virus pandemic popularly known as Covid 19 has left many employees confined to their homes. The present study focuses on the need arising due to corona pandemic across the world which has further restricted movement across different places during the lockdown. During this period the employees were asked to work from home without affecting organization's productivity at the

same time ensuring social distancing measures which were followed during the lockdown. The present study is trying to access the willingness and the future possibility of WFH as a post pandemic measure. This study shows our preparedness for the next level of new normalcy of virtual workspace. As a precautionary measure if there is an additional requirement to further curtail the movement of people or in order to cut down certain costs without effecting the productivity, the organizations may prefer employees to continue work from home. This study helps the organizations to understand the challenges and the preparedness of future contingencies.

## Methodology

### Respondents and Research Approach

In this cross-sectional study, people from India were requested to participate in the study. Respondents were contacted and requested to fill the questionnaire online through google forms in WhatsApp. The participants were assured of anonymity and confidentiality of data. Their prior consent and willingness to participate in survey was taken. Both female and male respondents were included in the study. The study aimed to examine educated and qualified young professionals within the working age group working from home during the Covid 19 crisis. The convenient sampling technique was implied for collecting the data. Respondents were included in this study only if they were willing to respond. In total, more than 200 questionnaires were distributed. 138 of the total respondents accepted to participate in the study. The response rate for the study was calculated to be 70% which is sufficient to conduct the further analysis. All the participants who filled the form were employees working from home due to lockdown restrictions imposed by the nation, in order to break the chain of transmission of novel corona virus (Covid 19). The field work of the study was conducted during June to December 2020. Each section had several questions related to a particular construct. The first section in the questionnaire consisted of the basic demographic information of the participants, which includes age, gender, marital status, children, educational level and whether they were willing and able (whether they had the infrastructure) to work from home.

To provide the current status of WFH during lockdown comprehensively, the respondents were asked to answer the questions divided into 7 parts which are work related infrastructure at home, job performance, work dependence, work life balance, social interactions, supervisor's role, work

environment and willingness to work from home in future (Shown in Appendix Table 1).

### Instrument

Work from home practices in pandemic COVID-19 situation demonstrates multifaceted phenomena. The aim of this paper is to gain deeper insight of willingness to work from home post COVID-19. This paper is based on primary data as well as secondary data. The survey method was adopted to conduct the study. Based on the review of literature and the researcher's understanding of the concept, a structured questionnaire was adopted.

The questionnaire consisted of 6 demographic questions, 6 pertaining to work infrastructure and 19 questions related to the core essence of the study (See Appendix Table 1). Questions on work related infrastructure at home was borrowed from the study done by Garg & van der Rijst, 2015 with slight modifications. The reliability of the questionnaire was checked by calculating the Cronbach's Coefficient Alpha value (See Table 2). This value depicts the reliability of a single uni-dimensional latent construct. The Cronbach's Coefficient Alpha of the overall scale for this study was calculated to be 0.708. A Cronbach's coefficient alpha value of 0.60 was suggested as threshold for the Cronbach's alpha reliability and acceptability (Pallant, 2013). This confirmed the internal consistency of the current study.

### Job Performance

Job Performance was measured using three item scale used by Raghuram et al. (2001); Sims et al. (1976). This scale was also used by Garg and van der Rijst (2015). The sample question for job performance is "The measures of my job performance are clear." One question pertaining to this has been added by the authors though not in scale as it is relevant for analysis "Employee engagement is more during the lock down". Each item was measured using 5-point Likert scale with 1 as strongly disagree and 5 as strongly agree. The Cronbach alpha value for Job Performance is 0.75.

### Work Dependence

Work dependence was measured using three item scale used in study done by Sims et al. (1976). The sample item is "My performance does not depend on working with others." The scale items are anchored with strongly disagree as 1 and strongly agree as 5. The Cronbach alpha value for Work dependence is 0.84.

### Work Life Balance

Work life balance during lockdown was measured using three item scale developed for the purpose of study. The sample questions are "Overall I am comfortable" (not considered due to model fit issues), "I am able to balance both work and household during the lock down" and "I feel it is difficult to maintain work life balance as I have to remain available all the time". Each item was measured using 5-point Likert scale with 1 as strongly disagree and 5 as strongly agree. The Cronbach's alpha value for this factor is 0.75.

### Social Interaction

Social interaction was measured using three item scale used by Raghuram et al. (2001). This scale was also used by Garg and van der Rijst (2015). The sample item is "The work-related meetings in my office are adequate to build good working relationships". The scale is anchored with 1 as strongly disagree and 5 as strongly agree. The Cronbach's alpha value for this factor is 0.642.

### Supervisors Role

Supervisor's role was measured using three item scale developed for the purpose of study. The sample question is "My superior is very supportive in addressing problems during the lock down". Each item was measured using 5-point Likert scale with 1 as strongly disagree and 5 as strongly agree. The Cronbach's alpha value for this factor is 0.781.

### Work Environment

Work environment was measured using three item scale used by Fonner and Roloff (2010). This scale was also used by Garg and van der Rijst (2015). The sample item is "I am distracted by other things going on in my work environment, such as background noise?". The scale is anchored with 1 as strongly disagree and 5 as strongly agree. The Cronbach's alpha value for this factor is 0.66.

### Willingness to Work from Home in Future

The dependent variable willingness to work from home in future (FWFH) post covid crisis was measured using single item "I feel post pandemic also work from home permits should be given". This was measured using 5-point Likert scale with 1 as strongly disagree and 5 as strongly agree.

## Data Synthesis

To test the hypothesized model, a Structural Equation Model (SEM) was used. The Statistical Package for Social Sciences (SPSS 28) and Analysis of Moment Structures (AMOS 28) was used for the study. The research analysis was conducted using two-step approach. Measurement model and Structural models were tested. The measurement model was checked for validity, internal consistency and reliability. To test the scale items Confirmatory Factor Analysis (CFA) was used. Present study reported Comparative Fit index (CFI), Root Mean Square Error of Approximation (RMSEA), Root Mean Residuals (RMR). The six latent constructs of the measurement model are tested to check if all the coefficients indicate FWFH. The coefficient values show that work dependence, work life balance and work environment are significant determinants of FWFH.

## Hypothesis

Extensive literature review has revealed the existing models developed by various researches. The Model framework proposed by Nordin et al., 2016 is as under. Previous research findings and the model framework set by Nordin et al., 2016 was studied. The change in the circumstances advocate the need for supplementary variables to the existing model. We would like to study the moderating effect of pandemic lockdown on employee preference to WFH post pandemic.

H1: There is a positive influence of job performance on employee's willingness to FWFH

As it is identified by many researchers and evident from the previous literature that job performance is one of the essential components in the study of work from home. The authors Garg and van der Rijst (2015) have studied the relationship between the job performance and professional isolation. Job performance and work from home are related and are inter dependent. When there is clear understanding of job performance and when the job indicators are quantifiable, work from home possibility is more even after pandemic. Therefore, it is hypothesized as there is a positive influence of job performance on work from home in future.

H2: There is a negative influence of work dependence on employee's willingness to FWFH

In past research was directed towards the importance of telecommuting and increasing work dependence (Vana et al., 2008). The study made by Garg and van der Rijst (2015) found that work dependence had a weak positive relation to experience with virtual work. The focus of present

study is to assess the willingness of employees to work from home post pandemic. The present study is during the peculiar times of Covid 19 which makes the concept of WFH a unique one.

H3: There is a negative influence of social interaction on employee's willingness to FWFH

Another important component of factors influencing willingness to work from home in future (FWFH) is Social Interaction. Previous studies (Baumeister & Leary, 1995) have highlighted that work from home with less social interaction in employees will make them aggravated due to isolation. Mintz-Binder & Allen, 2019 observed the factor social contact in terms of virtual meetings and online interactions. Many researchers in the past have focussed on the need to maintain firm and well-built interpersonal social relationships. There exists a negative influence of social interaction on work from home in near future.

H4: There is a positive influence of supervisor's role on employee's willingness to FWFH

Raghuram and Fang (2014) have studied the role of the supervisor in controlling the employees working from home. Previously Lautsch et al. (2009) have studied the general perceptions regarding supportiveness of supervisors. Madlock (2012) has studied the leadership styles and their results suggested that supervisors occupied in work oriented more than relational oriented leadership style in the virtual workplace.

H5: There is a negative influence of work environment on employee's willingness to FWFH

According to Wheatley (2012), work from home eliminates the workplace related distractions and allows to work productively without interruptions. The results of the present study are in agreement with the study conducted by Golden (2007) which pointed out that the virtual technology like e-mail and online-conferences to interact with other employees lack the warmth and social presence of face-to-face interaction.

H6: There is a positive influence of work life balance on employee's willingness to FWFH

Study conducted by Venkatraman et al. (1999) emphasised that working overtime informally without any extra payment affects the personal life of the employees. The study conducted by Tietze and Musson (2010) elicits that balance between work and home is essential to understand the relationship between household and professional life. The results of the present study agreed with a balanced work and family

life will have greater willingness to work from home. Thus, the proposed hypothesis is that there is a positive influence of work life balance on the employee's willingness to work from home in future (FWFH).

### Demographic Profile of Respondents

The study consisted of 138 participants working from home during the lockdown. 21% of respondents were female whereas 79% were male. The largest group 58% fall in the age group of 18–25 years, 34% of respondents were in 26–35 years of age group and 36–45 years of the age group is represented by 8% in the current study. The largest group 50% are Professionals (None of them are front end medical workers), 24% are IT software employees and others represent 26% (Design engineers, BPO employees and backend support). In terms of the highest educational qualification, 45% of participants were degree/diploma holders, 40% were postgraduates and 16% were holding a professional qualification. None of them were below graduation level, the group is mature.

### Data Screening

The responses were complete in all aspects. There is no missing data in the columns. Also, observed quite normally distributed data of our latent factors and other variables like job performance, work dependence, social interaction, supervisor's role, work environment and work life balance. To measure the multivariate normality, kurtosis and skewness measures were used which was generated using AMOS 26. The data exhibited normal distribution which ranged from  $-1.3$  to  $2.04$ . The threshold value for Kurtosis and Skewness is  $-2$  to  $+2$  (Byrne, 2010). However, the value of  $2.04$  does not violate the normality. The threshold is  $3.3$  according to Skarpness, 1983. This number indicates a good fit. Multivariate Analysis was suggested by Hu & Bentler, 1998 as an indication of goodness of fit. The multivariate measure in the study is  $15.472$  at critical ratio  $1.298$ . The data is perfectly well behaved.

### Results

The present study has attempted to explore the structural relationship between the multiple factors relating to Work from Home. Questions were measuring the variables on five point Likert scale. This was run in SPSS 28 using Varimax with Normalization method for rotation. The rotation and iteration were run until the ultimate clear pattern matrix arrived. The factor patterns arrived under each column were thoroughly diagnosed to understand the plausible cross-loadings of factors and elimination of redundant variables (Brown & Moore, 2012). Six factors were identified under

different heads like job performance (JP), work dependence (WD), work life balance (WLB), social interaction (SI), supervisor's role (SR) and work environment (WE). These six factors explained were calculated from the sum of squared loadings from the structure matrix. The total accumulated variance explained is  $71.709\%$  for work from home during pandemic. The total variance explained by first factor job performance is  $13.65\%$ , the second factor work dependence is  $13.656\%$ , work life balance is  $12.965$ , social interaction is  $12.450$ , supervisor's role is  $10.392$  and work environment is  $8.998$ . Absolute values below  $0.5$  were eliminated. During the principal axis factoring, few items cross loaded on another component and few items in scale were deleted due to low factor loadings. An item in the job performance scale "There are objective criteria by which my performance can be evaluated" was cross loaded on supervisor's role component during factor analysis. Third item in work life balance was deleted due to poor loading. The rotation converged in 7 iterations. Bartlett's Test of Sphericity was significant at  $000$  indicating the result was acceptably valid. In addition to this, the model fit indices were verified for the proposed factor structure. The CFA result yielded an adequate fit. The  $CMIN = 164.268$ ,  $CMIN/df = 1.711$ ,  $CFI = 0.922$ ,  $RMSEA = 0.08$ ,  $RMR = 1.55$  (See Appendix Table 3). The overall model exhibited a good fit. The Harman single factor test was used for examining if the problem of common method variance (CMV) exists or not. All the factors have not significantly loaded on a single factor. This test confirms that CMV is not a significant problem in this study.

The job performance scaled on three measures. It is easy to measure and quantify employee performance (with path coefficients  $= 0.932$ ), the measures of employee job performance are clear (with path coefficients  $= 0.829$ ), the feeling that employee engagement is more during the lockdown (with path coefficients  $= 0.704$ ). The hypotheses that there exists a positive influence of job performance on employee's willingness to WFH in future is refuted with estimate of  $0.003$  at  $p$  value greater than  $0.05$ . There is a negative influence of work dependence on employee's willingness to WFH in future. In this factor three aspects of work dependence are measured, the extent to which the employee performance depends on working with others (with path coefficients  $0.892$ ), the need to work independently for performing the best (with path coefficients  $0.872$ ), the nature of work in terms of independent task or projects (with path coefficients  $0.675$ ). All three are significant with  $p$  value less than  $0.05$ . However, the study has revealed the negative influence of Work Dependence on employee's willingness to work from home in future post pandemic situation. It may be inferred that the higher degree of WFH is associated with weakened work dependence. This is due to the interdependence of departments for work completion. Like for



example, the dependence on IT department for setting up remote access to all the employees for completion of work during the sudden lockdown. Next, social interaction was measured. The first item, social interactions are more in the current lock down situation (deleted due to low loadings), The work-related meetings in my office are adequate to build good working relationships (with path coefficient 0.915), the social events in virtual office are adequate to build a sense of community (with path coefficient 0.725). The research hypotheses relating to negative influence of social interaction on employee's willingness to WFH in future is refuted in the current study. The relationship between social interaction and willingness to WFH in future is  $-0.193$  at  $p$  value greater than 0.05. Thus, we refute the hypothesis.

The results of the present study hypothesize that there is a positive influence of supervisor's role on employee's willingness to WFH in future has been refuted. In the present study focused on three aspects of supervisory role. The first being close supervision of work during the lockdown (with path coefficients 0.902). Secondly, employees understanding on the criteria for evaluating the performance was studied (with path coefficients 0.760). Lastly, the support extended by the superior in addressing problems during the lockdown (with path coefficients 0.673) was studied. The supervisor's role estimated  $-0.002$  at  $p$  value more than 0.05. Thus, hypothesis is rejected under study that there is a positive influence of supervisor's role on employee willingness to WFH in future.

Hypothesis results have revealed that there is a significant negative influence of work environment on employee's willingness to WFH in future (with path coefficients  $-0.245$ ). In this factor, three aspects of work environment were measured, the interruption caused when colleagues talk in virtual meetings (with path coefficients 0.746) and the distraction caused by other things going on in the work environment, such as background noise (with path coefficients 0.802) and feeling of pressure because meetings take away from work (with path coefficients 0.632) are measured under this head. Moreover, it consumes lot of productive time to effecting work particularly for the complex type of tasks. It may be inferred that the higher degree of willingness to WFH is associated with weakened work environment.

Work life balance is measured using three items. Overall comfort working from home (with path coefficient 0.630), employee's ability to balance both work and household during the lock down (with path coefficient 0.909) and feeling of difficulty in maintaining work life balance due to the pressure of remaining available all the time (deleted due to low loadings). There is a positive influence of work life balance on employees willingness to WFH in future with regression estimate of 0.546 at  $p$  value less than 0.05. It may be inferred

that higher degree of work life balance has an incremental effect on willingness to WFH.

### Assessment of Reflective Model

**Reliability Analysis** Cronbach Alpha was used to assess the inter item consistency between measurement variables. Cronbach's Alpha for all the factors put together was 0.708. Post factorization, the Cronbach's Alpha for job performance was 0.750, work dependence was 0.844, work life balance was 0.75, social interaction was 0.64, superior's role was 0.781 and work environment was 0.66. All these values are above 0.6 indicating acceptable internal consistency (Nunnally, 1978). Next, Composite Reliability (CR) was assessed. CR values ranged from 0.753 to 0.865 higher than minimum requirement of 0.7 (see Appendix Table 4).

**Convergent Validity** Convergent validity was assessed using Average Variance Explained (AVE). The AVE values ranged from 0.533 to 0.684 higher than 0.5 threshold. The factor loadings exceeded 0.5 minimum requirement (Fornell & Larcker, 1981). Thus, Convergent Validity was assured.

**Discriminant Validity** Discriminant validity is assured by comparing the square root of AVE and inter-correlations between other constructs as exhibited in Appendix Table 5. The diagonal bold numbers in the table indicate square root of AVE and the non-diagonal numbers are the correlations between constructs signifying discriminant validity.

**Content Validity** It is very important to take utmost care while designing the questionnaire. The questionnaire was simple in its structure and the language used was easy to understand. This was principally designed to get better content validity.

### Structural Model Testing

**Hypothesis Testing** In the structural model analysis, multi-dimensional model was hypothesised and tested for significance. While testing the objectives under the study, it was encountered that three out of six path coefficients were considered statistically significant. Work dependence (with path coefficients  $-0.345$ ), work environment (with path coefficients  $-0.245$ ), work life balance (with path coefficients 0.546) are significantly related to employee willingness to WFH in future post pandemic. While job performance, social interaction and supervisor's role are not statistically significant (See Appendix Table 6).

As predicted in Hypothesis 2, work dependence is negatively associated with FWFH ( $\beta = -0.345$ ,  $p < 0.05$ ). Hypothesis 5, work environment is negatively associated with FWFH ( $\beta = -0.245$ ,  $p < 0.05$ ). Hypothesis 6, work life

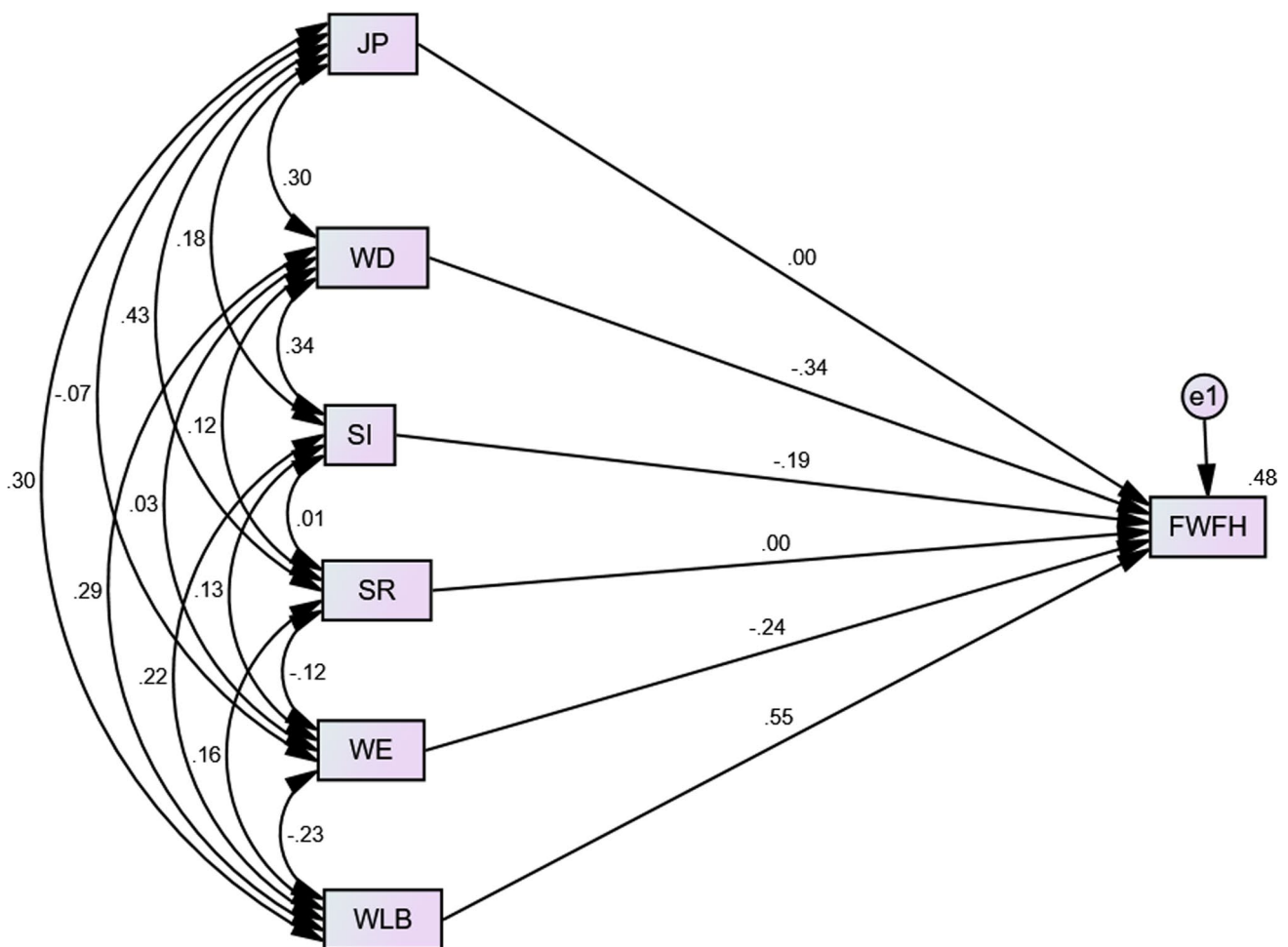


Fig. 1 Hypothesis testing results with SEM

balance is negatively associated with FWFH ( $\beta = 0.546$ ,  $p < 0.05$ ). Hypothesis 2, 5 and 6 are supported.

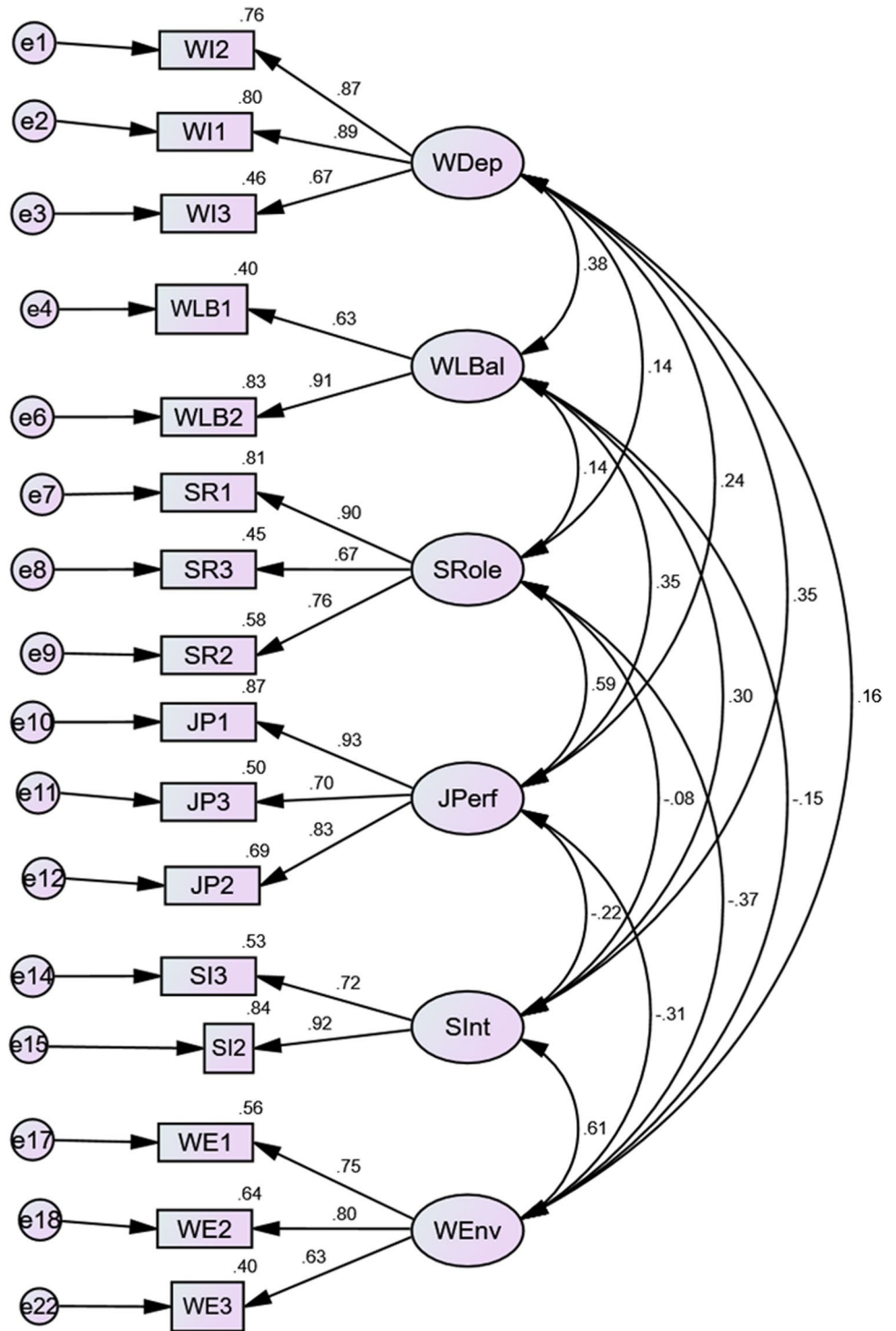
Unexpectedly, Hypothesis 1 that states that there exists a positive influence of job performance on FWFH was not supported. Hypothesis 3, that there is a negative influence of social interaction on FWFH was also not supported. Finally, Hypothesis 4, that there is a positive influence of supervisor’s role on FWFH was also not statistically significant (See Fig. 1).

### Discussion

Number of variables relating to work infrastructure at home, work dependence, virtual meetings, supervision, performance, social interactions with co-workers, challenges encountered and work life balance were measured in this study (See Fig. 2). Based on the availability of work related infrastructure at home during lock down, this part of the

survey tries to access the willingness and the future possibility of WFH if required. 82% of respondents confirmed that they are ready to work from home if they are given an opportunity and if such situations demand in future. Moreover, 82% had confirmed that they have internet connection at home, 50% of total respondents confirmed that they have air-conditioning at home, 60% respondents confirmed that they have separate space to work from home, 79% of participants opined that their home office were silent. 87% had computer/laptop/headphones and other accessories required for WFH. This indicates that most of them have access to basic work related infrastructure. It also indicates the future possibility of work from home. 79% of respondents agree that they felt there is a close supervision of work during the lockdown out of which 29% of respondents strongly agreed. This indicates that the amount of supervision over their work has increased comparatively. 76% agreed that they felt that employee engagement is more during the lock down out of which 26% of them strongly agreed. None of

**Fig. 2** Six factor model of work from home



them strongly disagreed that employee engagement is more during lockdown.

In perceived organizational support, the survey made an attempt to study the superior’s support towards the team members in addressing various work related problems

during the remote working scenario. It has been observed that superiors strongly support their teams when they confront any problems relating to work. Majority of them 83% agreed that they have a very supportive work environment out of which 23% of participants strongly agreed. Moreover,



71% agreed that social interactions were must, whereas 7% denied its importance. However, 21% were neutral.

The social events in virtual offices needs to be adequate to build a sense of community and break the social isolation among the teams. 61% agreed that they had adequate social events with co-workers in virtual office whereas 29% of them were neutral and only 10% of participants complained of not having adequate social events.

With respect to the adequacy of work related meetings, 68% of the participants agreed that the work-related meetings in the virtual office were adequate. This indicates that most of the employees working from home are closely connected through work related meetings. This is a good indicator of building a work relationship even during the lockdown in-spite of physical isolation. Only 5% feel that there are not much adequate interactions in terms of work related team meets as before.

Team meetings are a great way to come together with the colleagues and clients both inside and outside of the organization. The online platforms which are being commonly used in Indian scenario are zoom, google meet, webex, microsoft teams, go to meeting, kaizala and skype other service providers which they agreed to be very effective tools for managing virtual teams. However, it is also observed that certain problems and challenges with respect to internet connectivity, server issues, call drops, hacking and data insecurity during the lockdown were encountered. The study found that 55% of respondents agreed that messaging and chat has improved the team effectiveness. This study has revealed the role of technology in building the virtual workspace. Another problem which has surfaced during the study is the fact that the pressure to be available online all the time has affected the work life balance. 63% of participants agreed that post pandemic also work from home permits should be given. Thus, 63% of employees are comfortable with work from home.

## Conclusion

The evidence conferred suggests that WFH is on the whole beneficial to both organizations and its employees. Majority of the respondents agreed to WFH post pandemic with clarity on their performance indicators and enhanced productivity, it can be concluded that WFH during the pandemic is an overall WIN-WIN situation for the employees and the corporate (Garg & van der Rijst, 2015). However, home space has become the work area affecting the overall work life balance with long working hours, pressure to be available all the time. In conclusion, the tech problems associated with remote working due to unpreparedness with respect to COVID 19 cataclysm has contributed to the existing challenges of the employees

and organizations. It has also been observed that remote working has built a pressure on the home networks which led to frequent interruption in the regular working. Moreover, hacking and data security threats have added to the existing problems. Poor network quality coupled up with frequent call drops, server and connectivity problems are few more issues noticed.

With this, it can be concluded that despite all these challenges faced by the employees the exemplary attitude of employees towards WFH is commendable. It has been observed that majority of respondents have agreed to WFH post lockdown which truly exhibits the spirit to cooperate and abide by the nations call towards adhering to the timely health guidelines without affecting the productivity.

The current seismic circumstances are directing organizations and its employees into a new era of WFH. Employee engagement and supervision coupled alongside supervisor's support is the only way ahead. Catching up formally and informally through conference calls is the only mode to build teams effectiveness and team inclusion without compromising the productivity and the work enthusiasm is the new reality.

## Implications of the Study

The change in the place of working calls for the attention of the labour laws. The Government needs to redefine the existing labour laws in the country. The traditional laws related to workplace requires to be replaced with the changing needs of WFH. This calls for framing of new HR policies in organisations in order to ensure perfect work life balance.

## Limitations of Study and Scope for Further Research

Nevertheless, the present study has limitations. The study is limited to a small group of participants of private organizations including young educated working professionals, IT software employees, design engineers, BPO employees and backend support employees working from home. In this study, employees working in essential services and health care were excluded. The recommended future direction for research would be to study using a feasibly larger sample of survey and test the validity. The study is social desirability response bias. Although the anonymity was assured to the respondents there could be a possibility of bias in participation. Social desirability response bias in self report research as pointed out by authors Van de Mortel (2008) may have transpired. The present study calls for the attention of researchers towards WFH in educational sector and

challenges of smart teaching and learning. The impact of WFH and professional isolation on physical and mental well-being should also be further investigated in order to develop preparedness of management during contingencies.

## Appendix

Appendix Tables 1, 2, 3, 4, 5 and 6

**Table 1** Demographical characteristics and status of the respondents

Demographic details	<ul style="list-style-type: none"> <li>• Gender</li> <li>• Age</li> <li>• Job domain</li> <li>• Highest Level of education</li> <li>• Marital status</li> <li>• Children (if any)</li> </ul>
Infrastructure at Home (WFH)	<ul style="list-style-type: none"> <li>• Connection</li> <li>• Air-conditioning at home</li> <li>• Separate space to work from home</li> <li>• Home environment</li> <li>• Computer/laptop/Tab</li> <li>• Network/ Hacking/ Security issues encountered</li> </ul>
Job Performance	<ul style="list-style-type: none"> <li>• It is easy to measure and quantify my performance.</li> <li>• The measures of my job performance are clear.</li> <li>• I feel that Employee engagement is more during the lock down</li> </ul>
Work Dependence	<ul style="list-style-type: none"> <li>• My performance does not depend on working with others.</li> <li>• To perform my best, I need to work independently</li> <li>• My work primarily involves completing independent task or projects</li> </ul>
Work Life Balance	<ul style="list-style-type: none"> <li>• Overall, I am comfortable</li> <li>• I am able to balance both work and household during the lock down</li> <li>• I feel it is difficult to maintain work life balance as I have to remain available all the time</li> </ul>
Social Interaction	<ul style="list-style-type: none"> <li>• Social interactions are more in the current lock down situation</li> <li>• The work-related meetings in my office are adequate to build good working relationships</li> <li>• The social events in virtual office are adequate to build a sense of community</li> </ul>
Supervisors Role	<ul style="list-style-type: none"> <li>• I feel that there is a close supervision of work during the lockdown</li> <li>• There are objective criteria by which my performance can be evaluated by supervisor.</li> <li>• My superior is very supportive in addressing problems during the lock down</li> </ul>
Work Environment	<ul style="list-style-type: none"> <li>• I feel interrupted when colleagues talk with me?</li> <li>• I am distracted by other things going on in my work environment, such as background noise?</li> <li>• I feel pressure because meetings take you away from your work?</li> </ul>
Willingness to Work from Home in Future	<ul style="list-style-type: none"> <li>• I feel post pandemic also work from home permits should be given</li> </ul>

**Table 2** Cronbach's alpha for each factor

JP	WD	WLB	SI	SR	WE
0.75	0.844	0.75	0.64	0.781	0.66

JP : Job Performance, WD: Work Dependence, WLB : Work Life Balance, SI : Social Interaction, SR :Supervisor's Role, WE :Work Independence

**Table 3** CFA model indices

Indices	Final Measurement Model
$X^2(df)$	164.268
CMIN/df	1.711
CFI	0.922
RMSEA (P- close)	0.08
RMR	1.55

\*\*\*Significant at 0.000

**Table 4** Items description and measurement model results

Scale	Standard Beta	Alpha	CR	AVE
Work Dependence		0.844	0.858	0.671
WD2	0.872			
WD1	0.892			
WD3	0.675			
Work Life Balance		0.75	0.753	0.611
WLB2	0.909			
WLB1	0.630			
Supervisor's Role		0.781	0.825	0.614
SR1	0.902			
SR3	0.673			
SR2	0.760			
Job Performance		0.75	0.865	0.684
JP1	0.932			
JP3	0.704			
JP2	0.829			
Social Interaction		0.64	0.809	0.682
SI3	0.725			
SI2	0.915			
Work Environment		0.66	0.772	0.533
WE1	0.746			
WE2	0.802			
WE3	0.632			

Goodness of Fit:  $X^2(df)=164.268$ ,  $CMIN/df$  1.711,  $CFI$  0.922,  $RMSEA$  (P- close)=0.08,  $RMR=1.55$

**Table 5** Discriminant validity

	CR	AVE	WD	WLB	SR	JP	SI	WE
WD	0.858	0.671	<b>0.819</b>					
WLB	0.753	0.611	0.382	<b>0.782</b>				
SR	0.825	0.614	0.138	0.136	<b>0.784</b>			
JP	0.865	0.684	0.236	0.346	0.591	<b>0.827</b>		
SI	0.809	0.682	0.353	0.304	-0.078	-0.217	<b>0.826</b>	
WE	0.772	0.533	0.158	-0.153	-0.373	-0.314	0.612	<b>0.73</b>

Correlations between factors are represented, numbers in bold represent square root of Average Variance explained (AVE)

**Table 6** Hypothesis test

S. No	Hypotheses	Estimate	P Value	Result
H <sub>01</sub>	There is a positive influence of Job Performance on Employees willingness to WFH in future	0.003	0.982	Refuted
H <sub>02</sub>	There is a negative influence of Work Dependence on Employees willingness to WFH in future	-0.345	0.009	Supported
H <sub>03</sub>	There is a negative influence of Social Interaction on Employees willingness to WFH in future	-0.193	0.134	Refuted
H <sub>04</sub>	There is a positive influence of Supervisor's Role on Employees willingness to WFH in future	-0.002	0.990	Refuted
H <sub>05</sub>	There is a negative influence of Work Environment on Employees willingness to WFH in future	-0.245	0.049	Supported
H <sub>06</sub>	There is a positive influence of Work Life Balance on Employees willingness to WFH in future	0.546	***	Supported

\*\*\*Significant at 0.001 level

**Acknowledgements** The authors are thankful to Prof. V. Shekhar for his continuous guidance for this work.

**Code Availability** Not Applicable.

**Authors Contribution** Neha Tunk conceived the idea and A Arun Kumar developed qualitative and quantitative design to undertake the empirical study. A Arun Kumar extracted research paper with high repute, filtered the content based on keywords and generated the concept relevant to the study. A Arun Kumar verified the analytical method and supervised the study. The interviews were conducted by Neha Tunk in English language. A Arun Kumar contributed to the critical revision and final approval of the version to be published.

**Funding** There is no financial assistance for conducting the study.

**Data Availability** All data generated or analysed during this study are included in this published article.

## Declarations

**Conflict of Interest** The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter or materials discussed in this manuscript.

**Ethical Statement** All procedures performed in this study involving human participants were following the ethical standards of Osmania University's and The ICFAI Foundation for Higher Education Research Ethics.

**Consent to Participate** Informed consent was obtained from all participants.

**Consent to Publication** Not Applicable.

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