# AN INVESTIGATION ON THE INFLUENCE OF MEDIATORS ON IMPROVING ORGANIZATIONAL COMMUNICATION, JOB SATISFACTION, AND PERFORMANCE IN THE SOFTWARE INDUSTRY

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#### Abstract

Regular interaction among staff members will increase their flexibility and autonomy, save time and money on internal communication breakdowns, and potentially create a momentum for juggling work and personal obligations. By becoming engaged communicators, employees can play a significant part in enhancing organisational success. The study aims to take a closer look at role of mediators such as perceived autonomy and work family conflict between organisational communication and individual outcomes such as job satisfaction and job performance. A convenience and judgement sample was used to draw sample from employees of software companies. The study has a final sample size of 384. Google Forms was used to distribute surveys online. To ensure compliance with all institutional review board requirements, extra care was taken. Five standardised instruments were used to measure the study variables. All items included in this study were standardized to a uniform Likert-type scale that ranged from 1 (strongly disagree) to 5 (strongly agree). Structural equation modelling (SEM) was utilised to test the assumptions using the statistical programme AMOS 28. The study proved all four hypotheses collectively stating psychological mediators does mediate between organisation communication and individual outcomes. The results of this study have significant implications for the development of practices and regulations within organisational settings. This study has considerable limitation which was addressed in detail in the manuscript.

**Keywords:** Organisation Communication, Job Satisfaction, Work Family Conflict, Job Performance, Autonomy.

#### INTRODUCTION

The Industrial Revolution's influence may still be seen in the majority of modern employment arrangements. Employees primarily transact their time with their employers, not their products. Task and location are strictly limited by time (Lakoff & Johnson, 1980). However, an information revolution in recent decades has forced businesses to support employee behavioural outcomes like job satisfaction, performance, perceived career prospects, and role stress (Harrison, Johns, & Martocchio, 2000). Digital technologies have made it possible to share common, even synchronised activity across personnel in distant locations (Herschel & Andrews, 1997).

Employees can play a crucial role in boosting organizational success as strategic constituents by engaging in active communication (Lee et al., 2018). Organizations have potential to be productive and inventive when people actively seek out and exchange high-quality information (Park et al., 2014). According to Gursoy et al. (2008), workers typically prefer open and participatory communication and call for a great standard of knowledge flow at organisations they work in (Walden et al., 2017). According to Myers and Sadaghiani (2010), Frequent feedback from superiors, mentors, and colleagues is an important expectation of employees, and the use of

effective organizational communication strategies can help foster their commitment to their job and the company. (Walden et al., 2017; Hartman and McCambridge, 2011).

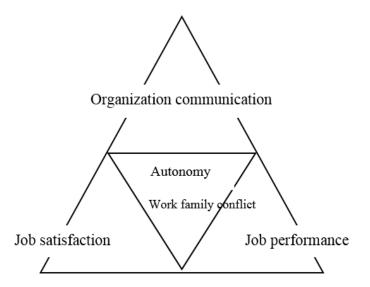
Recent years have seen a significant change in how organisations operate, mostly as a result of workplace digital transformation efforts (Hanelt et al., 2021; Briken et al., 2017). Without a fixed physical workspace, people can now interact and work together thanks to digital technologies (Harrison et al., 2000). This pattern has become increasingly prevalent as a result of the COVID-19 epidemic, and more people are now willing to work from home (Demmelhuber et al., 2020; Carroll and Conboy, 2020). Both advantages and downsides for individuals and companies come with the development of communication technologies within an enterprise. Employees who interact regularly will be more flexible and autonomous, save time and money associated with internal communication breakdowns, and possibly achieve a momentum in balancing work and life (Dannhauser, 1999; Gajendran and Harrison, 2007). However, enhancements in communication technologies result in more formal meetings and less informal interactions among co-workers, which are typically made possible by closeness to one another and chance meetings (Isaacs et al., 1997; Whittaker et al., 1994; Kraut et al., 1990; Gajendran and Harrison, 2007).

Prior studies focused primarily on in-person communication within traditional office settings, which has resulted in a lack of analysis on how organizational communication impacts psychological factors such as perceived autonomy and work-family conflict, and how they, in turn, affect employee job outcomes. This article aims to conceptualise the research strands analysing the impact of organizational communication on individual outcomes of software industry professionals related to their work. The study aims to take a closer look at role of mediators such as perceived autonomy and work family conflict between organizational communication and individual outcomes such as job satisfaction and job performance.

## LITERATURE REVIEW

## Theoretical Framework

Social exchange theory posits that individuals engage in behaviour that they perceive will lead to rewards and avoid behaviour that will lead to costs (Blau, 1964). In an organizational context, this theory suggests that employees will engage in communication behaviors that they believe will lead to positive outcomes, such as job satisfaction and job performance, and avoid communication behaviors that will lead to negative outcomes (Saks, 2006; Eisenberger et al., 1986; Rhoades and Eisenberger, 2002). The employees will be more likely to communicate effectively and perform well on the job if they perceive that doing so will lead to positive outcomes, such increased job satisfaction (Varona, 2002). This theory can be applied to communication between employees, as well as communication between employees and managers (Aggarwal and Bhargava, 2009; Eisenberger et al., 1986). It can also be applied to the design of communication systems and processes within an organization, to ensure that they are optimized for positive outcomes such as job satisfaction and Mitchell, 2005).



## Figure 1: Conceptual Model Indicating Relationship Between Organisation Communication Job Satisfaction and Job Performance

## Organizational Communication, Autonomy, Job Satisfaction and Performance

Establishing clear communication structures can benefit countries with high uncertainty avoidance, while a higher level of autonomy has been linked to increased subjective well-being (Steel et al., 2018; Diener et al., 1995; Fischer & Boer, 2011). Intellectual autonomy and affective autonomy in an organisation reflects the employee preference on independent thinking, creativity and pursuit of pleasure (Glazer, 2021). A high-autonomy organization emphasizes strong interaction of departmental objectives and procedures, both in terms of individual performance and organizational performance (Glazer, 2021). An adverse association exist between autonomy and organizational communication suggests that companies promoting independent thinking are less likely to share the goals and visions among the employees, which can lead to decrease in employee job satisfaction (Monnot & Beehr, 2014; Glazer 2021).

Herzberg (1987) two-factor model, posits that job dissatisfaction can be caused by extrinsic factors such as physical work conditions, job security, and salary, which are independent of the work tasks, while job satisfaction is primarily influenced by intrinsic factors such as responsibility autonomy, and challenge associated with the work tasks. The resigning employees reported lower levels of professional autonomy than remaining employees which suggests the perceived autonomy influences job satisfaction (Kerzman et al, 2020). In order to increase employees' job satisfaction, organisations need to concentrate on interventions that will help them stay with the company by creating professional career routes and giving them more autonomy (Kerzman, Van Dijk, Eizenberg, et al., 2015).

According to Jenkins and Wong's (2001) study, job satisfaction is positively correlated with feeling highly esteemed by surgeons. Simple acts of recognition and positive communication, such as being thanked, had a significant impact on job satisfaction, confidence, and performance. A review by Rama-Maceiras et al. (2012) identified leadership, professional relationships, worker autonomy, and acknowledgement of value as the main contributors to anaesthetist job satisfaction. This is supported by a

comprehensive review by Scheurer et al. (2009), which discovered that among physician hospitalists, job satisfaction is strongly correlated with work demands such hours, workload, and stress as well as autonomy and good communication connections with co-workers. According to James-Scotter (2019), the review has identified a number of organizational-level variables that can be changed to escalate job satisfaction. These variables contain management recognition and support, team dynamics and communication, granting more autonomy, providing opportunities for career development, and addressing the effects of working conditions. Based on the examined literature, it can be anticipated that employee perceptions of their role's autonomy and recognition of the value of professional connections as a result of communication are the two most important aspects influencing job satisfaction and performance in the service industry.

- H1: Perceived autonomy mediates between organisation communication and job satisfaction.
- H2: Perceived autonomy mediates between organisation communication and job performance.

# Organisation Communication, Work Family Conflict, Job Satisfaction and Performance

The communication between co-workers while teleworking can have both positive and negative effects on job satisfaction and performance, according to studies by Milton et al. (2016). Teleworkers can experience higher job satisfaction when they have positive interactions with their co-workers, which could include socialization and teamwork, despite not being in a physical office space (Fay and Kline, 2011). Establishing effective communication channels and promoting regular collaboration among workers can increase work efficiency and productivity by facilitating coordination, information sharing, and problem-solving, ultimately leading to better organizational outcomes (Muoz, 2012; Haapakangas et al., 2018). Reducing bureaucratic communication can lead to increased productivity among employees as they are able to focus more on their work (Muñoz, 2012; Randstad, 2017). Those who work from home for an extended amount of time may experience loneliness and lose contact with their coworkers, according to Mahmood et al. (2021). This is mostly because there is less face-to-face communication when working remotely, which makes communication different (Svein, 2009). As communication with co-workers and supervisors is significantly correlated with job happiness, it is known that a lack of communication can cause people to become dissatisfied with their positions.

Davidescu et al. (2021) and Schall (2019) suggest that teleworking can have a positive impact on work-family balance by reducing interruptions in family time and leading to increased job satisfaction. According to Delanoeije et al. (2019), teleworking negatively affects the worker since the boundaries between personal and professional lives blur, which might result in conflicts at home (Gajendran and Harrison, 2007). This is because there is a chance that the working day will be longer and more productive and that household work will be interleaved (Bosch et al., 2020). The distribution of household tasks according to gender has become more gendered as a result of teleworking (Lara-Pulido and Martinez-Cruz, 2022; Villarreal, 2020). This has detrimental effects on the business and the employees, resulting in low production (Kossek and Ozeki, 1999), which also lowers job satisfaction (Hernández, 2019; Kossek and Ozeki, 1998).

From the reviewed studies, the researcher concludes that both organisation communication and work family conflict has an impact on the job satisfaction and performance of employees in service sector. So further the arguments can be hypothesized that.

- H3: Work family conflict mediates between organisation communication and job satisfaction.
- H4: Work family conflict mediates between organisation communication and job performance.

## METHODS

As the behavioural constructs under investigation is highly impacting software professionals, the sample was restricted to software industry. Software firms are among the top in terms of knowledge, team size, and client testimonials (e.g., Wipro., Tech Mahindra., TCS., CTS., Accenture., and Mphasis; Hindu, 2022). After looking at a few organizations, phone calls were made to learn more about their methods of communication and telecommuting options. The professionals of such organisations were offered chances to take part in the research. A convenience and judgement sample was used to draw sample from employees of software companies. Companies which has minimum of 3 team meetings per week in form of face to face communication and minimum of 3 text based communication per day via official email are allowed to participate in the study.

#### Procedures

Google Forms was used to distribute surveys online. To ensure compliance with all institutional review board requirements, extra care was taken. The questionnaires were distributed via email to the selected company employees thorough their HR managers. The questionnaire was circulated by HR managers by posting it on the company intranet. The survey was available to about 600 workers for 30 days. In total, 59% of the questionnaires were returned, yielding a final sample size of 384. The participants were mostly men (67.1%) and married (69.7%), and were in the age group 18 to 52 years, 72.8% of the software professionals had completed their under graduate degree.

#### Measures

Five reliable, valid and standardized measures were adopted. The items were on a 5point anchor 1 = Strongly disagree to 5 = Strongly agree. All the adopted scales represented five separate, composite, observable variables in the structural equation model (SEM). This approach was chosen because these variables were already established in the existing literature and exhibited substantial Cronbach's alphas, which is also known as "parcelling" as described by Little et al (2002). Parcelling technique was affected by the reduced sample size compared to the numerous model variables (Hair et al., 2010). Participation in organizational communication activities was not specifically measured because of the exploratory nature of the study. By responding to questionnaire questions, participants were asked to consider their involvement in team and superior communication over the previous six months. The Cronbach's alpha reliability lied between .87 to.93 despite the lack of a pilot study.

## **Organizational Communication**

Organizational communication is measured directly from the software professionals through questionnaires as directed by Roberts and O'Reilly (1974). An established sixteen-item organizational communication measure was offered by Roberts and O'Reilly (1974). Some of the items are trust, influence, mobility, desire for interaction, directionality, accuracy, summarization, gatekeeping, overload, satisfaction. "Do you ever feel that you receive more knowledge than you can effectively use?" is one such example of a question. (Roberts and O'Reilly, 1974, p. 323) In the current sample, Cronbach's alpha was .85.

## **Perceived Autonomy**

A twelve-item scale measuring perceived autonomy was provided by Hagger et al. (2010). The original statements from the scale were slightly altered to the current scenario of the study. For example, the statement "I feel that PE teacher provides me with choices, options, and opportunities about whether to do active sports and/or vigorous exercise in my free time." was altered to "I feel that my manger provides me with choices, options, and opportunities about whether to do active sports and/or vigorous exercise in my free time." In the current sample, this scale had a Cronbach's alpha of .93.

## Work Family Conflict

An established ten-item measure of work-family conflict was presented by Haslam et al. (2015). "My family misses out due of my work responsibilities" is an example of a question in the scale (Haslam et al., 2015, p. 348). In the current sample, Cronbach's alpha was .87.

#### **Job Satisfaction**

An established ten-item measure of job satisfaction was presented by Andrade et al (2020a). "I can employ my skills in my work," is an example of a such question used in the study (Andrade et al., 2020, p. 366). In the current sample, Cronbach's alpha was.88.

#### Job Performance

An established ten-item measure of job performance was supplied by Andrade et al (2020b). "I plan the execution of my task by establishing actions, deadlines, and priorities," is an example of a question used in the instrument to collect data (Andrade et al., 2020b, p. 549). Cronbach's alpha for the current sample was.91.

#### Analysis

Structural equation modelling (SEM) was utilised to test the assumptions using the statistical programme AMOS 28. The evaluation of the literature served as a foundation for examining whether perceived autonomy and work-family conflict are facilitated by organizational communication to greater levels of job satisfaction and performance. To investigate the effect of organizational communication on job satisfaction and performance, we evaluated the model in both situations (work family conflict and autonomy). The statistical importance of indirect structural paths was validated by bootstrapping after both direct and indirect structural paths were compared.

## RESULTS

After removing rows reflecting missing data (6%), non-engaged respondents (eg. ticking "3" for all statements), and extreme values (outliers), after cleaning the data, 361 sample were used for final analysis. For all variables, acceptable kurtosis values between -1 and 1 were obtained (Sposito, Hand, & Skarpness, 1983). The skewness between 2 and 2 was rather modest, according to the statistics. A 5-point ordinal Likert-type scale was used for all variables except for demographics, therefore there were no extreme or erroneous value outliers. Table 1 displays the descriptive statistics for all variables. The SPSS Statistical Program, version 23.0, was used to import the data. For each of the measures, composite scores were created by adding and averaging the results on all independent and dependent factors.

	Ν	Minimum	Maximum	Mean	Standard Deviation
Age	361	18	52	34	10.10
Organisation communication	361	1	5	4.7	1.10
Perceived Autonomy	361	1	5	3.92	1.67
Work family conflict	361	1	5	3.41	1.85
Job satisfaction	361	1	5	4.23	1.93
Job performance	361	1	5	4.10	1.36

## MEASUREMENT MODEL

In this model, no latent variables were included, so exploratory and confirmatory factor analyses were not performed. Instead, the variables were combined into composite scores. Before collapsing these composite scales, reliability was examined, and after collapsing, normalcy was examined once more. The solution to this issue the researchers examined combined scores rather than latent variables as it would be hard to get discriminant validity in this scenario. All composite scores underwent a calculation of Pearson's correlations (refer Table 2). All relationships were significant (p .001).

	OC	ΡΑ	W-f C	JS	JP
00					
PA	.306**				
W-f C	.325**	486**			
JS	.443**	.650**	527**		
JP	.153**	.386**	384**	.440**	
Note. The measurement model categories were collapsed into the following					
categories: Organizational communication (OC); Perceived Autonomy (PA);					
Work family conflict(W-f C); Job satisfaction (JS); Job performance (JP)					
**. Correlation is significant at the 0.01 level (2-tailed).					

 Table 2: Pearson's Correlations (n = 361)

## **Model Fit**

A good goodness of fit was shown by the structural model. A direct link was made between organizational communication and job satisfaction and performance in order to achieve optimal fit. In the indirect path between organisation communication and job satisfaction, the mediators introduced were perceived autonomy and work family conflict. In the indirect path between organisation communication and job performance also, the same mediators were introduced (perceived autonomy and work family conflict). The discussion addresses further justification for the addition of this path. In order to assess model, fit, Bollen (1989) recommended using a variety of model fit indices. Bentler (1990); Kline (2005) and Steiger (1990) model fit measures were the baseline, refer Table 3. The standardised root mean square residual (SRMR), the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the p-value for close fit (PCLOSE) were within acceptable ranges. Due to their conceptual correlation, the error words for work satisfaction and performance were combined. The independent variables were likewise assumed to be covariant by the covariance-based AMOS approaches.

Table 3	3: Model	Fit Metrics
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Metric	Observed value	Recommended		
CFI (comparative fit index)	.97	>.95		
RMSEA	.06	<.08		
PCLOSE	.24	>.05		
SRMR	.04	<.09		
GFI	.98	>.90		
Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; PCLOSE				
= p-value of close fit: SRMR = standardized root mean residual: GFI = goodness of fit				

## Mediation

In the proposed paradigm, perceived autonomy and work-family conflict play a key role as mediators. 5,000 bias-corrected bootstrapping resamples in AMOS (Hair et al., 2011) was used to test the mediation effect. In this study, all indirect channels were distinct since each independent variable (IV) had only one indirect connection to each dependent variable (DV). According to the findings (refer Table 4), the identified mediated routes (Four) were found to be significant. Figure 2 displays the model in its entirety.

#### Table 4: Mediation

	β	Р
OC→PA→JS	.736	.001
OC→WFC→JS	.562	.001
OC→PA→JP	.931	.001
OC→WFC→JP	.406	.001
Note R is for standardized indirect effects, pypluse are calculated based on standardized		

Note. β is for standardized indirect effects; *p* values are calculated based on standardized indirect effects and two-tailed significance. The measurement model abbreviations are as follows: Organizational communication (OC); Work family conflict (WFC); Perceived autonomy (PA); Job satisfaction (JS); Job performance (JP)

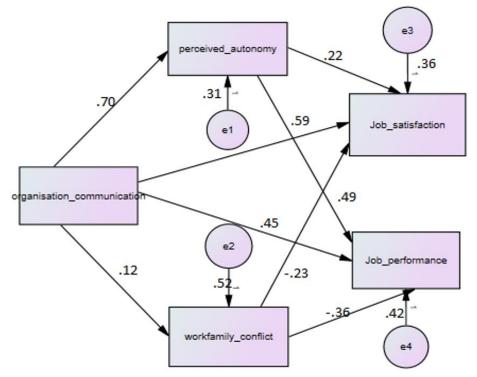


Figure 2: Path Analysis And Hypothesis Results

# DISCUSSIONS

## Organisation Communication, Perceived Autonomy and Job Satisfaction

Findings largely corroborated Hypothesis 1, which propositioned that mediation factor between organizational communication and job satisfaction would be perceived autonomy. Significant direct paths existed from organisation communication ( $\beta = .591$ , p < .05) to job satisfaction, partially supporting Hypothesis 1 (see Figure 2). The results demonstrate the importance and influence of organisation communication on job satisfaction (Wohlers et al., 2017). According to earlier research, the adaptability of communication settings within an organization-specifically, a blend of formal and informal communication styles that promote autonomy-boosted employee job satisfaction (Candido et al., 2018). Findings from the study indicated that spontaneous and flexible communication between members in an organization lead to higher job satisfaction, as members experienced greater autonomy in the organisation (Babapour et al., 2018; Hoendervanger et al., 2018). Job satisfaction of the employees depended on the inter and intra team communication in an organisation which successfully reduces frustrations and inefficiencies (Ekstrand and Karsten Hansen, 2016; Hoendervanger et al., 2018; Rolfö et al., 2018; Cai and Khan, 2010; Wolfeld, 2010;). The study argues against the notion that impromptu direct interactions at the workplace are the basis for work interruptions lowering the effectiveness and efficiency (Hoendervanger et al., 2018; Babapour et al., 2018).

## **Organisation Communication, Perceived Autonomy and Job Performance**

Hypothesis 2, findings corroborated that perceived autonomy mediates between organizational communication and job performance. Significant direct paths existed from organisation communication ( $\beta$  = .493, p < .05) to job performance, partially supporting Hypothesis 2 (see Figure 2). The study supported the view that employees

in an organizational setting with enhanced communication and knowledge sharing resulted in higher job performance (Zamani and Gum, 2019). Employers who choose where, when, and how to complete tasks autonomously in an organizational setting are more flexible and efficient (Appel-Meulenbroek et al., 2011). The results of the study stating the enhanced organisation communication leads to increase networking opportunities among the employees can cause high autonomy which results in high job performance is in consistent with previous studies (Gorgievski et al., 2010; Candido et al., 2018; Babapour et al., 2018; Hoendervanger et al., 2018; De Been and Beijer, 2014). Effective staff communication and association arrangements that promote productivity and knowledge transfer are necessary for firms to achieve satisfactory operational results (Brunia et al., 2016; Alker et al., 2014; Markhede, 2010). This may be due to the fact that effective communication reduces "bureaucratic communication," which in turn enables autonomy in work procedures to be flexible and increases productivity ensuring that the time invested by each individual considerably increased efficiency (Muoz, 2012; Randstad, 2017).

## Organisation Communication, Work Family Conflict and Job Satisfaction

Hypothesis 3, which proposed that work-family conflict would mediate greater association between organizational communication and job satisfaction was partially supported because of the significant direct effect of organizational communication on Job satisfaction ( $\beta$  =.584, p .05) (refer Figure 2). Al Omar et al. (2011) contend that there is a connection between employees' job satisfaction and the supervisor's ability to be make trusted communication. This is due to the fact that trust helps employees establish attitudes that are more optimistic at work, which leads to greater job satisfaction (Tan and Lim, 2009). Work family conflict and job satisfaction was negatively correlated ( $\beta$  = -.23, p < .05). In teleworking context boundaries are easily permeable and simple to breakthrough, which is one of the disadvantages for the worker likely to lead to disputes in the home (Delanoeije et al., 2019). Additionally, the epidemic forces forced work-family reconciliation, increasing conflict and lowering job satisfaction among employees (Yaccar, 2020; Kossek and Ozeki, 1998).

## **Organisation Communication, Work Family Conflict and Job Performance**

The findings partially corroborated Hypothesis 4, which proposed that work-family conflict would mediate the considerable association between organizational communication and job performance. Substantial direct pathways did exist between organizational communication and job performance ( $\beta$  =.472, p .05), partially confirming Hypothesis 4. (see Figure 2). These findings are consistent with a study on remote working conducted in an eastern European country during the recent epidemic, the investigators argued that inter and intra team communication, which involves contact and integration amongst co-workers, improves employee performance in teleworking environments (Savescu et al., 2022). Work family conflict and job performance ( $\beta$  = .584, p < .05), was negatively correlated in the present study. The theory advanced by Bosch et al. (2020), who contend that when communication in teleworking is improperly regulated or when there are gaps in that regulation, the working day may be prolonged to the point where it interferes with domestic duties, as a result, employee performance suffers, which has an impact on organizational productivity (Kossek and Ozeki, 1999). Regulators around the world still need to improve organisation communication, which is unfortunate because employees must navigate different rules, regulations, and work practises to complete their tasks. This raises the possibility of work-family conflicts, which obviously could have a negative impact on their productivity levels (Dauplaise et al., 2020).

## Implications

The findings of this study have crucial ramifications for the advancement of practices and policies in the organizational environment. A strong connection exists between organization communication, job satisfaction, and autonomy within a team and its overall efficiency, leading to decreased stress and enhanced performance (Kerzman et al, 2020). The review highlights the importance of promoting communication and effective functioning of teams to mitigate burnout, stress, and improve performance outcomes. Enhancing job satisfaction through improved communication within an organization presents a distinct challenge for management, as each discipline operates within its own distinct culture and group ideology (Sacks et al., 2015). The significant association between job satisfaction, autonomy, and work-family conflict, provides new insights that can be used to improve workplace policies and procedures, and promotes a healthier work-life balance for employees. By highlighting the importance of effective communication in promoting job satisfaction and reducing work-family conflict, the study provides a basis for organizations to improve their internal communication processes and strategies. The findings of the study can be used to support the implementation of autonomous work arrangements and to increase employee autonomy within organizations, which can improve job satisfaction and reduce work-family conflict. The negative influence of work-family conflict on job satisfaction and job performance underscores the importance for organizations to implement policies and procedures aimed at mitigating this conflict and enhancing work-life balance. This can be achieved through strategies such as introducing flexible and hybrid work arrangements, as well as fostering a sense of purpose and meaning in tasks, allowing employees to find significance in completing their assignments.

## Limitations and Future Scope

This study has considerable limitation. The authors measured rapid communication in organizations choosing sample on judgement having three face to face communication per week and three text-based communications via official email per day. The judgment lacks strong support from literature contributes to first limitation of the study. It took maximum consideration from the researcher to validate the judgment from the software industry professionals. The participants of the study are mostly teleworkers and the study failed to address the differences of communication between teleworkers and professionals from actual organizational settings. As a self-reported questionnaire on job performance was administered, i.e., software professionals' perceptions of their performance, it is perceptual response of the respondent which is inherit limitations of self-reported questionnaires. The scope of the study was focused on software companies in Bengaluru and Chennai region so in future large size of sample with stratified sampling should be used to study the differences among the companies that communication can have. The study has seen the influence of communication on job satisfaction but in future, research should be studied on the expression of dissatisfaction with autonomy as an intervention variable. The work family conflict has to be studied in the perspective of teleworkers and non-teleworkers in the future to study differences that organisation communication can make.

#### References

- Aggarwal, U., & Bhargava, S. (2009). Reviewing the relationship between human resource practices and psychological contract and their impact on employee attitude and behaviours. *Journal of European Industrial Training*, 33(1), 4–31. https://doi.org/10.1108/03090590910924351
- Alker, J., Malanca, M., Pottage, C. and O'Brien, R. (2014), Health, Wellbeing and Productivity in Offices: The Next Chapter for Green Building, World Green Building Council. London, UK, available at: www.worldgbc.org/sites/default/files/compressed\_WorldGBC\_Health\_Wellbeing\_Productivity\_ Full Report Dbl Med Res Feb 2015.pdf
- 3) Andrade, A. L., Omar, A., & Salessi, S. (2020a). Generic Job Satisfaction Scale: Psychometric qualities of the version adapted to Portuguese. *Revista Avaliação Psicológica*. https://doi.org/10.15689/ap.2020.1904.15804.02
- 4) Andrade, É. G., Queiroga, F., & Valentini, F. (2020b). Short version of self-assessment scale of job performance. *Anales De Psicología*, *36*(3), 543–552. https://doi.org/10.6018/analesps.402661
- 5) Appel-Meulenbroek, R., Kemperman, A., Kleijn, M., & Hendriks, E. (2015). To use or not to use: Which type of property should you choose? *Journal of Property Investment & Finance*, *33*(4), 320– 336. https://doi.org/10.1108/jpif-09-2014-0059
- 6) Babapour, M., Karlsson, M. A., & Osvalder, A.-L. (2018). Appropriation of an activity-based flexible office in Daily work. *Nordic Journal of Working Life Studies*, 8. https://doi.org/10.18291/njwls.v8is3.105277
- 7) Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107(2), 238–246.
- 8) Blau, P.M. (1964), Exchange and Power in Social Life, Wiley, New York, NY.
- 9) Bollen, K. A. (1989). Structural equations with latent variables. New York, NY: John Wiley & Sons.
- Bosch, M., Riumalló, M., and Urzúa, M. (2020). Teletrabajo. Available online at: https://www.uandes.cl/wp-content/uploads/2020/04/CTF-NT-ES-20-(accessed Dec 20, 2022)
- 11) Briken, K., Chillas, S., Krzywdzinski, M. and Marks, A. (2017), *The New Digital Workplace: How New Technologies Revolutionise Work*, Palgrave, London.
- 12) Brunia, S., De Been, I., & van der Voordt, T. J. M. (2016). Accommodating new ways of working: Lessons from best practices and worst cases. *Journal of Corporate Real Estate*, *18*(1), 30–47. https://doi.org/10.1108/jcre-10-2015-0028
- Cai, H., & Khan, S. (2010). The common first year studio in a hot-desking age: An explorative study on the studio environment and learning. *Journal for Education in the Built Environment*, 5(2), 39– 64. https://doi.org/10.11120/jebe.2010.05020039
- 14) Candido, C., Thomas, L., Haddad, S., Zhang, F., Mackey, M., & Ye, W. (2018). Designing activitybased workspaces: Satisfaction, productivity and physical activity. *Building Research & Information*, *47*(3), 275–289. https://doi.org/10.1080/09613218.2018.1476372
- 15) Carroll, N., & Conboy, K. (2020). Normalising the "New normal": Changing tech-driven work practices under Pandemic time pressure. *International Journal of Information Management*, *55*, 102186. https://doi.org/10.1016/j.ijinfomgt.2020.102186
- 16) Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. https://doi.org/10.1177/0149206305279602
- 17) Dauplaise, D., Ethan, I., and Rebecca, E. (2020). Global virtual workplaces solutions episode 5. Available online at: https://www.natlawreview.com/article/ global-solutions-episode-5-virtualworkplaces-worldwide-working-homeacross-globe (accessed Nov 20, 2022)

evidence based on multiple correspondence analysis (MCA) and logistic regression. *Amfiteatru Econ.* 23, 637–653. doi: 10.21511/ppm.19(3).2021.01

- 19) Delanoeije, J., Verbruggen, M., and Germeys, L. (2019). Boundary role transitions: A day-to day approach to explain the effects of home-based telework on work-to-home conflict and home-to work conflict. *Hum. Relat.* 72, 1843–1868. doi: 10.1177/0018726718823071
- 20) De Been, I., & Beijer, M. (2014). The influence of office type on satisfaction and perceived productivity support. *Journal of Facilities Management*, 12(2), 142–157. https://doi.org/10.1108/jfm-02-2013-0011
- 21) Demmelhuber, K., Englmaier, F., Leiss, F., M€ohrle, S., Peichl, A. and Schr€oter, T. (2020), "Homeoffice vor und nach Corona: Auswirkungen und Geschlechterbetroffenheit", Ifo Schnelldienst Digital Nr, p. 14, available at: https://www.ifo.de/publikationen/2020/aufsatzzeitschrift/homeoffice-vorund-nach-corona-auswirkungen-und
- 22) Diener, E., Diener, M., & Diener, C. (1995). Factors predicting the subjective well-being of nations. *Journal of Personality and Social Psychology*, 69, 851–864.
- 23) Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*, 500–507.
- 24) Ekstrand, M., & Karsten Hansen, G. (2016). Make it work! Creating an integrated workplace concept. *Journal of Corporate Real Estate*, *18*(1), 17–29. https://doi.org/10.1108/jcre-10-2015-0031
- 25) Ernst Kossek, E., & Ozeki, C. (1998). Work–family conflict, policies, and the job–life satisfaction relationship: A review and directions for organizational behavior–human resources research. *Journal of Applied Psychology*, *83*(2), 139–149. https://doi.org/10.1037/0021-9010.83.2.139
- 26) Fay, M. J., & Kline, S. L. (2011). Coworker relationships and informal communication in highintensity telecommuting. *Journal of Applied Communication Research*, 39(2), 144–163. https://doi.org/10.1080/00909882.2011.556136
- 27) Fischer, R., & Boer, D. (2011). What is more important for national well-being: Money or autonomy? A meta-analysis of well-being, Burnout, and anxiety across 63 societies. *Journal of Personality and Social Psychology*, *101*(1), 164–184. https://doi.org/10.1037/a0023663
- 28) Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524–1541. https://doi.org/10.1037/0021-9010.92.6.1524
- 29) Glazer, S. (2021). Organizational role ambiguity as a proxy for uncertainty avoidance. *International Journal of Intercultural Relations*, *85*, 1–12. https://doi.org/10.1016/j.ijintrel.2021.08.011
- 30) Gorgievski, M. J., van der Voordt, T. J. M., van Herpen, S. G. A., & van Akkeren, S. (2010). After the fire. *Facilities*, *28*(3/4), 206–224. https://doi.org/10.1108/02632771011023159
- 31) Gursoy, D., Maier, T. A., & Chi, C. G. (2008). Generational differences: An examination of work values and generational gaps in the hospitality workforce. *International Journal of Hospitality Management*, *27*(3), 448–458. https://doi.org/10.1016/j.ijhm.2007.11.002
- 32) Haapakangas, A., Hallman, D. M., Mathiassen, S. E., & Jahncke, H. (2018). Self-rated productivity and employee well-being in activity-based offices: The Role of Environmental Perceptions and workspace use. *Building and Environment*, 145, 115–124. https://doi.org/10.1016/j.buildenv.2018.09.017
- 33) Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2020). A systematic review of the literature on Digital Transformation: Insights and implications for strategy and organizational change. *Journal of Management Studies*, *58*(5), 1159–1197. https://doi.org/10.1111/joms.12639
- 34) Harrison, D.A., Johns, G. and Martocchio, J.J. (2000), "Changes in technology, teamwork, and diversity: new directions for a new century of absenteeism research", in Ferris, G. (Ed.), *Research in Personnel and Human Resources Management*, JAI Press, Greenwich, CT, pp. 43-91.

- 35) Hartman, J. L., & McCambridge, J. (2011). Optimizing Millennials' Communication Styles. *Business Communication Quarterly*, 74(1), 22–44. https://doi.org/10.1177/1080569910395564
- 36) Hair, J. F., Ringle, C. M., &Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139–152. doi:10.2753/MTP1069-6679190202
- 37) Hagger, M. S., Chatzisarantis, N. L. D., Hein, V., Pihu, M., Soós, I., & Karsai, I. (2007). The perceived autonomy support scale for exercise settings (passes): Development, validity, and cross-cultural invariance in young people. *Psychology of Sport and Exercise*, *8*(5), 632–653. https://doi.org/10.1016/j.psychsport.2006.09.001
- 38) Haslam, D., Filus, A., Morawska, A., Sanders, M. R., & Fletcher, R. (2015). The work–family conflict scale (WAFCS): Development and initial validation of a self-report measure of work–family conflict for use with parents. Child Psychiatry and Human Development, 46(3), 346-357. doi: 10.1007/s10578-014-0476-0
- 39) Herschel, R. T., & Andrews, P. H. (1997). Ethical implications of technological advances on business communications. *Journal of Business Communications*, 34, 160–170.
- 40) Herzberg, F. (1987). One more time: How do you motivate employees. *Harvard Business Review*, 65, 109–120.
- Hernández, L. (2019). Diseño y aplicación de UN modelo de medición de satisfacción laboral para teletrabajadores en Colombia. Caso entidad de Salud. Master Thesis. Bogota: Externado University of Colombia.
- 42) Hindu. (2022). *Top 10 popular IT & Software Companies in India 2022*. The Hindu. Retrieved January 16, 2023, from https://www.thehindu.com/brandhub/pr-release/top-10-popular-it-software-companies-in-india-2022/article65204373.ece
- 43) Hoendervanger, J. G., Ernst, A. F., Albers, C. J., Mobach, M. P., & Van Yperen, N. W. (2018). Individual differences in satisfaction with activity-based work environments. *PLOS ONE*, *13*(3). https://doi.org/10.1371/journal.pone.0193878
- 44) Isaacs, E., Whittaker, S. and Frohlich, D.M. (1997), "Informal communication re-examined.
- 45) New functions for video opportunistic encounters", in Finn, K.E., Sellen, A.J. and Wilbur, S.B. (Eds), Video-mediated Communication, Lawrence Erlbaum, Mahwah, pp. 1-30.
- 46) James-Scotter, M., Walker, C., & Jacobs, S. (2019). An interprofessional perspective on job satisfaction in the Operating Room: A review of the literature. *Journal of Interprofessional Care*, 33(6), 782–794. https://doi.org/10.1080/13561820.2019.1593118
- 47) Kerzman, H., Van Dijk, D., Siman-Tov, M., Friedman, S., & Goldberg, S. (2020). Professional characteristics and work attitudes of hospital nurses who leave compared with those who stay. *Journal of Nursing Management*, (28), 1364–1371. https://doi.org/10.1111/jonm.13090
- Kerzman, H., Van Dijk, D., Eizenberg, L., Khaikin, R., Phridman, S., Siman-Tov, M., & Goldberg, S. (2015). Attitudes toward expanding nurses' authority. Israel Journal of Health Policy Research, 4, 19. https://doi. org/10.1186/s13584-015-0005-z
- 49) Kline, R. B. (2005). Principles and practice of structural equation modeling (2nd Ed.). New York, NY: Guilford Press.
- 50) Kraut, R.E., Fish, R.S., Root, R.W. and Chalfonte, B.L. (1990). Informal Communication in Organizations: Form, Function, and Technology. In S. Oskamp & S. Spacapan (Eds.), Human reactions to technology: Claremont symposium on applied social psychology (pag. 145-199). Beverly Hills, Sage Publications.
- 51) Lakoff, N. J., & Johnson, M. (1980). Metaphors we live by. Chicago: University of Chicago Press.
- 52) Lara-Pulido, J. A., and Martinez-Cruz, A. L. (2022). Stated benefits of teleworking in Mexico City: A discrete choice experiment on office workers. Transportation 1–65. doi: 10.1007/s11116-022-10293-w
- 53) Lee, Y., Mazzei, A., & Kim, J.-N. (2018). looking for motivational routes for employee-generated innovation: Employees' scouting behavior. *Journal of Business Research*, *91*, 286–294. https://doi.org/10.1016/j.jbusres.2018.06.022

- 54) Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. Structural Equation Modeling, 9(2), 151–173. doi:10.1207/S15328007SEM0902\_1
- 55) Monnot, M. J., & Beehr, T. A. (2014). Subjective well-being at work: Disentangling source effects of stress and support on enthusiasm, contentment, and meaningfulness. Journal of Vocational Behavior, 85, 204–218. https://doi.org/10.1016/j.jvb.2014.07.005.
- 56) Milton, A., Sinclair, M., and Vakalahi, H. (2016). Organizational identification: Perspectives of dispersed social workers. Adv. Soc. Work 17, 285–303. doi: 10. 18060/21014
- 57) Muñoz, M. (2012). Comunicación y productividad en pequeñas y medianas empresas de UN cluster textil en Colombia. Contaduría Adm. 57, 223–244. doi: 10.22201/fca.24488410e.2012.183
- 58) Mahmood, F., Ariza-Montes, A., Saleem, M., and Han, H. (2021). Teachers' teleworking job satisfaction during the COVID-19 pandemic in Europe. Curr. Psychol. 1–14. doi: 10.1007/s12144-021-02355-6
- 59) Markhede, H. (2010), "Spatial positioning: method development for spatial analysis of interaction in buildings", Doctoral dissertation, US-AB.
- 60) Myers, K. K., & Sadaghiani, K. (2010). Millennials in the workplace: A communication perspective on millennials' organizational relationships and performance. *Journal of Business and Psychology*, 25(2), 225–238. https://doi.org/10.1007/s10869-010-9172-7
- 61) Park, S. H., Kim, J.-N., & Krishna, A. (2014). Bottom-up building of an innovative organization. *Management Communication Quarterly*, 28(4), 531–560. https://doi.org/10.1177/0893318914541667
- 62) Rhoades, L. and Eisenberger, R. (2002), "Perceived organizational support: a review of the literature", Journal of Applied Psychology, *87*(4), pp. 698-714.
- 63) Rama-Maceiras, P., Parente, S., & Kranke, P. (2012). Job satisfaction, stress and burnout in anaesthesia: Relevant topics for anaesthesiologists and healthcare managers? European Journal of Anaesthesiology, 29(7), 311–319. doi:10.1097/EJA.0b013e328352816d
- 64) Randstad. (2017). Comunicación constructiva: Mejorando la productividad. Las Condes: Randstad Chile.
- 65) Roberts, K. H., & O'Reilly, C. A. (1974). Measuring Organizational Communication. *Journal of Applied Psychology*, *59*(3), 321–326. https://doi.org/10.1037/h0036660
- 66) Rolfö, L., Eklund, J., & Jahncke, H. (2017). Perceptions of performance and satisfaction after relocation to an activity-based office. *Ergonomics*, *61*(5), 644–657. https://doi.org/10.1080/00140139.2017.1398844
- 67) Savescu, R., Kifor, S., D ` anut, R., and Rusu, R. (2022). Transition from office to ` home office: Lessons from Romania during COVID-19 pandemic. Sustainability 14:5758. doi: 10.3390/su14105758
- 68) Sacks, G. D., Shannon, E. M., Dawes, A. J., Rollo, J. C., Nguyen, D. K., Russell, M. M., ... Maggard-Gibbons, M. (2015). Teamwork, communication and safety climate: A systematic review of interventions to improve surgical culture. BMJ Quality & Safety, 24(7), 458. doi:10.1136/bmjqs-2014-003764
- 69) Sposito, V. A., Hand, M. L., & Skarpness, B. (1983). On the efficiency of using the sample kurtosis in selecting optimal LP estimators. Communications in Statistics-Simulation and Computation, 12(3), 265–272. doi:10.1080/03610918308812318
- 70) Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. Multivariate Behavioral Research, 25(2), 173–180. doi:10.1207/s15327906mbr2502\_4
- 71) Schall, M. (2019). The relationship between remote work and job satisfaction: The mediating roles of perceived autonomy, work-family conflict, and telecommuting intensity. Master Thesis. San Jose, CA: San Jose State University ProQuest Dissertations Publishing. doi: 10.31979/etd.2x82-58pg

- 72) Steel, P., Taras, V., Uggerslev, K., & Bosco, F. (2018). The happy culture: A theoretical, metaanalytic, and empirical review of the relationship between culture and wealth and subjective wellbeing. Personality and Social Psychology Review, 22(2), 128–169.
- 73) Scheurer, D., Mckean, S., Miller, J., & Wetterneck, T. (2009). U.S. physician satisfaction: A systematic review. Journal of Hospital Medicine. 4(9), 560–568 Hoboken. doi:10.1002/jhm.496
- 74) Svein, B. (2009). "Management of teleworkers–Managerial communication at a distance," in Networking the Bloc, ed. Turku School of Economics (Cambridge, MA: MIT Press)
- 75) Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. https://doi.org/10.1108/02683940610690169
- 76) Tan, H. H., and Lim, A. K. H. (2009). Trust in coworkers and trust in organizations. J. Psychol. 143, 45–66. doi: 10.3200/JRLP.143.1.45-66
- 77) Varona, F. (2002), "Conceptualization and management of communication satisfaction and organizational commitment in three Guatemalan organisations", American Communication Journal, Vol. 5 No. 3, available at: www.acjournal.org/holdings/vol5/ iss3/articles/concept.pdf (accessed 3 Dec 2022).
- 78) Vasquez, J. (2015). Relación entre la comunicación y la satisfacción laboral de un grupo de trabajadores del área de bodega de bofasa. Thesis. Available online at: http://186.151.197.48/tesiseortiz/2015/05/43/Vasquez-Jeimy.pdf (accessed Dec 20, 2022).
- 79) Villarreal, M. (2020). La pandemia y el impacto en las familias. Santiago: Universidad Pedro de Valdivia Walden, J., Jung, E.H. and Westerman, C.Y. (2017), "Employee communication, job engagement, and organizational commitment: a study of members of the Millennial Generation", Journal of Public Relations Research, 29, pp. 73-89, doi: 10.1080/1062726X.2017.1329737
- 80) Walden, J., Jung, E.H. and Westerman, C.Y. (2017), "Employee communication, job engagement, and organizational commitment: a study of members of the Millennial Generation", Journal of Public Relations Research, 29, pp. 73-89, doi: 10.1080/1062726X.2017.1329737
- 81) Whittaker, S., Freohlich, D. and Daly-Jones, O. (1994), "Informal workplace communication."
- 82) What is it like and how might we support it?", in ACM (Ed.), Conference Proceedings on Human Factors in Computing Systems, ACM, New York, pp. 131-137, doi: 10.1145/191666.191726
- Wohlers, C., Hartner-Tiefenthaler, M. and Hertel, G. (2017), "The relation between activity-based work environments and office workers' job attitudes and vitality", Environment and Behavior, *51* (2), pp. 167-198, doi: 0013916517738078
- 84) Wolfeld, L.R. (2010), "Effects of office layout on job satisfaction, productivity and organizational commitment as transmitted through face-to-face interactions", Colonial Academic Alliance Undergraduate Research Journal, Vol. 1, p. 8.
- 85) Yaccar, M. (2020). Qué provoca la cuarentena en las familias. Available online at: https://www.pagina12.com.ar/256037-que-provoca-la-cuarentena-enlas-familias (accessed Dec 20, 2022).
- 86) Zamani, Z., & Gum, D. (2019). Activity-based Flexible Office. *Journal of Corporate Real Estate*, *ahead-of-print* (ahead-of-print). https://doi.org/10.1108/jcre-08-2018-0028