



STUDYING EFFECTIVENESS OF USING ONLINE SERVICES AND APPS IN AVOIDING HOME–WORK AND WORK–HOME CONFLICT

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ABSTRACT

Objective: Using online services and apps has become recently common among individuals. It assists individuals in obtaining their home needs in fast and easy way. This study was conducted to identify the role of using online services and apps in avoiding work–home and home–work conflict among employees. **Method:** The participants included 200 male and female employees working full-time in various American organizations. Data were collected by a survey measuring the perspectives of participants from various angles. The data were analyzed statistically by SPSS using a t-test, the Pearson correlation coefficient, and an analysis of variance. **Results:** The results show that using online services and apps assists in avoiding home–work conflict (the interference of home duties with work duties). However, participants believe that even though using online services and apps reduces pressure regarding their family responsibilities, work duties may still interfere with home duties (work–home conflict). The results also revealed differences in perspective based on gender toward the effectiveness of online services and apps. Furthermore, perspectives varied among participants working in industry, commerce, and services due to the variety of their work. Age and organization type (public and private) were not found to be influential factors on participants' perspectives. **Conclusion:** This study provides a significant contribution to the existing management literature and offers suggestions for employers such as conducting awareness lectures about significance of using online services and apps in avoiding home–work conflict among employees. Future studies are recommended to identify employees' perspectives from different societies.

Keywords: Work–home conflict, Home–work conflict, Human resources, Organization, Online services and apps

JEL codes: M100, M190, M120

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INTRODUCTION

Organizations worldwide dream of stability and comfort for their employees, as these reflect positively on employee performance, which in turn enhances work productivity. However, employees may encounter pressures related to home responsibilities that affect their work performance. Over time, the responsibilities of employees toward their families increases. The size of families increases, and the demands of family members become significant and diverse. In addition, workload itself may increase due to the expansion of work and increasing demand among the public, increasing the burden on employees. As a result, employees may face difficulties in coordination between work and home responsibilities over time (Fortagne et al., 2024). This affects the performance of organizations both in the short and long term. For this reason, many studies has been conducted to understand the phenomenon and discover solutions.



At the same time, the world has witnessed unprecedented development in field of technology, giving organizations the opportunity to promote their business easily and reach a wide spectrum of society. This in turn assists businesses in obtaining greater profit and bringing comfort to consumers. Furthermore, it helps save time for consumers themselves, who can obtain the services they need online. Jain et al. (2021) explain that saving time is one of the advantages of using e-commerce. This raises the question about the role of online services and apps provided by business organizations in avoiding conflict between work and home duties among employees.

Many needs in a family can be met by using online services and apps: shopping, utilities, booking hospital appointments, virtual consultation with physicians, banking services, online tutoring, ordering food, buying groceries, and so on. Jain et al. (2021) suggest that the use of e-commerce is becoming increasingly common in the business sector. The present study investigates whether employees using online services and apps provided by business organizations are able to avoid home–work and work–home conflict. It measures the perspectives of employees from various angles, while taking into consideration demographic variables.

LITERATURE REVIEW

Human resources are considered a cornerstone of all organizations regardless of the field: public, business, or non-profit. Acar (2024) emphasizes the importance of human resources in the success of business organizations. The human factor is the first and last responsibility in terms of planning, work execution, and organization development. While technology is adopted in organizations and assists in enhancing their performance, it is also a tool used by humans for performing and accomplishing work. Technology itself is insufficient and requires skilled and qualified employees to use it. For this reason, organizations pay attention to employees. Almost every organization has an independent human resources department whose main duties revolve around employees. Human resources departments are responsible for enacting strategies related to recruiting and developing employees in line with strategic organizational goals. Bratu (2024) explains that human resource management has recently extended to include the devolvement of work performance.

Caring for employees assists in maintaining good performance within organizations. As long as employees feel comfortable, their productivity and performance increase. Janevski et al. (2025) found that the level of satisfaction and motivation among employees is correlated with practices of development conducted by human resource management. Sokolovic et. al (2026) explain that organizational support assists in improving employee performance. This even increases creativity and innovation in the workplace. Suryantini et al. (2026) found that human resource departments as well as innovation in technology play a role in enforcing creativity among employees in the workplace. Care for employees is given in various ways including providing a positive organizational environment. Employees spend many hours at work and thus seek a supportive and suitable environment. Many theories clarify the relationship between human resource practices and the performance of employees. Herzberg's two-factor theory is one of the most important of these, proposing that increased work performance can be achieved through removing dissatisfiers and providing incentives to employees (Tulsian



& Pandey, 2008). In fact, it is important to provide a positive work environment even before providing employees with incentives. This reflects positively on employee performance and eventually enforces their loyalties to their employers, preventing turnover.

However, employees are not fully dedicated to work and also have responsibilities toward their families. They are obligated toward their families in various aspects of life: education, medical care, entertainment, and so on. Abdou et al. (2022) mention that employees always have family responsibilities beyond their obligation toward work. Furthermore, they have natural roles as fathers and mothers. Some jobs do not cause pressure for employees to the extent of creating work–home conflicts, while others may do so. This depends on the nature of the jobs, including the workload and work hours enacted by employers. Human resource departments in organizations are strongly encouraged to assist employees in coordinating between their roles in family and work to avoid exposing them to pressures and stresses affecting their family duties and work. The next sections further discuss interferences between work and home duties and their consequences.

Work–Home and Home–Work Conflict

In the work world, employees have certain responsibilities toward their employers. Jobs are based on contracts signed by employees and employers, where the responsibilities and obligations of each party are determined and written. Employees are required to perform tasks assigned to them at a specific time to avoid disruptions of work. On the other hand, employers are obligated to fulfill their commitment toward their employees such as payments, compensation, insurance, and so on. The process is mutual and there is no issue in that regard. However, employees also have family responsibilities toward their spouses, children, and parents, as mentioned by Abdou et al. (2022). Employees' energies and efforts are thus divided between their work and family responsibilities on a daily basis. However, doing work at the expense of home responsibilities and vice versa can create a conflict of roles among employees. According to Cataldo et al. (2025) and Nativ (2022), conflict between work and home consists of an interference of duties related to the two. Fortagne et al. (2024) and Boone et al. (2026) explain that conflict between work and home emerges from divergent demands. Wang and Yao (2025) and Dhamayantie (2017) outline that work and home conflict result from the different roles played by employees in these two spaces.

On some occasions, home responsibilities may take employees' attention away from focusing on their work. For example, employees might not be able to come to work continuously or perform their work in accordance with quality standards set by their employers. Where home is the source of conflict, this is referred to as home–work conflict (Nativ, 2022). On other occasions, employees find themselves coerced to finish their work at home or even to stay long hours after work to finish their tasks. This is referred to as work–home conflict (where work is the source of conflict) (Nativ, 2022). Bernstrøm et al. (2025) clarify that it has become popular for employees to spend many hours working beyond regular work hours. This is due to huge demands on products and services resulting from growing populations worldwide. Whether conflicts occur from work or home, they create stresses and pressures that influence the productivity of employees.



Conflict between work and home is not limited to traditional jobs where employees have to come in person to the workplace. It may also occur for employees practicing online work (remote work). Mahomed et al. (2023) explain that employees working remotely are exposed more often to work–home conflict. This is attributed to employees' continual presence at home. In traditional work, employees are at work for many hours, away from home duties. However, in remote work, employees are present all the time at home, meaning their family responsibilities may interfere with their work and vice versa. Nadiv (2022) also explains that the literature confirms remote work may expose employees to work–home conflict, in contrast to popular views. He adds that pressures and even stresses are more present in remote work, as indicated by work during the COVID-19 pandemic.

According to Greenhaus and Beutell (1985), work–home and home–work conflict emerge due to three causes: time, strain, and behavior (as cited in Nadiv, 2022). Doing work at the expense of family responsibilities and vice versa creates dissatisfaction, either at home or work. Žiedelis et al. (2023) explain that time is a key issue in family–work conflict. In addition, when employees feel exhausted due to efforts expended at work, they are not active enough to perform family responsibilities and vice versa. This makes sense, as employees have limited energy. As for behavior, this conflict indicates variance between employees' roles at work and at home.

Consequences of Work–Home and Home–Work Conflict

The conflict between work and home has consequences affecting employee performance. Apostol et al. (2025) explain that both work–family and family–work conflict could generate feelings of guilt among employees. Employees feel guilty in case of the negligence of work duties due to family responsibilities and vice versa. Apostol et al. (2025) also explain that feelings of guilt among employees caused by work–family conflict affect life satisfaction for employees. Additionally, Dhamayantie (2017) explains that job satisfaction among employees is influenced by work–family conflict. In other words, employees encountering work–family conflict will have little satisfaction in their jobs compared to their counterparts who have no work–home conflict.

In addition, home–work conflict influences the performance of employees (Dhamayantie, 2017). The reason for this is that employees lose their focus on work, paying attention more to their family demands. Soyaine et al. (2026) found in their study that employee performance decreased with the increase of family–work conflict in jobs where employees worked remotely. Dahlan (2025) found in their study that work–family as well as family–work conflict affected employees' ability to achieve balance in their lives. Employees have responsibilities toward their work and their families and are required to distribute their time to fulfill these duties equally. Uslukaya et al. (2025) found in their study that teachers' well-being was influenced by both types of the conflict between work and home (work–home conflict and home–work conflict). Azzam et al. (2026) discovered, in a study conducted in Egypt on private universities, that the interference of work duties and home responsibilities increased intentions among faculty members and administrators to quit their jobs.



Mahomed et al. (2023) explain that employee' well-being is affected by intentions to quit due to work–home conflict. Costa et al. (2023) explain that creativity could also be affected by work–home conflict.

Conflict between work and home affects all employees regardless of their gender. However, women may face these types of conflict more than men. Nayak (2025) explain that women are subject to conflict between work and home more than men when work is done online. Women have responsibilities toward children in the home more than men. They are responsible for family needs on a daily basis, especially of children, including cooking, cleaning, and so on. Lai (1995) explains that household responsibilities assigned to women are greater than those assigned to men, meaning female employees face more work–home and home–work conflict. Lui and Chang (2020) found in their study that female employees who had children encountered more work–family conflict when requested to work during the weekend compared with their male colleagues. This can be attributed to the greater responsibilities assigned to mothers. Lui and Chang (2020) suggest that government and business organizations need to take gender into consideration when enacting work policies.

Research Problem

The literature exhibits the significance of human resources in the success of the organization. It shows that the care of employees by their employers reflects positively on their satisfaction and motivation. Many organizations put in good efforts on this matter. The literature also shows that there are many cases where employees face stressful situations that affect their work performance as well as their ability to fulfill their duties at home. Many studies have revealed that employees encounter conflict between work and home in both its dimensions (work–home conflict and home–work conflict). There is a near consensus that employees who encounter these types of conflict suffer pressure and stress. Boon et al. (2026) and Dhamayantie (2017) demonstrate that there may be interference between work duties and family responsibilities, a matter that creates conflict.

These conflicts have various negative consequences on employees. Gao and Jin (2015) mention that employee satisfaction is affected by conflicts between home and work responsibilities. Soyalm et al. (2026) also explain that the performance of employees decreases with the increase of conflict between home and work obligations. In addition, the interference of duties between home and work may increase employees' intentions to quit. Azzam et al. (2026) found in their study that there was an intention to quit jobs among faculty members and administrative staff due to both work–family and family–work conflict. In addition, women are more often subjected to these types of conflict because they usually hold more home responsibilities than men, as discussed earlier.

However, the world has been witnessing a technological revolution for some time. Thus, there is a need to identify the role of online services and apps provided by organizations in avoiding home–work and work–home conflict. There is a lack of studies touching on this topic despite its significance for organizations. It is important to understand the issue of home–work conflict in the shadow of the e-commerce revolution and identify whether this issue still ongoing among employees, and then to provide suitable suggestions. Since the development of the Internet, electronic commerce has spread through all the parts of the world, with sellers



and buyers dealing with each other electronically instead of in person. Jain et al. (2021) explain that the recent spread of e-commerce has had a notable influence in the economy. Many people have been able to meet their needs from home.

Furthermore, many businesses have virtual locations instead of physical buildings. Service companies in telecommunications and utilities, for example, offer electronic services through websites where benefiterers apply for their services without need to come in person. Jain et al. (2021) explain that shopping via the Internet assists in saving customers' time. Furthermore, with the existence of smartphones, customers can download apps related to companies, banks, airlines, service providers, and so on. These apps allow them to obtain all the services they need with less effort and time. Mohammed et al. (2025) explain that mobile apps for shopping are used widely around the globe. They also explain that there are various categories for mobile apps such as utilities, business, games, and entertainment. Chen (2018) explains that mobile shopping apps provide flexibility for consumers, who can shop anytime from any store they prefer. In addition, in the health sector, it has been seen that many private hospitals offer patient consultation with doctors without the need to go to clinics. Furthermore, people can order medical visits for elders without the need to go to hospitals. Some hospitals may offer appointments through their websites/apps. Even pharmacy goods can be ordered from home without the need to go in person. Zacharia et al. (2024) explain that using electronic services has become popular in the health sector, where online medical consultations and appointment booking are available. Even at the level of food, many of restaurants and groceries have released apps for delivering to customers. At the level of transportation, by using apps, younger family members are able to order a car for delivery without asking employed parents to give them rides.

This study focuses on identifying the role of online services and apps provided for customers by business organizations in avoiding home–work and work–home conflict. Gender is also considered as an influential factor, as the responsibilities of females to their families is huge compared to that of males (Alesina et al., 2007). As explained earlier by Nayak (2025) and Lui and Chang (2020), women may face interference in their duties more often than men due to the many responsibilities assigned to them at home. Therefore, it is expected that females and males will have different perspectives regarding the effectiveness of using online services and apps to avoid conflict between work and home duties.

This study assists organizations in understanding this phenomenon. Human resource departments in organizations are concerned with the human element so as to draw and enact strategies and plans related to work hours, workload, and employee satisfaction. Furthermore, this study focuses on the influence of other demographic variables on the relationship between using online services and apps and interference between work and home duties. Based on the above discussion, it can be hypothesized that:

- H1: Employees using online services and apps provided by business organizations are able to avoid home–work conflict.
- H2: Employees using online services and apps provided by business organizations are able to avoid work–home conflict.



- H3: There are differences between the perspectives of males and females toward the effectiveness of using services and apps provided by business organizations in avoiding home–work and work–home conflict.

METHODS

Participants

The study participants included full-time employees in the United States. The number of participants was 200, with each sharing their perspective on using online services and apps provided by business organizations. The participants confirmed at the beginning of the survey that they were using online services and apps as a condition to continue answering the survey. The survey was distributed to participants using the Pollfish online survey platform, which is common in this field of research (e.g., Grover et al., 2026; Nikolopoulos and Likothanassis, 2025). The participants worked in various private and public sectors in the United States. 47% of participants were male, while 53% were female. The participants worked in the following sectors: 11.5% in commerce, 37% in industry, and 51.5% in service (such as hospitals, telecommunications, banks, and education). The ages of the participants were diverse, ranging from 24 to 65 years.

Survey Instrument

The data were collected via a survey comprising 16 questions. Demographic questions identified information related to the participants: age, gender, type of organization, and field of work. The second section focused on the role of using electronic services and apps in avoiding home–work conflict (the influence of home duties on work duties) by measuring the perspectives of participants from various angles: absence from work, focusing on work, coming active to work, satisfaction toward work, the need for vacation for family purposes, and interference of daily family requirements with work hours. The third part focused on the role of using electronic services and apps in avoiding work–home conflict (the influence of work duties on home duties) by identifying perspectives of participants from different angles: the influence of working extra hours on home duties, the influence of performing work duties at home on home duties, the influence of working during the weekend on home duties, coming home exhausted from work, deferring vacations without influencing home duties, and flexibility of traveling for work purposes.

Table 1. Validity Measurement by the Pearson Correlation Coefficient

Item No.	Correlation Coefficient	Item No.	Correlation Coefficient
Q5	0.715**	Q11	0.823**
Q6	0.746**	Q12	0.649**
Q7	0.756**	Q13	0.820**
Q8	0.758**	Q14	0.752**
Q9	0.662**	Q15	0.745**
Q10	0.665**	Q16	0.799**

Note: **Correlation is significant at the 0.01 level (2-tailed).

All the answers were measured using a five-point Likert scale. The pilot test shows that the survey is valid, the values of Pearson's correlations are significant at the 0.01 level ranging from 0.662 to 0.823 (Table 1). Healy



(2009) confirms that correlation is acceptable as long as the value is above 0.3 As for reliability, the Cronbach's alpha values for the dimension were all high, at 0.8 and above (Table 2).

Table 2. Reliability Measurement

Dimensions	No. of Items	Cronbach's value
Home-work Dimension	6	0.80*
Work-home Dimension	6	0.86*
Overall Instrument Reliability	12	0.90*

Note: *The values of Cronbach's are above 0.7.

RESULTS AND DISCUSSION

The results (Table 3) show that the first hypothesis is accepted (home–work conflict can be avoided by using online services and apps). The overall mean of all the statements measuring perspectives of participants is 3.58 (Agreement- Accepting a hypothesis). The participants believed that they could perform their home responsibilities as required without missing their work (Q5). They stated that they did not think about their home duties during work because they could fulfill them easily using online services and apps outside of work (Q6). The participants agreed that performing their home duties using online services and apps saved them effort and time to the extent that they could arrive at work active (Q7). In addition, the participants were satisfied regarding the coordination between their home and work duties when using online services and apps (Q8). Finally, the participants were in moderate agreement that they needed to interrupt their work by applying for vacation to conduct their family responsibilities (Q9) and did not receive inquiries from their family regarding their daily requirements and needs during work hours (Q10). To conclude, the participants generally believed they could fulfill most of their home responsibilities easily using online services and apps, which assisted in avoiding interference with their work duties.

Table 3. Hypothesis 1 Test (Home–Work Conflict)

No.	Statements		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean*	Standard Deviation	Item Rank
1	Q5	N	45	67	44	26	18	3.48	1.23	4
		%	22.5	33.5	22.0	13.0	9.0			
2	Q6	N	46	89	45	14	6	3.78	0.98	2
		%	23.0	44.5	22.5	7.0	3.0			
3	Q7	N	51	93	40	13	3	3.88	0.92	1
		%	25.5	46.5	20.0	6.5	1.5			
4	Q8	N	43	85	51	19	2	3.74	0.94	3
		%	21.5	42.5	25.5	9.5	1.0			
5	Q9	N	29	61	50	50	10	3.25	1.13	6
		%	14.5	30.5	25.0	25.0	5.0			
6	Q10	N	25	71	59	40	5	3.36	1.02	5
		%	12.5	35.5	29.5	20.0	2.5			
Overall Mean Score of the Dimension								3.58 out of 5		

Note: * Interpretations of mean values in Likert scale: From 1.00 to 2.60 (Disagreement - Rejecting a hypothesis), From 2.61 to 3.40 (Neutral- Rejecting a hypothesis) From 3.41 to 5.0 (Agreement- Accepting a hypothesis)

**Table 4.** Hypothesis 2 Test (Work–Home conflict)

No.	Statement		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean*	Standard Deviation	Item Rank
1	Q11	N	33	84	36	35	12	3.46	1.14	2
		%	16.5	42.0	18.0	17.5	6.0			
2	Q12	N	37	96	25	31	11	3.59	1.12	1
		%	18.5	48.0	12.5	15.5	5.5			
3	Q13	N	33	70	37	42	18	3.29	1.23	5
		%	16.5	35.0	18.5	21.0	9.0			
4	Q14	N	25	78	41	41	15	3.29	1.15	4
		%	12.5	39.0	20.5	20.5	7.5			
5	Q15	N	16	53	52	51	28	2.89	1.18	6
		%	8.0	26.5	26.0	25.5	14.0			
6	Q16	N	25	79	47	32	17	3.32	1.14	3
		%	12.5	39.5	23.5	16.0	8.5			
Overall Mean Score of the Dimension								3.31		

Note: * Interpretations of mean values in Likert scale: From 1.00 to 2.60 (Disagreement - Rejecting a hypothesis), From 2.61 to 3.40 (Neutral- Rejecting a hypothesis) From 3.41 to 5.0 (Agreement- Accepting a hypothesis)

The results in Table 4 show that the participants had a neutral attitude toward the effectiveness of using online services and apps in avoiding work–home conflict. The overall mean of all the statements measuring perspectives of participants is 3.31 (Neutral attitude- Rejecting a hypothesis). Thus, the second hypothesis was rejected. While the participants agreed that they could work extra hours without causing interference with their home duties (Q 11), they also stated that they could do some of their work at home when needed, without causing interference with their home duties (Q12). However, the participants showed a neutral attitude toward an absence of work and home duty interference when working during the weekend upon the request of their employers (Q13). Furthermore, the participants had a neutral attitude when asked about whether they came home strained from work (Q14). They also showed a neutral attitude towards the statement that they could postpone their vacations for a while without influencing their home duties (Q15). Finally, the participants had a neutral attitude regarding their ability to travel due to their work requirements without affecting their home duties (Q16). To conclude, the participants had a neutral attitude toward the effectiveness of using online services and apps in avoiding the interference of work duties with home duties. To put it another way, the use of online services and apps did not make employees fully dedicated to their work. Work duties could still interfere with home duties.

Referring back to the literature, conflicts between work and home occur frequently due to interference of work and home responsibilities. Fortagne et al. (2024) explain that the conflict between work and home occurs due to differences in their demands. Conflict takes one of two forms: home–work or work–home conflict (Nadiv, 2022). In other words, home duties can interfere with work duties, or vice versa. This is natural due to the different roles employees play at work and at home. Lanchimba et al. (2026) explain that role conflict occurs when the requirements of home and work conflict with each other.

However, with the spreading of use of electronic commerce broadly by business organizations, it has become possible for consumers to obtain their personal and family needs easily. Chen (2018) explains that consumers enjoy flexibility in shopping when using mobile shopping apps. Gomes and Lopes (2022) explain



that consumers can save time by shopping online. Jain et al. (2021) explain that using online services saves significant time. This study demonstrates that conflict between home and work can be reduced by the use of technology (Hypothesis 1-accepted). This is line with what the researches in the literature which explain that online services and Apps play significant role in saving time of employees and assisting them in obtaining their home needs easily. Using online services and apps provided by business organizations assists employees in managing their home duties in a way that does not affect their work duties. The prevention of home–work conflict enhances the level of satisfaction among employees toward their employers, and vice versa. In addition, it enforces their desire to remain in their current jobs, reducing turnover intention. According to a study conducted by Azzame et al. (2026), turnover intention is correlated with both home–work and work–home conflict.

However, using online services and apps provided by business organizations does not necessarily assist in avoiding work–home conflicts (Hypothesis 2-rejected). Chen (2018) and Gomes and Lopes (2022) clarify how useful using online services an Apps assists in reducing pressure on individuals. However, the participants believed that performing work duties could cause work–home conflict even given the use of online services and apps. They considered that they could do some but not all work at home and stay a number of hours at work without causing interference with their home duties. However, they also believed online services and apps had limited effectiveness in terms of avoiding work–home conflict. For example, they considered working during the weekend or travelling for work purposes to still interfere with their home duties. They also believed that postponing vacations influenced their responsibilities toward their families. The participants further considered that being strained due to workload might prevent them from doing their home duties, even when using online services and apps. To conclude, even though online services and apps are available and easy to use, the participants believed that they would need sufficient time and peace of mind to perform home duties without the interference of work duties. In addition, some home duties still require huge effort, such as caring for old-age parents or children. Thus, traveling for work and working during the weekend could prevent the participants from fulfilling these family duties.

Table 5a. Independent-Samples T-Test by Gender Regarding Home–Work Conflict

Dimension		N	Mean	Std. Deviation	t	Sig.
Home–Work Conflict	Male	94	3.7039	0.71765	2.286	0.023*
	Female	106	3.4670	0.74373		

Note: *The difference between mean scores for males and females is significant as sig. value is 0.023 (below alpha value 0.05). The difference is in the favor of males.

Table 5b. Independent Samples T-Test by Gender Regarding Work–Home Conflict

Dimension		N	Mean	Std. Deviation	t	Sig.
Work–Home Conflict	Male	94	3.4504	0.79192	2.252	0.025*
	Female	106	3.1730	0.94922		

Note: *The difference between mean scores for males and females is significant as sig. value is 0.025 (below alpha value 0.05). The difference is in the favor of males.



Tables 5a and 5b show that the male participants believed that using online services and apps assisted in avoiding home–work and work–home conflict more than the female participants. Therefore, the third hypothesis was accepted. The males considered using online services and apps more effective due to their low family responsibilities compared with females. The males also felt less pressure regarding performing duties toward their families in contrast to females, meaning they benefitted more from using online services to avoid the interference of work and home duties. This is line with the studies in the literature demonstrating the differences in home duties and subjectivity to work-home and home-work conflict between males and females. Back to the literature, Nayak (2025) and Lai (1995) clarify in the literature that women may encounter home–work and work–home conflict more than men due to the many household responsibilities assigned to them. Females are assigned many significant responsibilities at home compared with males (Alesina et al., 2007). The overload of family responsibilities assigned to females makes them unable to avoid interference between home and work duties as easily as males do despite of using online services and Apps.

4.1 Demographic Variables

Table 6a. Independent-Samples T-Test by Organization Type

Dimension		N	Mean	Std. Deviation	t	Sig.
Home–Work conflict	Public	105	3.5635	0.74585	–0.298	0.766
	Private	95	3.5947	0.73564		

Note: *The difference between mean scores for participants working in public and private sectors is NOT significant as sig. value is 0.766 (above alpha value 0.05).

Table 6b. Independent-Samples T-Test by Organization Type

Dimension		N	Mean	Std. Deviation	t	Sig.
Work–Home conflict	Public	105	3.2905	0.89037	–0.215	0.830
	Private	95	3.3175	0.88895		

Note: *The difference between mean scores for participants working in public and private sectors is NOT significant as sig. value is 0.830 (above alpha value 0.05).

Tables 6a and 6b show that participants working in the public and private sector had no significant differences regarding agreement toward the role of using online services and apps in avoiding home–work and work–home conflict. Public and private sectors differ in terms of work policies and systems. Thus, many perceive that workers in these sectors may be subjected to different levels of work – home and home-work conflict. A matter that makes them believing that the level of effectiveness of using online services and Apps vary among employees in the private and public sectors in accordance with the size of encountered conflicts. However, this study proves that there are not differences in perspectives of employees working in these two sectors. This shows that the effectiveness of using online services and Apps is viewed similarly in the private and public sectors.

Table 7 shows that the correlation between age and perspective on avoiding home–work conflict and work–home conflict by using online services and apps was weak, below 0.3. According to Healey (2009), the correlation between independent and dependent variables is considered weak when values are 0.3 and below.



It is a common understanding that individuals' perspectives about different things in their lives vary while getting older. This is natural.

Table 7. Correlation Between Age and Perspective on Avoiding Home–Work Conflict and Work–Home Conflict by Using Online Services and Apps

Category		Age
Home–Work Conflict	Pearson Correlation	–0.136*
	Sig. (2-tailed)	0.055
	N	200
Work–Home Conflict	Pearson Correlation	–0.273*
	Sig. (2-tailed)	0.000
	N	200

*The correlation values (–0.136 are & –0.273) are low and NOT significant as they are below 0.30

However, this is not necessarily existent in all situations. The matter depends on experience and circumstances through which individuals went through. This study revealed that participants have no significant differences in their perspectives based on their ages regarding effectiveness of using online services and Apps in avoiding conflict between work and home duties.

Table 8a. Comparison of Participants' Perspectives Toward the Effectiveness of Using Online Services and Apps in Avoiding Home–Work Conflict among Participants Working in Industry, Commerce, and Services

Analysis of Variance						
		Sum of Squares	df	Mean Square	F	Sig.
Home–Work Conflict	Between Groups	3.485	2	1.743	3.261	0.040
	Within Groups	105.288	197	0.534		
	Total	108.773	199			

Table 8b. Continued Comparison of Participants' Perspectives Toward the Effectiveness of Using Online Services and Apps in Avoiding Home–Work Conflict among Participants Working in Industry, Commerce, and Services

Multiple Comparisons

Dependent Variable	(I) Type_2	(J) Type_2	Mean Difference (I–J)	Std. Error	Sig.
Home–Work Conflict	Industry	Services	0.23611*	0.11141	0.035*

Note: *The difference is significant as sig. value is 0.035 below alpha value (0.05). The difference is in the favor of industry sector.

The results exhibited in Tables 8a and 8b show there was a difference in the perspectives on the effectiveness of using online services and apps in avoiding home–work conflict between participants working in the industry and services fields. Participants working in industry had a more positive attitude than their counterparts working in services. This can be attributed to differences in the nature of workload in organizations working in these fields. This certainly created variety in the participants' perspectives.



Table 9a. Comparison of Participants' Perspectives Toward the Effectiveness of Using Online Services and Apps in Avoiding Work–Home Conflict among Participants Working in Industry, Commerce, and Services

Analysis of Variance						
		Sum of Squares	df	Mean Square	F	Sig.
Work–Home Conflict	Between Groups	6.084	2	3.042	3.977	0.020
	Within Groups	150.680	197	0.765		
	Total	156.764	199			

Table 9b. Continuation of the Comparison of Participants' Perspectives Toward the Effectiveness of Using Online Services and Apps in Avoiding Work–Home Conflict among Participants

Multiple Comparisons

Dependent Variable	(I) Type_2	(J) Type_2	Mean Difference (I–J)	Std. Error	Sig.
Work–Home Conflict	Industry	Services	0.30454*	0.13327	0.023
	Commerce	Services	0.44780*	0.20170	0.028

Note: *The difference is significant as sig. values are 0.023 and 0.028 below alpha value (0.05). The difference is in the favor of industry and commerce sectors.

As shown in Tables 9a and 9b, participants working in industry and commerce had a different perspective than their counterparts working in services. Employees working in industry and commerce believed that using online services and apps assisted in avoiding work–home conflict more than employees working in the services field. Again, the nature of work and work systems varies among organizations according to their fields.

Studies in the literature show that work-home and home-work conflict are common issues among employees such as Soyaine et al. (2026) Dahlan (2025). However, this issue could be viewed differently regarding causes and even solutions among employees working in different sectors. The findings in this study revealed that the effectiveness role of using online services and Apps varies with the type of sector (industry, commerce, and service).

CONCLUSION

The purpose of this research was to identify the role of using online services and apps provided for consumers by business organizations in avoiding home–work and work–home conflict. It is important for organizations to identify the factors affecting employee performance and take the actions required to mitigate them. The findings show that using online services and apps assists employees in avoiding home–work conflict. However, they provide no evidence that online services and apps play a significant role in avoiding work–home conflict. In addition, the male and female participants had different experiences. Furthermore, the perspectives varied among the participants working in industry, commerce, and services due to the variety of work in these fields.

This study revealed the role of technology in avoiding home–work conflict through the use of online services and apps. This is an essential contribution to the management field, especially human resources management, which is concerned mainly with employee issues. It also provides a significant contribution to the existing literature. The findings of this study to a large extent dispel concerns of human resource managers regarding the effects of employees' responsibilities toward their families on their work performance.



Additionally, human resources managers need to enforce awareness of the significant benefits of using online services and apps among employees and encourage them to use them by conducting awareness lectures. On the other hand, the findings enforce the need to make sure that work duties do not interfere with employees' home responsibilities, as participants show concerns in that regard. Workload and work hours systems in organizations need to be reviewed and modified. Doing so highlights the importance of retaining employees and reducing their dissatisfaction.

However, this study focuses on American society, with the participants being full-time employees working in the private and public sectors. Therefore, the results may not be applicable to employees in other countries. As is well known, work systems such as workload and work hours differ across countries. Therefore, the effectiveness of using online services and apps in avoiding interference between work and home responsibilities may vary among employees from different countries. This necessitates conducting additional research among employees in different countries to understand the topic from various geographical perspectives.

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References

- Abdou, A. H., Khalil, A. A., Mahmoud, H. M., Elsaied, M. A., & Elsaed, A. A. (2022). The impact of hospitality work environment on employees' turnover intentions during the COVID-19 pandemic: The mediating role of work–family conflict. *Frontiers in Psychology, 13*, 890418. <https://doi.org/10.3389/fpsyg.2022.890418>
- Acar, Ö. E. (2024). The importance of human resources planning in strategies. *R&S: Research Studies Anatolia Journal, 7*(4), 490–518. <https://doi.org/10.33723/rs.1557606>
- Alesina, A., Ichino, A., & Karabarbounis, L. (2007). *Gender-based taxation and the division of family chores* (Working Paper No. 13638). National Bureau of Economic Research. <https://doi.org/10.3386/w13638>



- Apostol, M.-M., Iorga, M., & Rotariu, M. (2025). Guilt in the context of work–family conflict, partner support, and life satisfaction among health professionals. *Healthcare*, 13(17), 2145. <https://doi.org/10.3390/healthcare13172145>
- Azzam, H., Shaaban, S., & Badawy, S. (2026). The relationship between work–family conflict and quiet quitting in Egypt academia. *Arab Journal of Administration*, 46(1), 355–372
- Bernstrøm, V. H., Ingelsrud, M., & Nilsen, W. (2025). The consequences of after-hours work: A fixed-effects study of burnout, pain, detachment and work–home conflict among Norwegian workers. *Scandinavian Journal of Work, Environment & Health*, 51(1), 38–47. <https://doi.org/10.5271/sjweh.4198>
- Boone, A., Steel, J., Lavreysen, O., Lambrechts, M.-C., Vandenbroeck, S., Braeckman, L., ... Godderis, L. (2026). Burnout and engagement within medical education: A repeated measures study on their evolution and main determinants. *Perspectives on Medical Education*, 15(1), 134–149. <https://doi.org/10.5334/pme.2013>
- Bratu, A.-M. (2024). Employees' perceptions on management policies and practices regarding human resources for economic efficiency in crisis period. *International Journal of Research in Business and Social Science*, 13(2), 115–126. <https://doi.org/10.20525/ijrbs.v13i2.3231>
- Cataldo, A., Bravo-Adasme, N., Riquelme, J., Vásquez, A., Rojas, S., & Arias-Oliva, M. (2025). Multidimensional poverty as a determinant of techno-distress in online education: Evidence from the post-pandemic era. *International Journal of Environmental Research and Public Health*, 22, 986. <https://doi.org/10.3390/ijerph22070986>
- Chen, H.-J. (2018). What drives consumers' mobile shopping? 4Ps or shopping preferences? *Asia Pacific Journal of Marketing and Logistics*, 30(4), 797–815. <https://doi.org/10.1108/APJML-08-2017-0167>
- Costa, G. G., Bortoluzzi, G., & Černe, M. (2023). Can innovative work behaviour spur creativity while working remotely? The role of work–home conflict and social isolation. *Management Research Review*, 46(8), 1132–1148. <https://doi.org/10.1108/MRR-03-2022-0204>
- Dahlan, D. A. (2025). The social costs of leadership: Analyzing the impact of distributed leadership on women's work–life balance: Mediating role of work–family and family–work conflict. *International Journal of Innovative Research & Scientific Studies*, 8(2), 2880–2889
- Dhamayantie, E. (2017). Contribution of work and family demands on job satisfaction through work–family conflict. *Journal of Management and Marketing Review*, 2(3), 49–54. [https://doi.org/10.35609/jmmr.2017.2.3\(7\)](https://doi.org/10.35609/jmmr.2017.2.3(7))
- Fortagne, M. A., Stichnoth, K.-J., & Lis, B. (2024). Technology-induced strain from team communication platforms: Empirical evidence for working from home. *Management Revue*, 35(3), 300–327. <https://doi.org/10.5771/0935-9915-2024-3-300>
- Gao, L., & Jin, W. (2015). Work–family conflict mediates the association between job demands and life and job satisfaction in Chinese middle-level managers. *Current Psychology*, 34(2), 311–320. <https://doi.org/10.1007/s12144-014-9259-9>
- Gomes, S., & Lopes, J. M. (2022). Evolution of the online grocery shopping experience during the COVID-19 pandemic: Empiric study from Portugal. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(3), 909–923. <https://doi.org/10.3390/jtaer17030047>
- Grover, H., Kushwaha, N., Pallathucheril, V., & Shirin, N. (2026). The trust–preparedness paradox: Institutional confidence and household flood risk readiness in the United Arab Emirates (UAE). *Sustainability*, 18(12), 6370. <https://doi.org/10.3390/su18126370>
- Healey, J. F. (2009). *Statistics: A tool for social research* (8th ed.). Wadsworth Cengage Learning
- Jain, V., Malviya, B., & Arya, S. (2021). An overview of electronic commerce (e-commerce). *Journal of Contemporary Issues in Business and Government*, 27(3), 665–670
- Janevski, L., Gjorgievski, M., & Nakovski, D. (2025). Ecotourism and its importance for human resources development in the Republic of North Macedonia. *UTMS Journal of Economics*, 16(1), 74–81
- Lai, G. (1995). Work and family roles and psychological well-being in urban China. *Journal of Health and Social Behavior*, 36(1), 11–37
- Lanchimba, C., Llanos-Contreras, O., & Welsh, D. H. (2026). Family and gender dynamics in entrepreneurship. *International Entrepreneurship and Management Journal*, 22(1), 51. <https://doi.org/10.1007/s11365-026-01158-0>
- Liu, L., & Chang, C.-F. (2020). Gendering the job demands–resources model: Work–family conflict in Taiwan. *Families, Relationships and Societies*, 9(3), 431–450. <https://doi.org/10.1332/204674319X15645384271053>



- Mahomed, F., Oba, P., & Sony, M. (2023). Exploring employee well-being during the COVID-19 remote work: Evidence from South Africa. *European Journal of Training and Development*, 47(10), 91–111. <https://doi.org/10.1108/EJTD-06-2022-0061>
- Mohammed, A. B., Abbruzzo, A., Qasim, D., Masa'deh, R., & Almajali, D. (2025). Modelling purchase intent through mobile shopping apps in Jordan with layered Bayesian networks. *Cogent Business & Management*, 12(1), 2567632. <https://doi.org/10.1080/23311975.2025.2567632>
- Nadiv, R. (2022). Home, work or both? The role of paradox mindset in a remote work environment during the COVID-19 pandemic. *International Journal of Manpower*, 43(5), 1182–1203. <https://doi.org/10.1108/IJM-01-2021-0012>
- Nayak, A. (2025). Work-from-home and work–life conflict: An empirical study on Indian working women. *Pacific Business Review International*, 18(2), 168–186
- Nikolopoulos, F., & Likothanassis, S. (2025). Influencing factors of behavioral intention to use cloud technologies in small and medium enterprises. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(4), 264. <https://doi.org/10.3390/jtaer20040264>
- Sokolovic, B., Katic, I., Milosevic, K., Berber, N., & Sidanin, I. (2026). Developing human resource sustainability: The importance of organizational culture, organizational career growth and career competences. *Sustainability*, 18(3), 1192. <https://doi.org/10.3390/su18031192>
- Soyalın, M., Babadağ, M., & Kerse, G. (2026). Family–work conflict, conscientiousness and job performance in working from home: A moderation model. *ESIC Market: Economic and Business Journal*, 57(1), 1–21. <https://doi.org/10.7200/esicm.57.402>
- Suryantini, N. P., Arsawan, I. W., Koval, V., Demirova, S., Azizah, A., & Udovychenko, V. (2026). Boosting employee creativity in SMEs: Double mediation of knowledge management and competitive work environment. *Societies*, 16(1), 33. <https://doi.org/10.3390/soc16010033>
- Tulsian, P. C., & Pandey, V. (2008). *Business organisation and management*. Pearson Education
- Uslukaya, A., Demirtas, Z., Alanoglu, M., & Zincirli, M. (2025). Exploring the moderating roles of family–work conflict in the relationship between work–family conflict and teacher well-being. *Psychology in the Schools*, 62(4), 1271–1282. <https://doi.org/10.1002/pits.23393>
- Wang, Q., & Yao, N. (2025). Understanding the impact of technology usage at work on academics' psychological well-being: A perspective of technostress. *BMC Psychology*, 13, 1–12. <https://doi.org/10.1186/s40359-025-02461-1>
- Zacharia, A., Thomas, A. C., Mathew, P. C., Cleetus, R. S., John, S. E., & Joseph, J. (2024). Exploring the intersection of e-commerce and healthcare: A visual analysis of research trends. *Cureus*, 16(9). <https://doi.org/10.7759/cureus.69865>
- Žiedelis, A., Urbanavičiūtė, I., & Lazauskaitė-Zabielskė, J. (2023). Family boundary permeability, difficulties detaching from work, and work–home conflict: What comes first during the lockdown? *Current Psychology*, 42(28), 24163–24174. <https://doi.org/10.1007/s12144-022-03492-2>

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Appendix. SURVEY

Dear Participant,

This survey measures the role of using online services and apps provided by business organizations in preventing home–work and work–home conflict based on your experience using them. Participation is voluntary, and all the data will be used for research purposes. Names or any other type of identification are not required.

Section 1: Demographic Information

1 - Age

2 – Gender:

A - Male

B - Female

3 - Organization Type:

A - Private

B - Public

4 - Field of Your Organization:

A - Commerce

B - Industrial

C - Services (e.g., banks, hospitals, education, telecommunications, or government agencies)

Section 2: Home–Work Conflict (Answers: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

5 - By using electronic services and apps provided for customers by private organizations, I can do many of my home duties without needing to be absent from work.

6 - By using electronic services and apps provided for customers by private organizations, I do not lose my focus on work thinking about my home duties.

7 - Using electronic services and apps provided for customers by private organizations assists me in coming to work active and doing my work as required.

8 - Using electronic services and apps provided for customers by private organizations enhances my satisfaction regarding the coordination between home duties and work duties to a large extent.

9 - By using electronic services and apps provided for customers by private organizations, I do not need to apply for vacation for devoting time for home matters.

10 - By using electronic services and apps provided for customers by private organizations, I do not receive inquiries from my family during work hours regarding their daily requirements and needs.



Section 3: Work–Home Conflict (Answers: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

11 - By using electronic services and apps provided for customers by private organizations, I can work extra hours without causing interference with my home duties.

12 - By using electronic services and apps provided for customers by private organizations, I can do some of my work at home without causing interference with my home duties.

13 - By using electronic services and apps provided for customers by private organizations, I can work during the weekend upon the request of my employer without causing interference with my home duties.

14 - By using electronic services and apps provided for customers by private organizations, I do not feel tired of doing my home duties after coming from work.

15 - By using electronic services and apps provided for customers by private organizations, I can postpone my vacation for a long time without influencing my home duties.

16 - By using electronic services and apps provided for customers by private organizations, I can travel due to my work requirements without interfering with my home duties.