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# STUDY ON VIRTUAL INTERACTIONS UNDER WORK FROM HOME DURING THE PANDEMIC-COVID 19

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**Abstract:** A company's greatest asset is its people. Managing Interactions among employees at workplace is an important element in every small or big organization, thus it is a growing area of research. Interactions among the employees when being physically present at the workplace would include Formal Communication, water cooler discussions and small talks over the tea / lunch breaks, knowledge sharing etc. Quality connections are brief, mutually beneficial, and dynamic dyadic interaction, which have the power to energize people with vital resources to do their work well. Managing and stabilizing these in pre Covid 19 – pandemic scenario have altogether a different meaning but in the current scenario everything related to the interactions or employee connect have drastically changed. This article is an attempt to analyze the effect of WFH on the Interactions among employee amid Covid 19-Pandemic. It is an exploratory study, which aims to propose a new definition of connections and interactions among the employees in remote working environment.

**Keywords:** Interactions, Work from home, Covid 19, Formal Communications, Knowledge sharing.

## I. INTRODUCTION:

Human beings are naturally social creatures and our interactions with others are just as vital as food, and water (Lieberman, 2013). Research shows that relationships and work are among the major contributors to individual well-being (Diener & Biswas-Diener, 2008). As we all know that environment is ever changing, highly dynamic, and information-rich, social connections is one means by which a lot of work is done. It can be seen that Social interactions recharges employees to flourish in their work. From the above stated arguments, it becomes a highly important topic to give attention so that organizations can work upon this dimension too. Many of the authors have done studies and applied different methods to get some valuable output over this topic. All these studies were carried out keeping in mind the physical boundary of the

organization and even the presence of employees at the workplace. Studies were conducted to understand the impact of positive social Relationships/ interactions among the employees in the organizations.

Talking about the individual outcomes of these studies, Connections generate feelings of vitality and aliveness. People engaged in interactions experience increased feelings of mental and physical energy and eagerness to act. (Berscheid, 2003). Presence of connections have been associated with positive outcomes for well-being too. Studies by Dutton and Heaphy (2006) highlight various short-term and longer-term effects of connections including lower physiologic responses to stress, more energy, lower anxiety, higher affiliative behavior, positive social contact. Theme that will run through this paper is to know about the scenario of managing connections or virtual interactions among employees in the current new normal that is Work from home. Consequently, the aim of this paper is to propose a new way of defining the Interactions by the employees and the organizations in the future work model under Covid 19 – Pandemic.

## RESEARCH PROBLEM:

This study is to solve the problem of managing the Virtual Interactions/ connections among the employees in the new work model that is remote working under the Covid-19 crisis.

## RESEACRH OBJECTIVES:

- To study the importance of Interactions at workplace.
- To study the impact of Virtual Connections/ Interactions on the employees while working in virtual work set up.
- To study measures taken by the organizations to improve employee connect under WFH model.

## HYPOTHESIS:

- H0: WFH (Work from Home) has no significant effect on the Virtual Interactions among the employees respect to Pandemic.



- H1: WFH (Work from Home) has significant effect on Virtual Interactions among the employees respect to Pandemic.

## II. LITERATURE REVIEW:

There has been many past researches or studies that could make reader ponder about the importance of social interactions in life. Social interactions can be understood as in which people act with other people and react to how other people are acting. If we consider interactions/ face-to-face conversations in the organization environment, it could be a formal one that is communication about the work and other is the informal/grapevine that includes water cooler discussions, random debate over any recent topic, small tea breaks and many more. Gallup's 2017 "State of the American Workplace" report, also found that forming friendships with co-workers increases levels of happiness and makes an employee a more engaged worker.

Forming friendships in an organization helps lot of employees to distress themselves. The Society for Human Resource Management's 2016 Employee Job Satisfaction and Engagement Report, showed that relationships with co-workers were identified "as the top driver of employee engagement, with 77 per cent of participants listing these connections as a priority". Evidences suggests social interaction can lead to knowledge transfer from newly trained to untrained workers. Some of the articles help us (employer, employee, organizations) to acknowledge the positive impact of social interactions among employee such as increased engagement and loyalty as social connection provides a sense of cohesion in the office, which is essential for cultivating creativity and teamwork.

Social Connectivity can be understood by looking at the variables included in this heavy word such as knowledge sharing, Formal and informal communication, communicating wellbeing.

To have complete knowledge about Knowledge sharing, the reader should be thorough with the term knowledge:

### **Knowledge:**

Knowledge is firmly connected to doing and infers know-how and comprehension. The knowledge controlled by every individual is a result of his experience, and envelops the standards by which he assesses new inputs from his surroundings (Davenport and Prusak 2000). As indicated by Gamble and Blackwell (2001), "Knowledge is a liquid blend of encircled experience, values, logical information, master understanding, and grounded instinct that gives a domain and structure to assessing and consolidating new encounters and information.

In organizations it frequently gets to be inserted in documents or repositories, as well as in organizational routines, practices and standards."The findings propose that

the presence of network connections and the related social capital can encourage KNOWLEDGE SHARING within a group of practice (e.g., Kankanhalli et al., 2005; Nahapiet and Ghoshal, 1998). Individuals' desires of the helpfulness of their Knowledge and that through Sharing they can enhance relationships with others have been appeared to be identified with constructive knowledge sharing mentalities which in turn were identified with knowledge sharing goals and behaviors (Bock and Kim, 2002).

### **Knowledge Sharing:**

Knowledge Sharing is defined as 'the provision or receipt of task information, know-how and feedback regarding a product or procedure' (Cummings, 2004: 352). It is a social interaction culture, involving the exchange of employee Knowledge, experiences, skills and values through the whole department or organization. Ardichvill et al. (2003) discussed Knowledge Sharing as involving both the supply and the demand for new Knowledge.

Knowledge sharing can be described as either push or pull. Knowledge sharing depends on the habit and willingness of the knowledge worker to seek out and/or be receptive to these knowledge sources. Knowledge sharing contains an arrangement of shared understandings identified with giving workers access to important data and building and utilizing Knowledge systems inside of organizations (Hogel et al., 2003). For individual workers, knowledge sharing is conversing with associates to assist them with getting something improved, even more rapidly, or proficiently. Knowledge sharing helps with the development of shared mental models that empower individuals to be "on the same page" on the work execution.

### **Informal and Formal communication/ Interaction:**

An effective communication process in an organization provides conditions for enhancement of knowledge and information sharing. According to Scott (2005), communication is about sending, receiving, and understanding information and meaning. He claimed that "receiving" and "understanding" are the most important operations in the communication process. According to Imberman (2003), communication is a key to employees' involvement. Subramanian (2006) asserted that both formal and informal communication is like blood to any living organisation.

Informal communication is crucial for coordination since it depends on human's necessities: (a) the physical proximity, (b) the instinctive need to communicate, (c) the sense of being a member group. Informal way of communication is also called as grapevine. The face-to-face conversation continues to be a top-level priority for all employees. Personal contacts builds business relationships, create trust and resolve ambiguities.

Formal communication is a type of communication that is pre-planned. In other words, the information transmitted or



written are prepared in advance (Fox, 2001). It is a form of posting and scheme of work, communication of project plan, etc. according to Turkalj and Fosis, (2013).

#### **Well Being:**

Well-being in the workplace is considered the result of the interaction between individual characteristics working in an organizational environment. A study has undertaken on 72 participants using a qualitative approach based on focus groups and individual interviews. The results revealed that the individual characteristics identified by the participants as capable of influencing well-being in the workplace include being positive, communication, management of difficulties and conflicts, socio-emotional skills, and values which in turn make employees more closer to each other and developed a sense of belongingness. Interaction between employees recognize a common root in interactional theories, which considers a person organization fit as being crucial in generating wellbeing.(Alvesson & Willmott, 2002; Cable & Judge, 1996; Mininni, Manuti, Scardigno, & Rubino, 2010).

#### **This research article thrives to work upon the virtual connectivity among employees under WORK FROM HOME model.**

##### **Background:**

Work From home is a concept where the employee can do his or her job from home. Work from home gives a flexible working hour to the employee as well as the job for the employer is done with ease.

While remote work is one of the most popular term for this particular kind of flexible working arrangements, telecommuting was once the preferred one. Coming from Jack Nilles' book The Telecommunications-Transportation Tradeoff in 1976, he proposed a system whereby work was brought closer to the workers.

It is easy to see that over the past 50 years improvements in technology and a general shift in working culture have all contributed to the rise of remote work. Productivity gains are one of the most reported benefits that working from home can provide. This productivity boost is not just a result of improved technology, but the actual conditions of working outside of the office and their effect on the working mind. For example, 55% of people in the UK reported higher stress levels due to their daily commute, according to a **report by the UK Royal Society for Public Health**. Removing this from schedule improves mental wellbeing and subsequently the quality of work produced by remote workers. Working from home or remotely is set to become an even more common arrangement in the future. **LinkedIn's Global Talent Trends Report for 2019** reported that 72% of talent professionals agree that work flexibility will be very important for the future of HR and recruiting. They also

found a 78% increase in LinkedIn job posts advertising flexible work arrangements over the past two years.

##### **Current:**

From the UK to the US, Japan to South Korea, China to India, these are all global companies that have rolled out mandatory work-from-home policies amid the spread of Covid-19. 88% of organizations have encouraged or required their employees to work from home, according to a **March 17 Gartner, Inc. survey of 800 global human resources (HR) executives**. Nearly all organizations (97%) have cancelled work-related travel in response to the coronavirus pandemic.

#### **COVID 19: PANDEMIC: The Current situation where the normal work set up has changed.**

Coronavirus disease (COVID-19) is an infectious disease caused by a new virus. The disease causes respiratory illness (like the flu) with symptoms such as a cough, fever, and in more severe cases, difficulty breathing. You can protect yourself by washing your hands frequently, avoiding touching your face, and avoiding close contact (1 meter or 3 feet) with people who are unwell. Coronavirus disease spreads primarily through contact with an infected person when they cough or sneeze. It also spreads when a person touches a surface or object that has the virus on it, then touches their eyes, nose, or mouth.

##### **Research Methodology:**

This research aims to study the Work from home Model (the new normal) and its effect on the Virtual Interactions among the employees under the crisis. Sampling in a research is an important element that refers to the selection of individuals, units, and/or settings to be studied. For the current research, sample size is taken as 101 respondents. Sampling technique that is benefitted for the study is Snowball sampling as it is a non-probability sampling technique in which the samples have traits that are rare to find and provide referrals to recruit samples required for a research study. For data collection, a Questionnaire (Sampling Technique) was circulated amongst the employees and quantitative research was carried out.

##### **Data Analysis:**

##### **Reliability Analysis:**

Reliability is the extent to which a questionnaire, test, observation, or any measurement procedure produces an equivalent result on repeated trials. This method is the most considered general forms of reliability estimation. In the internal consistency method, reliability is considered as internal consistency, which is the degree of inter correlation among the items that constitute a scale. It represents the level of homogeneity in the items of the scale. Internal consistency is measured using a reliability coefficient of Cronbach's alpha.



Following is the result of the Cronbach Alpha:

#### Reliability Statistics

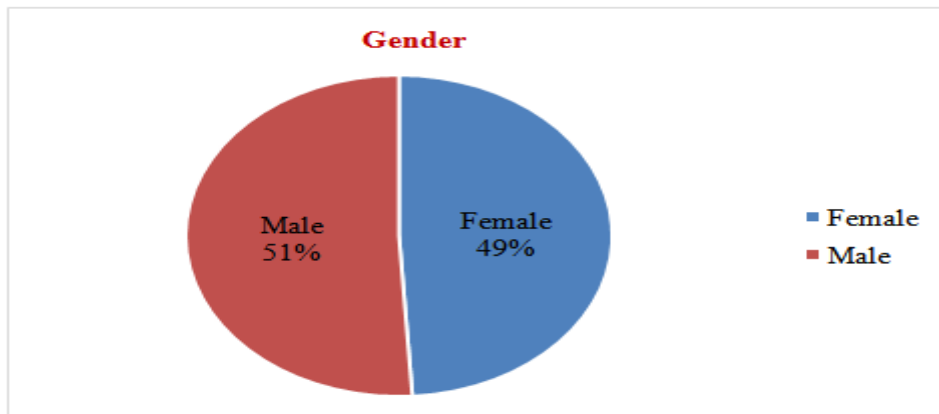
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|----------------------------------------------|------------|
| .768             | .773                                         | 13         |

Table 1: Cronbach's Alpha coefficient

The Cronbach alpha value found to be is 0.768, which is greater than .70, and hence the Research Questionnaire has an acceptable and moderate level of internal consistency.

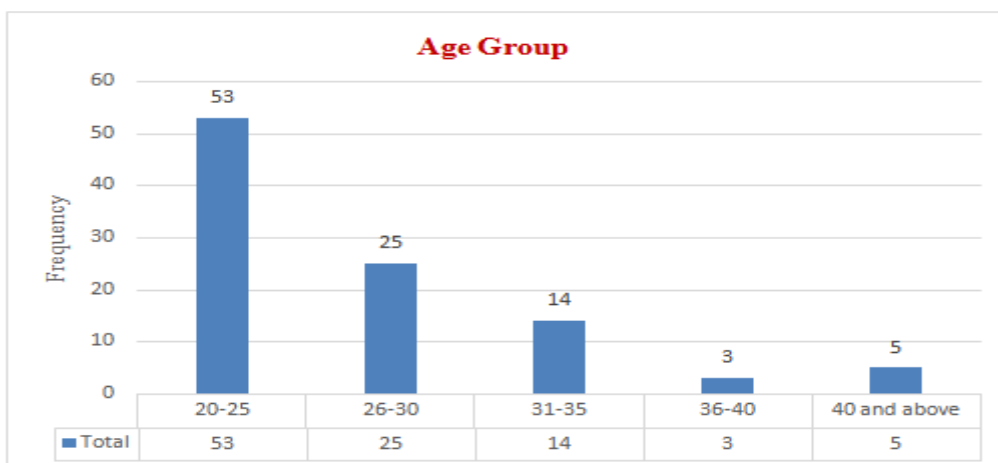
#### Demographic Analysis:

##### Analysis of Gender



Out of all the responses (101) collected, 49% respondents were Female and 51% were male respondents.

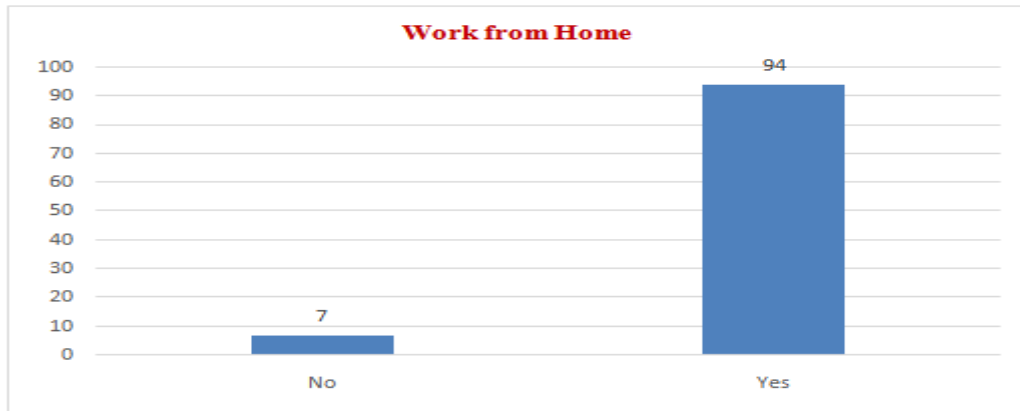
##### Analysis of Age



It is clear from the above chart that mostly responses came from the age group of 20 -25(53) and 26-30(25).



### Analysis of Work from Home Policy



From the above Bar Chart, we can interpret that out of 101 respondents, 94 respondents were from Work from Home model and the remaining, 7 respondents did not get this policy from their organization.

### Hypothesis Testing:

Spss Tool used for the data analysis.

For the Hypothesis Testing, we have used the Regression Analysis.

### Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |               |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|---------------|
|       |                   |          |                   |                            | F Change          | Sig. F Change |
| 1     | .127 <sup>a</sup> | .016     | .006              | .41955                     | 1.619             | .206          |

a. Predictors: (Constant), Work from home

Table 2: Model Summary

From the Table 2, we can interpret that R value is 0.127 which indicates that there is a weak relationship between the work from home and the virtual interactions.

### ANOVA

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig. |
|-------|------------|----------------|-----|-------------|-------|------|
| 1     | Regression | .285           | 1   | .285        | 1.619 | .206 |
|       | Residual   | 17.426         | 99  | .176        |       |      |
|       | Total      | 17.711         | 100 |             |       |      |

Table 3: Anova

### Coefficients

| Model |                | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|--------|------|
|       |                | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)     | 4.293                       | .257       |                           | 16.727 | .000 |
|       | Work from home | -.313                       | .246       | -.127                     | -1.273 | .206 |

a. Dependent Variable: VIR

Table 4 : Coefficients



From the above tables, we can see that Sig is 0.206, which means p value is  $> 0.05$  so we reject the alternative hypothesis. We cannot conclude that WFH (Work from Home) has significant effect on Virtual Interactions among the employees respect to Pandemic.

### III. FINDINGS:

Some of the notable findings from the study done are as follows:

- Most of the respondents (94%) were provided with the Work from Home facility by their respective organization.
- Majority of respondents agreed to the point that catch-ups and informal meet ups are an important part of to keep employees well connected in an organization.
- Due to the new normal of WFH, employees feel that they are not able to interact with the colleagues on a daily basis and they are not satisfied by the interactions done in the current scenario.
- Some of the employees think that there are lot of distractions/issues while having the Virtual meetings or the official discussion. To name a few like net connectivity, household chores or the child care.
- A large number of respondents highly agreed that managers creating a weekend informal calls with family members and conducting virtual fun activities are helping employees to be virtually connected under remote working.
- After analyzing the data, the result concluded that we failed to reject the null hypothesis framed in the beginning of the study.

### IV. RECOMMENDATIONS:

As the result of the current study done provides us with the different results, but we cannot forget the importance of interactions/connection in life of an individual. Brene Brown, Professor at the University Of Houston Graduate College Of Social Work says, "A deep sense of belonging is an irresistible need of all people. We are biologically, cognitively, physically, and spiritually wired to be loved, and to belong."

Some of the initiatives that the organizations on their level can adopt to make it more employee connected that too virtually:

- In order to encourage positivity, daily synchronizations (streamlines collaboration & increases transparency), regularly reviewing & acknowledging accomplishments (offers a sense of value & belongingness), and cultivating virtual bonding/morale (helps reinforce organization cultures & values).

- Exercise emotional acuity and understanding. Ensure every team member has an opportunity to be heard and acknowledged. Adopt patience in large dollops. Employees may be going through more than their share of challenges on a personal level. Some may have ailing family members or close ones dying with no way of being a part of their final rites.
- Create sense of belonging with team bonding exercises that help understand each other well. Can conduct a "Know Me" Hour every week, where teams get acquainted with facets of an employees' life beyond the scope of work; taking a peek into the person beyond the designation and role. Or "Gratitude Morning" where each employee is encouraged to speak about three things that they are most grateful for, personally and professionally.
- Provide employees the opportunity to learn new skills, together and grow, professionally. 'Wisdom Wednesdays' where talent from a cross section could be invited to share nuggets from their experience to inspire and encourage your employees to aim higher.

### V. DISCUSSIONS:

As the research was not able to prove the fact of importance of interactions among employees although doing a thorough research about the matter, studies show that people who feel more connected to others they also have higher self-esteem, are more empathic to others, more trusting and cooperative and, therefore, others are more open to trusting and cooperating with them. Social connectedness therefore generates a positive feedback loop of social, emotional and physical well-being. Low social connection has been generally associated with declines in physical and psychological health.

In the present era of Covid 19 pandemic, where remote working is becoming the new normal and physical interactions have gone on a toll, and we all know that conversations & socialization are productive tools. As a collective society, employees are more productive when they engage in conversations and socialize.

So a more thorough research should be done on the aspect of employee connect in this remote environment which would ultimately help the organizations to integrate the employee in a more enhanced manner.

### VI. LIMITATIONS:

Researches during the study suffers from some of the limitations and it mostly depends upon our subject on to which we are pursuing the research. Since we mailed the questionnaire, there is a possibility that the answers may not be filled with full attention or by the concerned person himself/herself. Time and circumstances is also a limitation as this research is conducted during the pandemic Covid –



19 situation so data is collected on convenience basis and that could lead to questioning over the authenticity of data collected.

#### VII. CONCLUSIONS:

In the wake of Covid 19, Organizations are looking over the aspect of employee connect and considering it and if the condition persists for the longer time it would come out to be a major concern to look out.

One of the big giants Capgemini CHRO Pallavi Tyagi, says that their organization have come up with a new initiative to keep employee connected. They are up with the innovative employee engagement program, 'CapGemini Bigg Boss challenge' where employees along with their family or friends can participate in exciting series of tasks and contests such as a creativity challenge, showcasing the unique talent of your family or friend or an online quiz contest, among others. These activities are a great way to help employees stay connected virtually with the organization and bring in the fun element while doing so. Nearly 60,000 employees have been engaged through this Pan India level program. Besides these, there are other programs like "Re-vive in Five" where we reach out to the entire team with a topic other than work every day – wellbeing, productivity improvement, health to help spread positivity and team bonding.

There are other companies too coming up with the new ideas and initiatives that are trying to enhance the employee wellbeing and connect.

Therefore, in future, Employee Connect/ Interaction may hold a very important facet for the organization to ponder upon as to create a sense of belongingness towards the organization and between the employees too through the remote mode only.

#### REFERENCES:

- [1]. Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), 222-235. doi:10.5502/ijw.v2i3.4
- [2]. Bradburn, N. (1969). *The structure of psychological well-being*. Chicago: Aldine.
- [3]. Johnson, J. D., Donohue, W. A., Atkin, C. K., & Johnson, S. (1994). Differences between formal and informal communication channels. *Journal of Business Communication*, 31(2), 111–122. doi:10.1177/002194369403100202
- [4]. Rosales, Robert M., "Energizing Social Interactions at Work: An Exploration of Relationships That Generate Employee and Organizational Thriving" (2015). Master of Applied Positive Psychology (MAPP) Capstone Projects. 86
- [5]. Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*.
- [6]. Nadason, S., Saad, R. A., and Ahmi, A., (2017) Knowledge Sharing and Barriers in Organizations: A Conceptual Paper on Knowledge-Management Strategy.
- [7]. Gianluca Biggio & Claudio G. Cortese (2013) Well-being in the workplace through interaction between individual characteristics and organizational context, *International Journal of Qualitative Studies on Health and Well-being*, 8:1, 19823, DOI: 10.3402/qhw.v8i0.19823
- [8]. Baumeister, R. F., and Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol. Bull.* 117, 497–529. doi: 10.1037/0033-2909.117.3.497
- [10]. Krause, M. S. (1970). Use of social situations for research purposes. *Am. Psychol.* 25, 748–753. doi: 10.1037/h0029822
- [11]. Ono E, Nozawa T, Ogata T, Motohashi M, Higo N, Kobayashi T, Ishikawa K, Ara K, Yano K and Miyake Y. Relationship between Social Interaction and Mental Health. *SI International* 2011
- [12]. Ono E, Nozawa T, Ogata T, Motohashi M, Higo N, Kobayashi T, Ishikawa K, Ara K, Yano K and Miyake Y. Relationship between Social Interaction and Mental Health. *SI International* 2011
- [13]. Umberson D, Montez K J. Relationships and health. *Journal of health and social behavior*. Nov 2010. 51(1), S54-S66

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