A STUDY ON MIDDLE-CLASS FEMALE REMOTE WORKERS: A STUDY ON WORK-FAMILY CONFLICT, JOB SATISFACTION, AND INTERPERSONAL COMMUNICATION SATISFACTION

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ABSTRACT
Purpose- This study sought to investigate the impact of the emerging remote working model, which has gained significant popularity among businesses in recent years, specifically focusing on middle-class female employees. The primary objectives included understanding how work-family conflict, job satisfaction, and interpersonal communication satisfaction interplay in the context of remote work and how they contribute to the overall employee experience.
Methodology- To gather the data for the study, a comprehensive questionnaire was designed and distributed among the target population. The data collected were meticulously analyzed using the SPSS 23 statistical package program, ensuring the reliability and precision of the results. For further validation and in-depth interpretation, advanced statistical models such as Random Forest (RF) and Naive Bayes (NB) were employed. These supervised machine learning models played a crucial role in enhancing the completeness of the analysis and corroborating the study findings.
Findings- Empirical analysis led to several significant conclusions. The first was the finding that work-family conflict exhibited a negative correlation with interpersonal communication satisfaction. This suggested that a higher level of conflict between work and family roles tends to lower the quality of interpersonal communication in the context of remote work. Furthermore, the study found a positive relationship between job satisfaction and the nexus between work-family conflict and interpersonal communication satisfaction. This indicates that higher job satisfaction can potentially mitigate the negative impacts of work-family conflict on communication.
Conclusion- The study provides critical information on the challenges faced by middle-class female remote workers, particularly in the realm of work-family conflict and its subsequent effects. The findings underscore the negative implications of this conflict on both job satisfaction and interpersonal communication. Employers and organizations, therefore, must be mindful of these issues and devise suitable strategies, taking into account these outcomes to better manage the work-life balance and communication dynamics of their remote working female employees, thus improving their overall work experience.

Keywords: Remote work, woman, work-family conflict, job satisfaction, ınterpersonal communication.
JEL codes: E24, O47, J21

1. INTRODUCTION

Remote work has become an essential issue for modern organizations, especially after the COVID-19 pandemic. Before the pandemic, remote work was already on the rise, with 3.6% of the US workforce and 5.4% of all workers in the European Union (EU) reporting remote working full-time, and a greater number of workers reporting remote working from home at least some of the time. However, the pandemic has accelerated this trend, with approximately 70% of US workers with jobs conducive to remote work working from home or remotely at the height of the pandemic (Iordache et al., 2021). Remote work refers to working outside of a physical organizational setting, often using information communication technology to perform work tasks and communicate with others both within and outside the organization (Lott & Abendroth, 2020).

Although remote work has increased over the last decade and tremendously in response to the COVID-19 pandemic, researchers are still exploring its relationship with productivity and well-being. Formal remote work arrangements have been

associated with higher reports of employee job satisfaction, especially for women, but also higher levels of depression, except for women with children (Iordache et al., 2021; López-Igual & Rodríguez-Modroño, 2020). Work and family are the two most important areas of human life. The family is one of the most important social institutions where a person completes her basic needs. Business life is another important area that meets the social and economic needs of the individual (Pordelan et al., 2022). The problems experienced in business and family life affect each other, as well as are reflected in the relations of the employees. For this reason, ensuring work-family balance is important not only for the individual, but also for the organization of which she is a member and family member (Gálvez et al., 2020).

Remote work can have a complex impact on work-family conflict among women, which is influenced by various factors. Workplace culture is one of those factors that can contribute to higher levels of work-family conflict perceived by women who remote work (Pordelan et al., 2022). Research indicates that remote work is associated with higher levels of time- and strain-based work-family conflict among women. Remote workers are also more likely to experience higher levels of work-family conflict if they perceive their workplace culture to be highly demanding. The roles attributed to gender are critical in ensuring work-family balance, especially for female employees (Aguiar et al. 2023; Nguyen & Armoogum, 2021). In societies where the patriarchal order predominates, women are expected to take on the responsibilities of the home and family, in addition to workplace responsibilities (Lott & Abendroth, 2020). With the remote work working order, the expected responsibilities of women working together have increased, leading to a deterioration of the work-family balance of female employees. Therefore, it is essential for women workers to understand the effects of this disruption. Within the scope of this research, the effect of female remote workers' work-family life balance on interpersonal communication will be examined.

2. LITERATURE REVIEW

2.1. Remote work and Gender

Remote working has the potential to challenge traditional gender roles and expectations in the workforce, as women are more likely to take advantage of this work arrangement than men (Heggeness & Suri, 2021). Remote working, in particular, can offer a solution for women seeking to balance their work and family responsibilities (Lu & Zhuang, 2023). However, remote working does not directly address the conflict between work and family. Traditional gender roles can be replicated during remote work through childcare, domestic labor, gendered family structures, and time use (Aguiar et al. 2023). Without buffer mechanisms such as grandmother babysitting, kindergarten and cleaning services, remote working can lead to women being socially isolated, facing more demands on both home and work lives, and being exposed to stricter control by their husbands (Loezar-Hernández et al., 2023).

The flexibility model suggests that remote work can provide opportunities to balance home and work lives. However, without these buffer mechanisms, remote working can become an intermediate form that confines women's labor to the home and makes it invisible rather than a permanent solution for work-life balance (Loezar-Hernández et al., 2023). Furthermore, women who remote work may be limited to lower wage part-time jobs due to domestic responsibilities (Gálvez et al., 2020). Remote working may also lead to individualized work and a lack of solidarity, self-esteem, and collective activism, which were previously provided by stable work relations. Moreover, remote working can cause precarization of women's employment (Raišienė, Rapuano & Varkulevičiūtė, 2021). Women find remote working to be unsustainable and exacerbate work-family conflict for them. Additionally, remote working does not result in a reduction in time spent on domestic chores for women (Lu & Zhuang, 2023). In conclusion, remote working has many gender traps that make it difficult for women to balance work and life.

2.2. Importance of Work Family Conflict and Interpersonal Communication

The conflict between work and family is when the individual's wishes are not met in both areas of her life: at work and in her personal life. The theory of Clark's boundary states that individuals have two worlds, a personal life and a professional life (Clark, 2000). Theory separated work and family as two separate disciplines (Gálvez et al., 2020). The individual must mold and alter himself as she transitions between her professional and family lives. Boundary theory recognizes the importance of the path individuals take to maintain the boundary between work and personal space. Despite being considered separate entities, "family" and "work" have an indirect relationship that directly affects one another (Rodríguez-Modroño & López-Igual, 2021). This will allow individuals to complete their obligations with the least role conflict at home and at work, and maintain this balance.

Interpersonal communication is the exchange of information, feelings, and thoughts between two individuals or entities. Interpersonal communication is a process that involves both the sender and the receiver simultaneously exchanging messages, interpreting them in interpersonal relationships, and drawing conclusions (Adamovic, 2022).

Studies have shown that finding a balance between work and personal life is crucial for a fulfilling and successful life. However, research has also found that women experience more conflict in their professional, family, and private lives than men, leading

to negative emotional states and physical and psychological symptoms of stress. Work-family conflict has been shown to negatively impact employee job satisfaction and can lead to interpersonal conflict in the workplace (Clark, 2000). This is because individuals experiencing work-family conflict can bring their negative emotions and stress from home to the workplace, leading to conflicts with colleagues. Psychological distress has been found to mediate the relationship between work-family conflict and interpersonal conflict. Therefore, organizations should recognize the negative impact of work-family conflict on employees and provide adequate support and resources to address these issues to prevent interpersonal conflicts from arising in the workplace (Gálvez et al., 2020). Furthermore, work-family conflict can negatively affect the social lives of workers, leading to a decrease in interpersonal satisfaction and the willingness to interact with others (Schall & Chen,2022). It is essential to manage work and careers to minimize negative emotional spillover and achieve a balance between professional and personal life. Women face more pressure to manage the boundaries between professional and private life.

H1: Work-family conflict has a negative effect on interpersonal communication satisfaction.

Work-family conflict is a significant issue that can have negative outcomes for employees, such as reduced job satisfaction and increased work stress. Studies have shown that work-family conflict has an adverse impact on career satisfaction of employees, leading to negative spillovers and decreased job performance (Adamovic, 2022). The impact of work-family conflict on job satisfaction is a significant issue that deserves the attention of organizations and scholars. A systematic review and meta-analysis conducted on this topic revealed several important findings. Firstly, work-family conflict has a negative impact on job satisfaction among social workers. Secondly, the impact of work-family conflict on job satisfaction is stronger for women than for men (Loezar-Hernández et al., 2023). Third, the impact of work-family conflict on job satisfaction is stronger for those with children than for those without children. It is crucial to address this issue and to enact progressive family-friendly laws and regulations to improve the lives of employees and their families (Schall & Chen,2022). Work-family conflict can lead to stress, burnout, and other forms of stress, which can undermine family satisfaction and job satisfaction, leading to general unhappiness for both employees and family members.

H2: Work-family conflict has a negative effect on job satisfaction.

2.3. Role of Job Satisfaction

The literature on job satisfaction is vast and multifaceted, offering valuable insight into the factors that contribute to the happiness and well-being of employees in various professions. A crucial topic within this body of literature is the significance of the work cycle for female employees. Women often face unique challenges in balancing their professional and personal responsibilities, and understanding the rhythms and patterns that can help alleviate the demands of their hectic lives can make a substantial difference in their overall job satisfaction (Lu & Zhuang, 2023).

The literature further elucidates the positive impact of job satisfaction on the often challenging interplay between work-family conflict and interpersonal communication satisfaction. Three significant pieces of evidence illustrate this relationship. First, employees who feel fulfilled by their job are more likely to develop strong communication skills, which can be applied to both their professional and personal relationships (Gálvez et al., 2020). Second, an enjoyable and supportive work atmosphere can provide a foundation of stability and positivity that can help buffer the effects of work-family conflict, making it easier for the employee to maintain strong communication with loved ones (González Ramos & García-de-Diego, 2022). Lastly, job satisfaction can serve as a powerful motivator, encouraging employees to strive for a healthy work-life balance and thus enhancing their ability to engage in satisfying and meaningful interpersonal communication across all aspects of their lives.

H3: Job satisfaction has a positive effect on interpersonal communication satisfaction.

In addition to recognizing the specific needs of female employees, the literature on job satisfaction also demonstrates the positive relationship between workplace happiness and satisfaction with interpersonal communication. Three key pieces of evidence highlight this connection. First, studies suggest that contentment with one's job leads to open, honest, and constructive communication with colleagues, facilitating better collaboration and problem solving (Lu & Zhuang, 2023). Second, employees who feel supported and encouraged by their workplace environment are more likely to develop genuine relationships and connections with their colleagues, which can facilitate more meaningful and productive communication. And finally, job satisfaction has been shown to increase the overall sense of trust and camaraderie within a working environment, fostering a culture of open and respectful discourse (Taboroši et al., 2022). Therefore, job satisfaction has a mediator effect on the negative relationship between work-family conflict and interpersonal communication satisfaction.

H4: Job satisfaction has a mediator effect on the relationship between work-family conflict and interpersonal communication satisfaction.

3. RESEARCH METHODOLOGY

3.1. Sample and Method

In this study, our aim was to determine the effects of work-family conflict on the relationship between interpersonal communication. The survey was conducted with a questionnaire applied to 271 female employees. The data obtained were measured using SPSS 23.00 Statistical Package Program. While descriptive analysis was performed in the analysis of demographic information, factor analysis and reliability analysis were performed on the questions in the questionnaire. Hypotheses are proven by correlation and regression analysis. In addition, two different machine learning algorithms were used in this study to support the validation methodology. These are, respectively, supervised machine learning models of random forest (RF) and logistic regression (LR). Three machine learning algorithms are investigated to evaluate their performance in predicting employee job satisfaction, work-family conflict, and interpersonal communication satisfaction using a data set that contains employees' reviews and comments.

The survey consists of two parts. In the first part, demographic information of the person is included. In the second part of the questionnaire, there are scales related to Job Satisfaction, Work-Family Conflict, and Interpersonal Communication. The Work-Family Conflict scale is based on the 5-work-family conflict questionnaire developed by Netemeyer et al. (1996); Job Satisfaction scale is based on the 5 questionnaire developed by Pond & Geyer (1991) and Interpersonal Communication was measured with a 5-item inventory developed by Smith (2018). All scales have five options ranging from (5) strongly agree to (1) Strongly Disagree.

The research was carried out with 271 middle-income female employees working in different departments of private and public institutions. 26.6% of the respondents are between the ages of 26-30 (72 Participants), 29.9% are between the ages of 31-35 (81 Participants), 9.1% are between the ages of 36-40 (52 Participants), 24.4% are between the ages of 41-45 (66 Participants). 38% of the employees are in the public sector (103 employees), and 62% are in the private sector (168 employees). Working time of the employees in the institutions they are affiliated with; 11.8% less than 1 year (32 employees), 32% between 1-3 years (87 employees), 33.6% between 4-7 years (83 employees), 12.5% between 8-10 years (34 employees), 12.9% of them have been working for 10 years or more (35 employees). Participants; 11.8% (32 participants) have vocational school/associate degree, 55.7% (151 participants) have university degrees, and 32.5% (88 participants) have graduate degrees.

3.2. Research Model

In the research model, one independent variable; Work Family Conflict, An Intermediate variable; Jop Satisfaction, and a Dependent variable; There is Interpersonal Communication Satisfaction. Within the scope of the research model, the relationships between the variables and their effects are examined.

There are four hypotheses in our research, as explained in the second chapter and supported by the literature (Figure 1). The hypotheses are listed below.

H1: Work-family conflict has a negative effect on interpersonal communication satisfaction.

H2: Work-family conflict has a negative effect on job satisfaction.

H3: Job satisfaction has a positive effect on interpersonal communication satisfaction.

H4: Job satisfaction has a mediator effect on the relationship between work-family conflict and interpersonal communication satisfaction.

Figure 1: Research Model
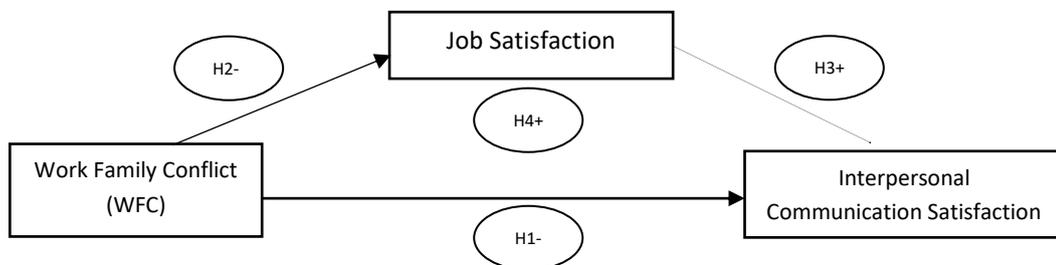
3.3. Evaluation

The study used ML models and transformer-based techniques for the supervised portion of the assessment. The aim was to evaluate and compare the performance of conventional machine learning algorithms and transformer-based techniques. The models were evaluated based on classification criteria such as precision, recall, F1 score, and accuracy. The study compared the performance of other ML models with the trained version of their model, which used the Text model as the benchmark. The study used the naive Bayes method, the random forest method, the support vector machine method, as well as multilayer perceptron and transformer-based techniques. Tables 1 and 2 show classification models for Bert and Electra that were trained using their data and text embeddings, respectively. The models were trained using their data. It is evident that the Multilayer Perceptron model exhibits superior performance in terms of precision, recall, and F1-score, with values of 0.73 across all three metrics. This suggests a strong performance in terms of both the identification of true positives and the minimization of false negatives and positives. This demonstrates the model's robustness in handling the given dataset. Moreover, the Multilayer Perceptron model ties in terms of accuracy with the Naive Bayes and Support Vector Machine methods, each boasting an accuracy score of 0.86. This denotes a high overall correctness of classification, reinforcing the model's reliability for the study's objectives. On the other hand, the transformer-based techniques, Bert and Electra, presented somewhat mixed results. Despite their prowess in natural language processing tasks, they didn't surpass the traditional machine learning models in this context. However, Electra outperformed Bert slightly in terms of precision and F1-score. It's also worth noting that their accuracy scores are not too far behind the top-performing models.

This analysis underscores the importance of the choice of model in machine learning tasks, and that advanced transformer-based methods may not always outperform traditional ML models depending on the specific task and dataset at hand. These results also stress the need for further research to optimize the use of transformer-based techniques in such contexts. the Multilayer Perceptron model takes the lead in terms of precision, recall, and F1 score, although the performance has slightly dropped compared to the first set of embeddings. With scores of 0.71 across all three metrics, it demonstrates a solid performance in identifying true positives while minimizing false negatives and false positives. Furthermore, the Multilayer Perceptron, along with the Naive Bayes method, scored the highest in terms of accuracy, both garnering a score of 0.84. This indicates a consistently high overall classification correctness across different data embeddings, reinforcing the reliability of these models for the study's objectives. On the other hand, the transformer-based techniques, Bert and Electra, didn't manage to outperform the traditional ML models in this context, albeit with a slight increase in their performance compared to the first set of embeddings. Despite the advancements in these transformer-based techniques, particularly in the field of natural language processing, their results in this scenario underline that selecting the best performing model may often depend on the specific task and dataset. The results from the second set of data embeddings further emphasize the importance of selecting the most appropriate model for specific tasks. Moreover, it showcases the potential of traditional ML models in extracting insights from the data, even when compared to more recent and advanced methodologies.

Table 1: Calculations of Accuracy, Recall, and F1 Score as Macro Averages for Evaluations Using First Data Embeddings

Method	Precision	Recall	F1-Score	Accuracy
Random Forest	0.64	0.72	0.64	0.78
Naïve Bayes	0.58	0.60	0.59	0.86
Support Vector Machine	0.59	0.61	0.60	0.85
Multilayer Perceptrone	0.73	0.74	0.73	0.86
Bert	0.66	0.65	0.56	0.81
Electra	0.70	0.70	0.62	0.84

Table 2: Calculations of Precision, Recall, and F1 Score as Macro Averages for Baseline Evaluations Using Second-Data Embeddings

Method	Precision	Recall	F1-Score	Accuracy
Random Forest	0.62	0.70	0.62	0.76
Naïve Bayes	0.56	0.58	0.57	0.84
Support Vector Machine	0.57	0.59	0.58	0.83
Multilayer Perceptrone	0.71	0.72	0.71	0.84
Bert	0.65	0.67	0.62	0.83
Electra	0.69	0.68	0.59	0.82

The assessment results show that our model outperforms the second model in all machine learning models, except for naive Bayes and Multilayer Perceptron, which have the same accuracy. The multilayer perceptron model achieved the highest scores in all assessment criteria for both representation models in the supervised task of sentiment analysis, regardless of the selected model. The F1 score for the first model is 0.73, while the F1 score for the second model is 0.71. Although transformer-based approaches such as Bert and Electra had performance values greater than the general norm, they were not successful in achieving the highest possible model scores. Class-wise performance assessments were performed for both positive and negative classes to determine which algorithm produced the most favorable results. The results of the ML models and transformer-based approaches are compared in Table 3. All trained models can perform more successfully with a dataset that is more uniformly distributed, despite the fact that the number of positive comments is a very small fraction of the total number of comments in the other classes.

Table 3: Class-Wise Performance of the ML Models and Transformer-Based Approaches

Class	RF	NB	SVM	MP	Bert	Electra
Positive	74.5	86.1	85.7	87,3	84,6	81,2
Negative	78.2	82.6	81,3	82,5	82,2	84,3

In table 3, the Multilayer Perceptron model displayed the highest performance for the positive class, with a score of 87.3%. This indicates the model's exceptional capability in identifying and correctly predicting positive instances from the dataset, thereby showcasing its effectiveness in capturing the nuances of the positive class. On the contrary, Electra, a transformer-based approach, achieved the highest performance for the negative class at 84.3%. Despite its overall performance being lower than the Multilayer Perceptron in the earlier evaluations, its top performance in this specific aspect highlights the model's strength in understanding and predicting negative instances. Interestingly, while both classes had their best performances with different models, it emphasizes the complexity of sentiment analysis tasks and how no single model may be the best fit for all aspects of such tasks. These results underline the significance of understanding the strengths and weaknesses of different models for various classes and tasks. It further exemplifies the need for comprehensive evaluation techniques that cover all potential aspects of a problem when choosing the best machine learning approach.

4. FINDINGS

Factor analysis was performed to examine the validity of the structure of the scale. Büyüköztürk (2005) defines factor analysis as a multivariate statistical method that aims to discover a small number of unrelated but conceptually significant variables (factors, dimensions) by bringing together interrelated variables. To determine whether the data are suitable for factor analysis, the Kaiser-Meyer Olkin (KMO) sample fit test was performed on the data obtained from the pre-application and the Bartlett sphericity test was performed to examine the diagonal values of the anti-image correlation. The KMO and factor analysis test of the research are shown in Tables 4 and 5.

Table 4: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin measurement of sampling adequacy.		, 866
Bartlett's Test of Sphericity	Approx. Chi-Square	3179,174
	df	105
	Sig.	,000

If the value obtained as a result of the Kaiser-Meyer-Olkin (KMO) test is greater than 0.5, the sample size is assumed to be sufficient for factor analysis (Büyüköztürk, 2005). According to the analysis results, the sample size is suitable for factor analysis. In our study, the variables prepared according to the 5-point Likert Scale and were measured by a questionnaire with 15 questions. Independent variables (Work Family Conflic), and intervening variable (Job Satisfaction) and dependent variable (Interpersonal Communication Satisfaction) were subjected to factor analysis. The variables are subjected to factor analysis and are shown in the following table, together with factor loads (Table 5).

Table 5: Rotated Component Matrix[a]

Rotated Component Matrix[a]				
	Component			
	1	2	3	4
JS5.	,903			
JS4.	,898			

JS2.	,862			
JS1.	,853			
JS3.	,849			
WFC3.		,869		
WFC4.		,862		
WFC2.		,853		
WFC1.		,792		
WFC5.		,781		
ICS3.			,857	
ICS2.			,846	
ICS4.			,816	
ICS1.			,814	
ICS5.			,785	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. The rotation converged in 5 iterations.				

JS: Job satisfaction, WFC: Work- Family Conflict, ICS: Interpersonal Communication Satisfaction

Reliability analysis is defined as the internal consistency of the measure that takes into account the mean relationship between questions. In the literature, a Cronbach's alpha coefficient of 0.50 and above is considered sufficient, as stated by Nunnally (1978) (Nunnally, J. C., 1978, Hair et al., 2000, Büyüköztürk, 2007).

Table 6: Reliability Analysis

Variables	Number of questions	Cronbach Alfa (α) Values
ICS	5	,904
WFC	5	,909
JS	8	,939

Reliability means that the measurement tool shows consistent results in all situations. When the literature is examined, reliability is seen to be examined before validity in scale development studies (Hair et al., 2000). For this purpose, items or scale scores are used as a basis for item selection (Item Analysis) among draft items (Büyüköztürk, 2007). The reliability of the scale was determined by the difference in the mean scores of the subgroups and the item analysis based on correlation. According to the results of the research, the reliability analysis is among the appropriate values (Table 6).

As seen in Table 7, correlation analysis deals with the interrelationships between work-family balance, interpersonal communication satisfaction, and job satisfaction. As we mentioned before, analyzes (factor analysis, reliability analysis, descriptive analysis) were made on 271 questionnaires obtained from remote workers.

Table 7: Correlation Analysis

Correlation		ICS	WFC	JS
ICS	Pearson Correlation	1	-,380**	,353**
	Sig. (2-tailed)		,000	,000
	Sum of Squares and Cross-products	202,497	-108,835	92,118
	Covariance	,753	-,405	,342
	N	270	270	270
WFC	Pearson Correlation	-,380**	1	-,333**

	Sig. (2-tailed)	,000		,000
	Sum of Squares and Cross-products	-108,835	404,832	-122,584
	Covariance	-,405	1,505	-,456
	N	270	270	270
JS	Pearson Correlation	,353**	-,333**	1
	Sig. (2-tailed)	,000	,000	
	Sum of Squares and Cross-products	92,118	-122,584	335,435
	Covariance	,342	-,456	1,247
	N	270	270	270

**. The correlation is significant at the 0.01 level (2-tailed).

*. The correlation is significant at the 0.05 level (2-tailed).

As a result of the hypothesis tests performed between the variables specified in our research model, the hypotheses were supported by regression analysis. The relationships between the variables are statistically significant as a result of the regression analysis. According to the results of the regression analysis in terms of its relationship with the independent variable of work-family conflict that affects the satisfaction of interpersonal communication in Table 8, (β=,-380***; Sig=,000) H1 is supported. According to the results of the regression analysis in terms of its relationship with the independent variable of work-family conflict affecting job satisfaction, (β=-,-333***; Sig=.000) H2 hypothesis is supported. According to the results of the regression analysis in terms of its relationship with the job satisfaction independent variable affecting interpersonal communication satisfaction, (β=.353***; Sig=.000) H3 hypothesis is supported.

Table 8: Results of Regression Analysis of the Effects of Independent Variables on Dependent Variables

Independent Variables	Dependent Variables	Standart β	Sig.	Adjusted R²	F
WFC	ICS	,-380***	,000	,141	45,264
WFC	JS	,-333***	,000	,107	33,347
JS	ICS	,353***	,000	,122	38,261

*: p<0.05   **: p<0.01   ***:p<0.001

According to the regression analysis in Table 9, the mediator effect of job satisfaction affects the satisfaction with interpersonal communication in institutions with work-family conflict. In this case, it is understood that if the job satisfaction of employees who have work-family conflict is ensured, the satisfaction of interpersonal communication will increase.

Table 9: Regression Analysis Results of the Mediator Effect

	Independent Variables	Dependent Variables	Standart β	Sig.	Adjusted R²	F
Regression	WFC	ICS	-,295***	,000	,141	45,264
	JS		,255***	,000	,196	33,884

*: p<0.05   **:p<0.01   ***:p<0.001

Regression analysis was used to test the research hypotheses and the four hypotheses are shown in Table 10. As a result of the hypothesis tests performed between the variables specified in our research model, the hypotheses were supported by regression analysis. As a result of the regression analysis, the relationships between the variables are statistically significant.

Table 10: Supported/Unsupported Status of Research Hypotheses

Hypotheses	Supported / Not Supported	Significance Level (Sig.)
H1: Work-family conflict has a negative effect on interpersonal communication satisfaction.	**Supported**	**P<0.001**
H2: Work-family conflict has a negative effect on job satisfaction.	**Supported**	**P<0.001**
H3: Job satisfaction has a positive effect on interpersonal communication satisfaction.	**Supported**	**P<0.001**

H4: *Job satisfaction has a mediator effect on the relationship between work-family conflict and interpersonal communication satisfaction.*	**Supported**	*p<0.001*

5. CONCLUSION

According to our study, the analysis of data obtained from white collar female remote workers working in the public and private sectors shows the relationships between work-family conflict variables and interpersonal communication satisfaction variables in employees.

The two areas where individuals socialize and spend most of their time are work and family (Loezar-Hernández et al., 2023). The workplace provides the benefits that employees receive so that they can continue their lives. Additionally, the family is an area to which individuals attach great importance in terms of their values and goals. For this reason, it has been assumed that the incompatibility between work and family roles can negatively affect the communication satisfaction. The results obtained confirm this idea.

When the effect of gender on work-family conflict is examined, contrary to many studies in the literature, the levels of work-family conflict experienced by male and female employees do not differ (Gálvez et al., 2020). Although it is quite ambitious to conclude that the profile of working women in Turkey has begun to differ from this finding, it also points to the need for more research on gender differences.

However, it should not be ignored that conducting the research while the pandemic conditions continue may affect the results. One of the reasons for the low satisfaction of participants in interpersonal communication may be the ongoing epidemic and its effects.

The other purpose of the study was to compare the performance of conventional machine learning algorithms and transformer-based techniques. Researchers used transformer-based ML models and techniques to achieve this goal. The text data were split into two separate datasets, and class-wise performance measurements were carried out across both positive and negative classes. The transformer-based approach known as Elecktra achieved the highest performance in the negative class, while multilayer perceptrone achieved the highest performance in the positive class. Transformers are state-of-the-art models in NLP, trained on large corpora of text, and are popular due to their ability to learn contextual relationships between input data, which allows for more accurate predictions. Transformers have the ability to process large amounts of data, making them ideal for handling big data problems. The Transformer architecture was introduced in 2017 and has had a great impact on many NLP tasks.

The difficulties experienced by women working remotely are multifaceted and complex. Balancing the demands of their professional lives along with fulfilling the needs of their families has become increasingly strenuous, as the boundaries between work and home life have become blurred with remote work situations. (Lu & Zhuang, 2023). In addition, the responsibility often falls on the shoulders of these women to balance household chores and caregiving duties in tandem with their professional obligations. This added weight can have a significant impact on their mental health and overall well-being, leading some women to suffer from increased levels of stress, burnout, and anxiety (Schall & Chen,2022).

The literature on flexible work arrangements and gender practices in organizations suggests that while flexibility presents opportunities, remote work does not improve gender stereotypes (Nakrošienė et al., 2019). Traditional gender roles are maintained in both family and work organizations, and remote work strengthens gender stereotypes by providing continuity between home and work and reinforcing gender stereotypes in both mediums (Gálvez et al., 2020). Remote work does not directly resolve the work-family conflict because traditional gender roles are reproduced through childcare, domestic labor, gendered family structures, and gendered time use.

Gender comprises roles learned and internalized through interactions in organized social constructs, such as education, family, and work organizations. Studies have focused on gendering practices in work organizations, revealing how gender stereotypes are created and protected, how male norms are established, and how gender roles are reproduced in daily communication practices in workplace relationships in formal organizations (Pordelan et al., 2022). Some studies point to the possibility of "undoing gender" in organizations. Culturally, it becomes possible for women to start working by negotiating genderroles and undoing gender (Lu & Zhuang, 2023).

REFERENCES

Adamovic, M. (2022). How does employee cultural background influence the effects of remote work on job stress? The roles of power distance, individualism, and beliefs about remote work. International Journal of Information Management, 62, 102437.

Aguiar, S. F. B. D., Oliveira, F. B. D., Hryniewicz, L. G. C., & Sant'Anna, A. D. S. (2023). Remote work and women: perceptions of work and family life balance. Cadernos EBAPE. BR, 20, 836-850.

Büyüköztürk, Ş. (2007), Sosyal Bilimler için Veri Analizi El Kitabı, Ankara: Pegem A Yayıncılık

Clark, S. C. (2000). Work/Family Border Theory: A New Theory of Work/Family Balance. Human Relations, 53(6), 747–770. https://doi.org/10.1177/0018726700536001

Gálvez, A., Tirado, F., & Alcaraz, J. M. (2020). "Oh! Remote working!" Regimes of engagement and the lived experience of female Spanish remote workers. Business Ethics: A European Review, 29(1), 180-192.

González Ramos, A. M., & García-de-Diego, J. M. (2022). Work–life balance and remote working: Lessons learned during the pandemic on gender role transformation and self-reported well-being. International Journal of Environmental Research and Public Health, 19(14), 8468.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). Multivariate Data Analysis. Upper Saddle River, NJ: Pearson.

Heggeness, M., & Suri, P. (2021). Remote work, childcare, and mothers' labor supply. Opportunity and Inclusive Growth Institute Working Papers: Federal Reserve Bank of Minneapolis, 10.

Iordache, A. M. M., Dura, C. C., Coculescu, C., Isac, C., & Preda, A. (2021). Using Neural Networks in Order to Analyze Remote work Adaptability across the European Union Countries: A Case Study of the Most Relevant Scenarios to Occur in Romania. International Journal of Environmental Research and Public Health, 18(20), 10586.

Loezar-Hernández, M., Briones-Vozmediano, E., Ronda-Pérez, E., & Otero-García, L. (2023). Juggling during Lockdown: Balancing Remote work and Family Life in Pandemic Times and Its Perceived Consequences for the Health and Wellbeing of Working Women. International Journal of Environmental Research and Public Health, 20(6), 4781.

López-Igual, P., & Rodríguez-Modroño, P. (2020). Who is remote working and where from? Exploring the main determinants of remote work in Europe. Sustainability, 12(21), 8797.

Lott, Y., & Abendroth, A. K. (2020). The non-use of remote work in an ideal worker culture: Why women perceive more cultural barriers. Community, Work & Family, 23(5), 593-611.

Loezar-Hernández, M., Briones-Vozmediano, E., Ronda-Pérez, E., & Otero-García, L. (2023). Juggling during Lockdown: Balancing Remote work and Family Life in Pandemic Times and Its Perceived Consequences for the Health and Wellbeing of Working Women. International Journal of Environmental Research and Public Health, 20(6), 4781.

Lu, Z., & Zhuang, W. (2023). Can remote working improve workers' job satisfaction? Exploring the roles of gender and emotional well-being. Applied Research in Quality of Life, 15, 1-19.

Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: characteristics and outcomes of remote work. International Journal of Manpower, 40(1), 87-101.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. Journal of Applied Psychology, 81(4), 400-421.

Nguyen, M. H., & Armoogum, J. (2021). Perception and preference for home-based remote work in the covid-19 era: A gender-based analysis in Hanoi, Vietnam. Sustainability, 13(6), 3179.

Nunnally, J.C. (1978) Psychometric theory. 2nd Edition, McGraw-Hill, New York.

Pond, S., & Geyer, P. (1991). Differences in the relation between job satisfaction and perceived work alternatives among older and younger blue-collar workers. Journal of Vocational Behavior, 39, 251-262.

Pordelan, N., Hosseinian, S., Heydari, H., Khalijian, S., & Khorrami, M. (2022). Consequences of remote working using the internet among married working women: Educational careers investigation. Education and Information Technologies, 27(3), 4277-4299.

Raišienė, A. G., Rapuano, V., & Varkulevičiūtė, K. (2021). Sensitive men and hardy women: How do millennials, xennials and gen x manage to work from home? Journal of Open Innovation: Technology, Market, and Complexity, 7(2), 106-118.

Rodríguez-Modroño, P., & López-Igual, P. (2021). Job quality and work—life balance of teleworkers. International Journal of Environmental Research and Public Health, 18(6), 3239.

Schall Jr, M. C., & Chen, P. (2022). Evidence-based strategies for improving occupational safety and health among remote workers during and after the coronavirus pandemic. Human Factors, 64(8), 1404-1411.

Smith, S. A., Patmos, A., & Pitts, M. J. (2018). Communication and remote working: A study of communication channel satisfaction, personality, and job satisfaction for remote working employees. International Journal of Business Communication, 55(1), 44-68.

Taboroši, S., Popović, J., Poštin, J., Konjikušić, M., & Nikolić, M. (2022). Job satisfaction in the conventionally employed and remote workers: the impact of gender, age and education. Anali Ekonomskog fakulteta u Subotici, (48), 65-82.