

# THE RELATIONSHIP BETWEEN REMOTE WORK AND JOB SATISFACTION: THE MEDIATING ROLES OF SOCIAL INTERACTION AND WORK-FAMILY CONFLICT

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**ABSTRACT:** The global pandemic, COVID-19, has prevented much of the workforce from traveling to work to reduce the spread of the virus. This has resulted in employers and employees looking for alternative work arrangements, thus nowadays, remote working “enjoys” its momentum that is spreading more and more into the business practice. The remote work is considered to have a significant relation with job satisfaction; therefore, it has an impact on organizational efficacy and success.

Yet, the new way of functioning arises questions on social interaction and work-family conflict. More specifically, remote working can result in physical and mental health issues, through the decreased level social interaction and work-family conflicts that have impact on the level of job satisfaction.

The goal of this study is to explore the relationship between remote work and job satisfaction with focus on mediating role of social interaction and work-family conflict. In other words, the study examines the factors that affect the job satisfaction while working remotely and the changes that can be made in people’s homes in order to provide them a sense of working atmosphere. Both aspects are of special importance because they can serve as a reference for designing ideas and changes in homes for the purpose of creating better working conditions.

**Keywords:** COVID-19, remote work, job satisfaction, social interaction, work-family conflict

## INTRODUCTION

The increase of the technology and globalization resulted in emerged interest in studying the remote work and its effects (Carmela, 2017). Due to technology, people have chance to work from anywhere in the world, if they are internet connected (Hendricks, 2014). Invented in 1970s, when Jack Nilles was stuck in LA traffic (Kurland & Baliey, 1999), remote work is defined as working from location other than a standard work office. Today, it is considered as the most known type of distributed work (Gajendran & Harrison, 2007). According to Nilles (1994), remote work is “working outside the conventional workplace and communicating with by way of telecommunications or computer-based technology.”

However, the remote working was not widely used approach before the pandemic (Kossek & Lautsch, 2018). Only 2% of the European employees and 2.9% of US workforce used this approach and therefore the remote working approach was “luxury for the affluent” in the time prior the pandemic (DeSilver, 2000). Consequently, before COVID-19, the remote working experience was not common among the employees, nor among the organizations, although it became “new normal” overnight.

COVID-19 transfers the way people work. During this time, the businesses have advanced their capabilities and the remote working becomes a new work model. By definition, remote working is “a flexible work arrangement whereby workers work in locations, remote from their central offices or production facilities, the worker has no personal contact with co-workers there, but is able to communicate with them using technology” (Di Martino & Wirth, 1990).

## REMOTE WORK AND JOB SATISFACTION

The remote work has beneficial effects for both sides: employees and employers. The organizational advantages include using less office space, improved diversity, less absenteeism, and turnover and higher rate of retention (Mello, 2007, Robertson, Maynard & McDevitt, 2003). In addition, the nature of remote work encourages the idea of people having flexible work location which decreased costs in terms of road commuting to work, gas, and dress code. On the other hand, remote work can provide a blurred line between work and family, social isolation and costs bearing related to remote working because usually employees have to pay electricity and internet costs by themselves. From here, the organizations which offer this option to the employees, emphasize the importance of meeting the needs of employees, which may reflect in “a greater fit between themselves and their jobs” (Gajendran & Harrison, 2007). Hence, the remote work is an important factor for determining job satisfaction.

Job satisfaction is defined as positive emotional state resulted from one’s job evaluation (Locke, 1976). Therefore, the link between remote work and job satisfaction comes from the idea that the remote work allows flexibility and autonomy which allows employees to meet their work-life balance (Virick, DeSilva & Arrington, 2010).

There is no consensus regarding the remote work effects on job satisfaction. According to Guimaraes & Dallow (1999), there is an evidence of linear relationship, suggesting that employees who work from home are more satisfied with their jobs, while Cooper & Kurland (2002), suggest that employees who use remote work approach are less satisfied with their jobs.

On the other hand, Golden (2006), provides an evidence of u-shaped relationship suggesting that as remote work increases, the job satisfaction increases as well, but up to the certain point. From that point on, the increase in remote work results in decreased job satisfaction. For this reason, the organizational managers should be careful when they imply remote work. Rather, they should limit the remote work to only a couple of days per week, so that the employee will have flexible schedule and social interaction with the organizational members. The explanation behind this u-shaped relationship is the evidence that the extent of remote work does not relate equally to job satisfaction (Allen, Golden, & Shockley, 2015). In other words, Allen et al. (2015), the lack of social interaction and increased isolation are the main reason why u-shaped relationship is evidenced. These disadvantages can overcome the advantages from remote working, and impact on the overall job satisfaction.

### **THE MEDIATING EFFECT OF WORK-FAMILY CONFLICT AND SOCIAL INTERACTION**

Concerning the relationship between remote work and job satisfaction, another major belief that has been analyzed is the work family conflict. Work family conflict is a “product” of the pressures from work and family roles that are mutually incompatible (Greenhaus and Beutell, 1985). This kind of conflict occurs when one role affects the expectations of the other.

Employees may be distracted by the presence of young offspring or family members while working remotely, which can lead to overwork (Kazekami, 2020, Grant et al., 2019). In addition, the boundaries between work and family exposed the idea that remote work relates to the inability of the employees to separate from work activities (Eddleson and Milki, 2017). In

addition, household characteristics such as number of family members and offspring, size of the living area, number of people present when working remotely and availability of the workspace are important factors influencing remote work (Baker, Avery & Crawford, 2007; Baruch, 2000).

Yet, the relationship between remote work and family conflict is still questionable. According to Golden, Veiga, and Simsek (2006), if the employee is engaged more into remote working and there is a less work affected with family there will be an evidence of decreased work-family conflict. But, if there is more family affected with work, there would be increased level of this kind of conflict. For this reason, it can be concluded that the researchers do not find a full combination between work and family roles.

On the other hand, Gözükara & Çolakoğlu (2016) suggest that the work-family conflict has a negative impact over the job satisfaction. This can be explained due to the negative link between autonomy and work-family conflict; higher autonomy leads to lower work family conflicts which results in higher job satisfaction.

In their study, Fonner and Roloff (2010) examine the degree to which remote work impacts on job satisfaction. They provide an evidence that the remote workers show higher level of satisfaction than office-based employees, while work-life conflict was the most pivotal contributor to their overall satisfaction. They conclude that by working remotely, employees may comfort situation with work and life, thus being more productive and satisfied.

Another major theme that has been investigated is remote work's relationship to social interaction. The context or setting is an important element while framing the remote work (Bailey &

Kurland,2002). Although employee enjoy their autonomy and flexibility, there is a feeling of isolation that arises as an issue when working from home. Therefore, maintaining a sense of social connection in a challenge for remote working employees (Staples,2001). Social interaction is important because it improves commitment and trust, thus minimizing the conflicts and increasing the loyalty (Strohmeier,2013).

This approach has important implications especially in a time of COVID-19 pandemic, when the understanding the remote work experiences are put on pedestal. During a COVID-19 times, when the social gatherings are not allowed, being socially connected with colleagues has totally different meaning from being socially connected in “normal” times. Social support has a pivotal role in preventing suicide during COVID-19 pandemic. In addition, concerning the lack of sociability, job autonomy is evidenced as relatively high in this situation. However, according to Warr (1994), too much of good

things can lead to the negative effects. Higher autonomy is related with family issues and lack of concentration on their work at home approach.

## METHODOLOGY

The paper aims to explore explore the relationship between remote work and job satisfaction with focus on mediating role of social interaction and work-family conflict. For this purpose, to collect the empirical material, an online questionnaire was used as the main survey method, which was applied to a sample of 45 remote working employees. The survey was divided into two sections. The first section of the questionnaire, comprising of 14 questions, examined the job satisfaction, work family conflict and social interaction, out of which 8 questions were placed on Likert scale, 3 questions were multiple choice, and 3 questions were yes/no questions to measure satisfaction, family conflict, social interaction, and work conditions at home.

**Table 1**

*depicts the profile of respondents. Of all the respondents thirty six percent (36%) are male, while sixty four percent (64%) are female. The majority of them (40%) fall in the age group of 36- 45 years of age, thirty-three percent (33%) fall in the age group of 46-55 years, twenty-three percent (23%) fall in the age group of 23-35 years and only five percent (5%) of the respondents belong to the age group of more than 56 years of age.*

Variable	Structure	
Gender	Male	36%
	Female	64%
Age	25-35	23%
	36-45	40%
	46-55	33%
	56+	5%

## RESULTS

In sequence of better understanding of remote work and job satisfaction, several indications are provided. According to the results, there are differences in level of satisfaction, work-family conflict and social interaction among employees who work remotely and employees who work at office. The remote working employees show lower level of satisfaction and higher level of work-family conflict. However, the results provided evidence that there is no statistically significant difference between the employees working from home and employees working from office regarding satisfaction and work family conflict. Yet, there is statistically significant difference concerning social interaction. Employees notice higher level of negative feelings due to the absence of social interaction.

According to Table 3., employees that experience higher level of satisfaction

experience higher level of work-family conflict and lower level of negative feelings due to lack of social interaction. However, there further results provide an insight that there is no statistically difference among the two employee group regarding the two examined factors.

According to findings, there are differences among employees living in house and employees living in apartment. Employees that live in house show higher level of job satisfaction and work-family conflict, while lower level of negative feeling due to absence of social interaction. Yet, the results show that there is no statistically significant difference between the two different employee groups regarding the three factors.

Table 5. shows employees having three or more bedrooms within their homes have higher level of satisfaction, work-family conflict, while lower level of negative feeling from the lack of social interaction

**Table 2.**

*Mean, Standard Deviation and T-test based on employee working approach*

	Remote-Working Employees	Office Working Employees	Remote-Working Employees	Office Working Employees	Sig (2tailed)
	Mean		Standard Deviation		
<i>Satisfaction</i>	5,40	5,78	1,63	1,39	0,53
<i>Work-Family Conflict</i>	4,29	4,00	1,89	1,80	0,69
<i>Social Interaction</i>	5,11	2,44	2,03	1,88	0,00

**Table 3.**

*Mean, Standard Deviation and T-test based on employee level of satisfaction*

	More satisfied Employees	Less satisfied Employees	More satisfied Employees	Less satisfied Employees	Sig (2tailed)
	Mean		Standard Deviation		
<i>Work-Family Conflict</i>	4,33	4,00	1,90	1,41	0,69
<i>Social Interaction</i>	4,90	6,40	2,09	0,89	0,10

**Table 4.**  
Mean, Standard Deviation and T-test based on employee living form

	Employees living in House	Employees living in Apartment	Employees living in House	Employees living in Apartment	Sig (2tailed)
	Mean		Standard Deviation		
<b>Satisfaction</b>	5,85	5,14	1,21	1,81	0,22
<b>Work-Family Conflict</b>	4,54	4,14	1,81	1,96	0,55
<b>Social Interaction</b>	4,69	5,36	2,25	1,89	0,35

**Table 5.**  
Mean, Standard Deviation and ANOVA based on employee living space (number of bedrooms)

	1 bedroom	1-3 bedrooms	>3 bedrooms	1 bedroom	1-3 bedrooms	>3 bedrooms	Sig (2tailed)
	Mean			Standard Deviation			
<b>Satisfaction</b>	4,65	5,40	5,50	2,22	1,66	1,38	0,97
<b>Work-Family Conflict</b>	3,51	4,28	4,67	2,06	2,01	1,37	0,76
<b>Social Interaction</b>	5,24	5,00	5,00	1,15	2,06	2,45	0,66

**Table 6.**  
Mean, Standard Deviation and ANOVA based on number of offspring

	None	1	2-4	None	1	2-4	Sig (2tailed)
	Mean			Standard Deviation			
<b>Satisfaction</b>	4,77	5,57	5,87	1,88	1,72	1,25	0,20
<b>Work-Family Conflict</b>	4,00	4,14	4,60	1,83	1,95	1,99	0,69
<b>Social Interaction</b>	5,46	4,00	5,33	2,15	2,16	1,80	0,26

than the employees having less than three bedrooms in their homes. However, the results show that there is no statistically significant difference between employees having more and less bedrooms regarding the three mentioned factors.

According to the results, there are differences in level of satisfaction, work-family conflict, and social interaction among employees with different number of

offspring. The employee having two or more offspring show higher level of satisfaction and work-family conflict, while employees with no offspring show higher level of negative feelings due to lack of social interaction. However, the results provided an evidence that there is no statistically significant difference between employees having different number of offspring regarding these three factors.

**Table 7.***Mean, Standard Deviation and T-test based on sufficient space for work*

	Yes	No	Yes	No	Sig (2tailed)
	Mean		Standard Deviation		
<i>Satisfaction</i>	5,60	4,90	1,50	1,91	0,26
<i>Work-Family Conflict</i>	4,32	4,20	1,99	1,69	0,87
<i>Social Interaction</i>	4,72	6,10	2,21	0,99	0,07

**Table 8.***Mean, Standard Deviation and T-test based on having balcony or/and loggia*

	Yes	No	Yes	No	Sig (2tailed)
	Mean		Standard Deviation		
<i>Satisfaction</i>	5,73	4,25	1,28	2,25	0,02
<i>Work-Family Conflict</i>	4,35	3,75	1,94	1,57	0,44
<i>Social Interaction</i>	4,77	6,13	2,20	0,99	0,10

According to Table 7., employees having sufficient place to work show higher level of satisfaction, work-family conflict, while lower level of negative feelings due to absence of social interaction in comparison with employees considering no having sufficient workspace.

However, the results show that there is no statistically significant difference between employees having or not, sufficient space for work, regarding the three mentioned factors.

According to findings, there are differences among employees living having a balcony or/and loggia in their homes. Employees having a balcony or/and loggia show higher level of job satisfaction and work-family conflict, while lower level of negative feeling due to absence of social interaction. Yet, the results show that there is statistically significant difference only regarding job satisfaction among the two different employee groups.

## DISCUSSION

Since the remote working approach is enjoying its momentum, the purpose of this study is to understand the satisfaction among the remote-working employees. More specifically, the purpose was to assess the mediating effects on work-family conflict and social interaction and work conditions on the relationship between remote work and job satisfaction. As a result, this study sheds the light on current understanding into employees' attitudes of remote work along with its outcomes.

The results show that employees who work remotely experience lower level of social interaction in comparison with the employees who work from the organizational offices. This is expected result, since remote employees face with issues coming from behavioral and cultural aspects of pervasive and long-term home working. In line with other studies

conducted on the same issue, remote employees show high levels of lack of social interaction with their colleagues and lack of organizational connection (Aschenden,2020).

In addition, there is the lack of collaborative communication, face to face communication and social cues which are one of the main challenges for remote employees. The lack of social interaction and physical distance can potentially stimulate psychological and social consequences (Massaccesi,2021). Furthermore, remote working employees experience lack of social support required to stay engaged and motivated. Yet, social interaction is not the main contributor, but the “cut off” feeling is. Employees who work remotely have issues regarding the information process, communication, decision-making process and consequently they have a feeling of being “left out” of their workplace.

Another interesting finding from this study is the importance of having balcony or loggia in people’s homes. Although the employee living and working space at home show to be not significant while determining the satisfaction, having a balcony or loggia is important for the level of job satisfaction measured among remote employees. Employees who have balcony or loggia experience higher level of job satisfaction. This can be explained by emphasizing the importance of daylight which consists of three basic dimensions’ the field of health, the field of performance, and the feeling of well-being. (Cheong,et al.,2014; Ali et al.,2020). According to Steven Lockley, light, is an “acute stimulant that directly alerts the brain,” can affect sleep, alertness, and

human productivity and therefore it is believed that the daylight stimulates cognitive functions. (Wasterman,2018a; Wasterman, 2018b; Wasterman,2019). In other words, the light has impact on both mental and physical state of each person, therefore having balcony or loggia is recognized contributor for satisfaction among remote work employees.

## LIMITATIONS OF THE STUDY

The limitations of this study are acknowledged. One of the main limitations is that the sample carries a risk of not being representative to the general population. Although the respondents are anonymous, still the level of honesty should not be taken for granted. The last limitation is the demographic location of the respondents. The results are bases on investigation only in the Republic of North Macedonia, and therefore the additional studies should provide more comprehensible analysis of such variables.

## CONCLUSION

This paper contributes to the existing field of knowledge by providing investigation of the job satisfaction among remote working employees in R.N. Macedonia. The provided outcomes contribute to the more in-depth understanding of the factors that may shape the job satisfaction. However further research is necessary to provide an amplified understanding on the effects on work-family conflict, social interaction and conditions that will help people design their homes suitable both for living and working.

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