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Haya Ajjan

Safa'a AbuJarour

Jane Fedorowicz

Dawn Owens

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## Working from Home During the COVID-19 Crisis: A Closer Look at Gender Differences

Completed Research Paper

Haya Ajjan Elon University, USA <u>hajjan@elon.edu</u>

Jane Fedorowicz Bentley University, USA jfedorowicz@bentley.edu **Safa'a AbuJarour** University of Potsdam, Germany <u>safaa.abujarour@uni-potsdam.de</u>

Dawn Owens University of Texas at Dallas, USA <u>dawn.owens@utdallas.edu</u>

## Abstract

The world faces an unprecedented catastrophe in the COVID-19 pandemic. Working From Home (WFH) during COVID-19 diminishes the boundaries between work and home life. WFH can create obstacles for those suddenly forced to accommodate working and living in the same place. The purpose of this study is to investigate home-office conditions by studying employees who were forced to WFH during the COVID-19 crisis. We focus on how gender and family responsibilities shape worker reaction to WFH. Data was collected via an online survey administered at the height of the COVID-19 pandemic. The study examines differences in control over time, technology usefulness, WFH attitude, and WFH conflict based on gender and whether the worker has dependent children living at home, and notes significant interactions between gender and parental status. Our goal is to suggest best practices on how we can prepare for a next-generation (online) homeoffice era in consideration of these personal characteristics.

**Keywords:** Work from Home, Gender Differences, COVID-19, ICT, Work-Life Boundaries, Work-Life Conflict

## Introduction

Information and communication technology (ICT) enables many workers to Work From Home (WFH) during the COVID-19 pandemic. It provides the data and tools needed to accomplish tasks and communicate with other employees or business partners outside their residential work location. Workers now must function in a residence that doubles as an office and engage in a series of Zoom meetings interrupted by home-life demands, all the while monitoring an ever-extending date for returning to a "normal" work situation. This unprecedented global disruption to the work environment provides the setting for the current study.

The purpose of this study is to investigate gender differences and parental responsibilities in work-life trade-offs related to home-office conditions during the COVID-19 crisis. We look at how work and household responsibilities affect working conditions of affected employees, by examining their control over time, WFH attitude, and work-life conflicts. We study whether home-office ICT is equally useful to all workers, regardless of gender or parental status.

Data was collected early-crisis to obtain in situ reactions from a cross-section of workers who are currently working at home. We developed an online survey that combines demographic questions characteristic of a WFH situation with items depicting the work environment (e.g., tasks, space, time, technology). It also measures the respondents' ability to accomplish work expectations and how they handle the division of work and personal life under colocation. The paper's purpose is to document whether workers' ability to WFH differs by gender and parental status to tailor recommendations on how we can prepare for a next-generation (online) home-office era to those who are adversely situated.

The following sections provide the theoretical underpinnings of the study, outline the research methods and data collection process, present analysis of the data, and discuss the results and their implications for supporting more inclusive WFH practices.

## Background

#### Working from Home during COVID-19

Working from home (WFH), also called telecommuting, telework, or teleworking, started as an innovative idea meant to move work to workers instead of moving the workers to work (Nilles et al., 1974). Demand for flexible work practices that help employees perform more effectively in both their private and work lives was appealing to many, even before COVID-19 (Kelly et al., 2020). Notably, digital tools enhance the popularity of this work mode as they "enable [e]workers to choose where, when, and how to perform their daily work activities" (Curzi et al., 2020).

Many businesses required eligible employees to shift their daily business activities to their homes very early in the COVID-19 crisis, as a powerful mechanism to control the spread of COVID-19 (Anderson et al., 2020; Bodewits, 2020). WFH frees workers from the threat of exposure to the virus in the work environment, while giving workers more control over how to manage work and personal responsibilities when both temporarily convene in a single location.

On the other hand, WFH during COVID-19 creates obstacles that workers previously did not have to juggle (Kelly et al., 2020). Choudhury et al. (2020) highlight that managers should consider strategies to mitigate the psychological costs for workers who have made an unanticipated switch to WFH and might have insufficient time to manage the trade-off among their work, social, and family roles. Having children to entertain and educate at home, coupled with "…women's increasing participation in the labor force and tertiary education, have led to new challenges for employees at work and at home" (Kelly et al., 2020, p. 2).

Ng (2010) points out that a positive WFH environment depends on being able to provide similar amenities in a home office to those of conventional offices, such as a home office, job equipment (e.g., ICT), and work behavior (e.g., working hours, communication, work autonomy, control, and access to information). Unfortunately, employees forced to move suddenly to WFH may not be able to replicate the tools and behaviors that best support their work responsibilities and patterns.

Our study examines these aspects of the WFH environment, documenting workers' characteristics, the role of technology in enabling work, and personal challenges and perspectives of workers trying to cope with competing work and home demands. In particular, the confluence of family and work roles has been shown to result in an inability to easily disengage from one role to the other (Ashforth et al., 2000; Desrochers, Hilton, and Larwood, 2005), which is magnified in the current environment of 24/7 collocation. In normal times, the transition between family and work roles requires psychological effort (Ashforth et al., 2000). When role boundaries are obscured, people experience a mood spillover across their family and work lives, causing strain on the individual. A common example during the pandemic finds a parent attending a virtual call while his child is in the same room, where their role boundaries can exhibit blurring and psychological strain.

In the next section, we introduce the model underlying our study and provide background on its component constructs.

## **Conceptual Model**

Our conceptual model (shown in Figure 1) aims to understand the relationship between the personal characteristics of gender and parental status, and how workers respond while WFH during a time of crisis. We include four constructs – *Control over Time, Technology Usefulness, WFH Attitude,* and *WFH Conflict* to help us understand COVID-19's impact on work-life balance.

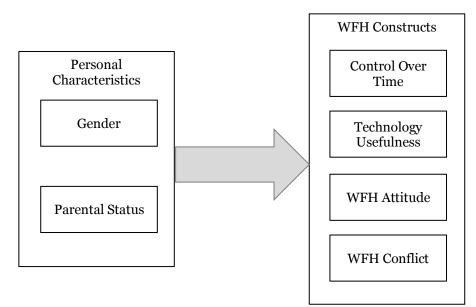


Figure 1. Personal Characteristics Influence on Working from Home

### **Research Questions**

As shown in Figure 1, the model proposes that two demographic factors, gender and parental status (i.e., the presence of dependent children in the home), are expected to have an impact on four aspects of the WFH experience: control over time, technology usefulness, WFH attitude, and WFH conflict. Based on this model, our study aims to answer the following research questions:

- 1. Are there significant differences in the four WFH characteristics based on gender?
- 2. Are there significant differences in the four WFH characteristics based on the presence of children in the home?
- 3. Is there a significant interaction between gender and having children at home relative to the four WFH characteristics?

## **Literature Review**

In this section, we summarize prior research on each of the constructs in the conceptual model, including background on what is known about their interactions.

## Gender and Caregiver Differences

WFH creates unique challenges for parents or caregivers who work remotely because their work role becomes embedded in the family domain, and their home becomes associated with their work role, physically and psychologically (Eddleston and Mulki, 2017). In this context, the new or increased presence of family is particularly harmful to remote work productivity and leads to more family-work conflict (Eddleston and Mulki, 2017).

Gender differences emerge when discussing the ability to manage work and family demands (Eddleston and Mulki, 2017; Kwok, 2016). Gender role theory maintains that an emphasis on work, and specifically time allocated to work, is incongruent with female gender role expectations (Wood and Eagly, 2010). For instance, Rothbard (2001) suggest that females are "integrators" and males are "segmentors."

Research also shows that although WFH does not create more time for recreational labor, it may help women juggle family and work (Powell and Craig, 2015). However, the wealth of research on WFH has been conducted in normal situations, i.e., not during pandemics or forced colocation. Therefore, our work is unique as we investigate the WFH situation in relation to gender differences and family parenting responsibilities due to the pandemic's lockdown.

#### **Control over Time**

Perceived control over time has an impact on performance and problem-solving ability (Half, 1997, cited in Kissi, Nat, and Armah, 2018). It is related to better performance evaluations, greater work and life satisfaction, less role ambiguity, less role overload, and fewer job-induced and somatic tensions (Macan et al., 1990, p. 760). However, there is little empirical evidence about the relationship between perceived control over time and behavioral intention (Kissi, Nat, and Armah, 2018).

The ability to manage time may increase job productivity and performance when trying to balance work and household responsibilities in the same environment. The forced WFH setting creates a shift in the process of work and the way that work is performed for those used to working outside the home. Our study directly examines how a worker's gender or responsibilities for dependent children affect one's perceived control over time in the WFH context.

#### **Technology Usefulness**

ICT is essential to be able to perform typical office work while at home. Not only is ICT available 24/7 because work and home are now the same place, WFH also increases workers' dependency on ICT as it substitutes for in-office interaction. As such, its usefulness becomes more important than in pre-COVID-19 times. Because of its critical role in performing work, accessible ICT tends to disrupt the balance between personal and work lives as it blurs prior work-life boundaries. We aim to understand if there is a noticeable difference in perceived technology usefulness between genders or those with dependent children at home. Differences may be attributable to gender-related work styles or patterns, or to conflicting demands placed on parents or caregivers who may find past ICT arrangements do not transfer well to their current situation.

We adopt measures of technology acceptance (TAM2) to the pandemic setting, to explain perceived usefulness and usage intentions in terms of social influence and cognitive instrumental processes (Venkatesh and Davis, 2000). In particular, we adopt a tested scale on Perceived Usefulness (the degree to which a person believes that using a particular system would enhance his or her job performance), framing it within the employee's ICT usage during the WFH period (Venkatesh and Davis, 2000).

#### WFH Attitude

Having job satisfaction and a positive attitude toward work increases the likelihood of achieving higher levels of productivity (Tenney, Poole, and Diener, 2016). An individual's WFH attitude, or how they view working from home, is dependent on their ability to be productive and complete tasks. The line between work and home life is indistinct while WFH, resulting in boundaries that are often crossed, thus competing for workers' attention in meeting work or personal needs. A negative attitude can create tension between work and home responsibilities and interfere with worker performance. On the other hand, having a positive attitude toward work increases the likelihood of achieving higher levels of productivity (Tenney, Poole, and Diener, 2016).

With this construct, we investigate how people respond when they must simultaneously manage work and household responsibilities in a co-located environment. In particular, we seek to understand if there are differences between genders and for those who have dependent children at home in their WFH attitude. We adapt the WFH Attitude construct from Edwards, Van Laar, Easton, and Kinman (2009).

#### WFH Conflict

WFH conflict may occur because of challenges to work-life balance. Conflicts happen when varied family and work demands cut across each other, resulting in negative consequences (Voydanoff, 2005). Familywork conflict is the degree to which responsibilities from the family and work domains are incompatible (Greenhaus and Beutell, 1985). Studies show that family-work integration increases both family-to-work conflict and work-to-family conflict, and that an inability to disengage from work increases work-to-family conflict (Eddleston and Mulki, 2017).

The family-work-role conflict has been classified into time-based, strain-based, and behavior-based indicating the scarcity of time and energy that a person has (Netemeyer et al., 1996; Greenhaus and Beutell, 1985). Time-based conflict is the time demanded by one's family roles and responsibilities such as children,

spouse, parent as compared to time demanded by work-related tasks (Netemeyer et al., 1996; Greenhaus and Beutell, 1985). A strain-based conflict can be understood as anxiety and stress resulting from performing family and work duties (Netemeyer et al., 1996; Greenhaus and Beutell, 1985). A behavior-based conflict is when role demands such as self-reliance and emotional stability make it harder to fulfill other roles such as emotional vulnerability and warmth (Greenhaus and Beutell, 1985).

We include time-based, strain-based, and behavior-based family-work items in the WFH Conflict construct used in our study. While not tied to long-term outcomes of prior studies (such as turnover and career progression), this construct enables us to depict the peculiar challenges and impacts of the unanticipated and involuntary move to WFH during this unprecedented global emergency.

Next, we present the research methods adopted for the study, followed by our analysis and results.

## Methodology

#### The Survey

A survey was developed to gather data about work-time control, WFH attitude, technology usefulness, and family tensions' impact on accomplishing work responsibilities. Perceived control-over-time is measured using a five-item scale adapted from Macan (1994). The four-item scale measuring technology usefulness was adapted from Venkatesh and Davis (2000). WFH attitude is measured using a three-item scale adapted from Edwards, Van Laar, Easton, and Kinman (2009). Finally, WFH conflict was measured using a five-item scale measuring the demands of one role and its impact on the other from Netemeyer, Boles, and McMurrian (1996). Parental Status is based on the number of children under 18 in the home, with details on their ages collected in ranges. The survey was pilot-tested with a small sample of individuals working from home; minor corrections were made based on the respondents' feedback.

The final questionnaire began distribution on April 27, 2020 and closed on May 8. A total of 870 responses were collected. Of these, 545 were complete and valid for analysis. Completed surveys were received from thirty-eight countries, with the U.S. and Germany accounting for about 75%. Of these, 445 indicated a binary gender and provided data on children at home (i.e., some chose "prefer not to answer" for at least one of these dependent variable items). 38.5% of the respondents were male and 33.9% had children under the age of 18 at home. Respondent age categories were 18-24 (10.5%), 25-34 (23.5%), 35-44 (22.9%), 45-54 (19.1%), and 55 and older (22.8%).

## **Data Analysis**

In our analysis, we examine if there is a significant direct effect of gender and having children under the age of 18 at home, and an interaction effect between the independent variables gender and having children under the age of 18 at home on each of the following dependent variables: control over time, technology usefulness, WFH attitude, and WFH conflict. Because the survey was worded to capture a lack of control over time, we rename the construct as such in the remainder of the paper. Table 1 shows descriptive statistics of each of the dependent variables, across gender and across children under 18 (i.e., No Children, Children) living at home during COVID-19.

A two-way multivariate analysis of variance (MANOVA) procedure was used to test the significance of the direct and interaction effects of gender and having children under the age of 18 at home. Using the Box's Test, we evaluated equal variances among groups. Next, we determined the appropriate measure to interpret the multivariate test results. If the multivariate test result is significant (p < .05), then the univariate ANOVA is evaluated to determine significant group differences for each dependent variable on the independent variables (F ratios and p values). If the multivariate test result is not significant (p > .05), no further test is conducted.

Construct	Gender	Children at Home	Ν	Mean	Std. Deviation
Lack of Control Over Time	Male (N = 180)	No Children Under 18	96	2.852	0.764
		Children Under 18	84	2.954	0.832
	Female (N = 265)	No Children Under 18	165	2.874	0.784
		Children Under 18	100	3.298	0.776
Technology Usefulness	Male (N = 180)	No Children Under 18	96	3.815	0.722
		Children Under 18	84	4.036	0.680
	Female (N = 265)	No Children Under 18	165	3.788	0.744
		Children Under 18	100	3.725	0.840
WFH Attitude	Male (N = 180)	No Children Under 18	96	3.523	0.918
		Children Under 18	84	3.443	0.883
	Female (N = 265)	No Children Under 18	165	3.554	0.971
		Children Under 18	100	3.297	0.970
WFH Conflict	Male (N = 180)	No Children Under 18	96	2.612	1.056
		Children Under 18	84	3.043	1.039
	Female (N = 265)	No Children Under 18	165	2.353	0.956
		Children Under 18	100	3.658	1.004

#### Table 1. Descriptive Statistics

To use MANOVA, the dependent variables should be related to each other at a low to a moderate level (Leech, Barrett, and Morgan, 2005). Table 2 shows low to moderate strength among the dependent variables in the study, with correlations ranging from -.178 to 0.624. Thus, the MANOVA assumption of no multi-collinearity is met.

Measure Name	Control Over Time	Tech Usefulness	WFH Attitude	WFH Conflict
Lack of Control Over Time	1			
Tech Usefulness	178**	1		
WFH Attitude	500**	.304**	1	
WFH Conflict	.624**	188**	422**	1

#### Table 2. Correlation Matrix of the Dependent Variables

## Results

The Box's test revealed the homogeneity of variance–covariance with a value of 24.04 was not significant (p= 0.789, > .001); therefore, Wilks' test was used to interpret the multivariate test statistic. The Levene's test revealed that the assumption of homogeneity of variances was met for lack of control over time (F(3,441) = .927, p > .05), technology usefulness (F(3,441) = .283, p > .05), WFH attitude (F(3,441) = .620, p > .05), and WFH conflict (F(3,441) = .535, p > .05).

The Wilks' Lambda results for gender indicated significant group differences with respect to the overall dependent variables examined (Wilks' value = 0.977., F = 2.587, p = .036, partial  $\Omega = 0.023$ ). The results of univariate ANOVA revealed a significant group effect for the independent variable gender on the dependent variables of lack of control over time (F = 5.602, p= 0.018, partial  $\Omega = 0.013$ ) and technology usefulness (F = 5.282, p = .022, partial  $\Omega = 0.012$ ). On the other hand, we find no significant group effect for the independent variable gender on the dependent variables of WFH Attitude (F = 0.386, p = .535) and WFH conflict (F = 3.259, p = .072).

The Wilks' Lambda results for those with children under the age of 18 indicated significant group differences with respect to the overall dependent variables examined (Wilks' value = 0.820, F = 24.047, p = .000, partial  $\Omega = 0.180$ ). The results of univariate ANOVA revealed a significant group effect for the independent variable children on the dependent variables of lack of control over time (F = 11.661, p= 0.001, partial  $\Omega = 0.026$ ) and WFH conflict (F = 77.744, p = .000, partial  $\Omega = 0.150$ ). On the other hand, we find no significant group effect for the independent variable children on the dependent variables of technology usefulness (F = 1.151, p = .284) and WFH attitude (F = 3.323, p = .069).

The Wilks' Lambda results for the interaction of gender and having children under the age of 18 at home indicated significant group differences with respect to the overall dependent variables examined (Wilks' value = .951, F = 5.681, p = .000, partial  $\Omega = 0.049$ ). The results of univariate ANOVA revealed significant group effect for the independent variable of gender and having children on the dependent variables of lack of control over time (F = 4.341, p =.038, partial  $\Omega = 0.010$ ) and WFH conflict (F= 19.755, p=.000, partial  $\Omega = 0.043$ ). On the other hand, we find no significant group effect for the independent variable of gender and having children on the dependent variable of gender and having children on the dependent variables of technology usefulness (F= 3.717, p=.055) and WFH attitude (F= .917, p=.339). We visualize the significant interaction relationships of the two dependent variables: control over time and WFH conflict in Figures 2 and 3 below.

Figure 2 shows that females have an overall higher mean for perceived lack of control over time compared to their male counterparts. We see the gap in lack of control over time widens for females with children under the age of 18 compared to their male counterparts.

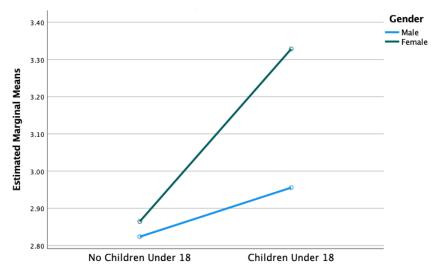


Figure 2. Estimated Marginal Means of lack of Control Over Time

Figure 3 shows that females with no children under the age of 18 experience slightly lower WFH conflict than their male counterparts. However, females with children under the age of 18 experience higher WFH conflict compared to their male counterparts.

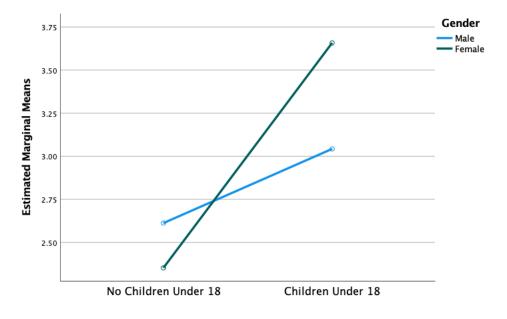


Figure 3. Estimated Marginal Means of WFH Conflict

Table 3 summarizes the results of this analysis.

WFH Characteristic	Gender	Children in Home	Gender X Children in Home	
(Lack of) Control over time	Significant	Significant	Significant	
Technology usefulness	Significant	Not significant	Net significant	
WFH attitude	Not significant	Not significant	Not significant	
WFH conflict	Not significant	Significant	Significant	
Group (all four)	Significant	Significant	Significant	

#### Table 3. Summary of Results

## Discussion

"It's not working from home. I can do that. It's working while at home with kids and my spouse during a pandemic that's the problem." Survey respondent.

Working from home has taken on new meaning due to the COVID-19 pandemic. Day-to-day routines and responsibilities have been altered because workers are forced to work in an environment that is no longer shared with fellow employees; rather it is shared with family members of all ages. This way of working has left employees with mixed views about WFH. Our study explored the demographic factors that influence WFH, specifically gender differences and having dependent children at home. In this discussion, we add comments from open-ended questions in the survey to give depth to our findings.

#### **Gender Differences**

The findings revealed significant gender group differences with respect to **control over time** and **technology usefulness**, with women experiencing less **control over time** and lower perceived **technology usefulness**. This is most likely due to the sudden and unexpected need to balance ongoing work assignments and demanding household responsibilities in the same environment. Notably, these gender differences were even more significant for those who had children living at home.

The forced WFH order has shifted work processes and the way that work is performed. Technology is essential to be able to perform work at home, and a positive WFH environment depends on being able to provide similar amenities in a home office to those of conventional offices (Ng, 2010). When reviewing the open-ended survey comments, we found that this was a major concern and challenge for employees. Being able to set-up one home office is manageable for some, but having to set up two or more is a challenge: *"[The challenge is] two professionals working from home without an office environment. We started working in the same room but have since moved to separate rooms (me: dining room table, him: desk in living room)."* 

Additionally, many struggle with not having needed devices and or high-speed internet to keep up. Many commented that they had difficulty working 8 hours due to uncomfortable desks, chairs, and lack of technical equipment such as webcams and monitors. While it is unclear why females experienced lower technology usefulness, it may be related to ICT's increased accessibility, further disrupting the balance between personal and workspace. One female called it 'technology tethers': "Inability to turn off - I commute downstairs from my office, but my technology tethers follow me. Expectation that I am always on" and another said they missed "the ride time to switch between work time and free time." There is no clear end to the day now.

We found that both female and male respondents experienced a similar *WFH attitude* and *WFH conflict*. However, when comparing the open-ended comments, male respondents had more positive comments about WFH. Consider the following:

Male Respondents:

"For me it has worked extremely well and has resulted in a much better 'work life balance'."

"Working from home really has not been a challenge for me, only that I miss the office environment."

"Challenges? None at present. It took about 1 week to fully adjust to working from home."

Female Respondents:

"To many things are competing for my attention. There is no separation between private and workspace."

"Challenges? To keep the life-work balance. To keep my breaks short. To end in the evening."

These comments illustrate well the analytical findings of gendered perception differences about WFH.

#### Dependent Children at Home

When examining the independent variable, **dependent children living at home**, the findings revealed that **control over time** and **WFH conflict** are significant for respondents with children under the age of 18 living at home. We found it was not just young children that create work-life challenges: "remote working with 12-18-year-old children is challenging, cooperation necessary but not always given". We also found that females with dependent children living at home experience lower **control over time** and exacerbated **WFH conflict** than their male counterparts.

Prior to the pandemic, parents who WFH and have dependent children living at home contribute significantly more time to childcare activities than parents working outside the home (Kwok, 2016). Now, however, all parents and all children are home together, and this has increased WFH conflict.

The transition between family and work roles requires psychological effort (Ashforth et al., 2000). When role boundaries are blurred, people experience a mood spillover across their family and work lives, causing strain on the individual. Employees could be happier if work/life blended and allowed for more breaks and balancing. Thus, it is not surprising that those with dependent children feel less control over time and more WFH conflict. These differences are confirmed when comparing open-ended comments from males and females. Both genders commented that having children at home is difficult; however, females were more likely to mention trying to balance caring for the children and working.

For example, when asked about challenges:

Male Respondents:

"Space limitation to work comfortably at home because I have 3 kids which have home schooling at the same time during my work time"

"Having two very young children home all of the time."

"Raising a 2-year old that needs a lot of attention. Not being able to reason with a toddler that his parents have to work."

Female Respondents:

"The full-time care for a 17-month-old, a husband who believes his job takes priority over mine, hence, there is no sharing of household or childcare tasks."

"The juggling act of providing/supporting home instruction, behavior management and social-emotional supports for my 2 children, while working .... my job."

"childcare and all related to it! being a full-time mommy while trying to work (full time) and teaching online is insane. let alone all the grocery shopping and cooking and cleaning that is sooo much more compared to times when he eats and kindergarten"

"Core work hours are also core hours school-age kids need assistance with their schoolwork. Limited hours for me to work. I am main one responsible for providing meals "feeding the zoo animals" constantly and encouraging nonscreen activity when these tasks were outsourced to their school."

These comments support gender role theory, where an emphasis on work, and specifically time allocated to work, is incongruent with female gender role expectations (Wood and Eagly, 2010). Eddleston and Mulki (2017) found that when women can integrate their family and work, they seem to express less family-work conflict than when men integrate the two roles. This matches our finding of no significant gendered difference in WFH conflict, with women reporting slightly less conflict than men. However, as depicted in Figure 3, WFH conflict increases much more for females with children at home, perhaps signaling that traditional caretaking roles fall more often to women during the pandemic. There is increased conflict because of a strong inability to disengage from work, as supported by Eddleston and Mulki(2017).

Finally, there were no significant differences when comparing the interaction between **gender** and having **dependent children living at home** on the perceptions of **technology usefulness** and **WFH attitude**, as those with children or without children experienced similar **technology usefulness** and **WFH attitude**.

These similarities and differences suggest the need for further investigation into the implications of differing home situations would have for increasing worker productivity and performance when WFH.

#### **Recommendations**

What does this mean? Findings of this study demonstrate that female workers with children under the age of 18 experience less control over their time, and those who also have children report higher WFH conflict than their male counterparts while WFH during the pandemic. While we don't know how long workers will need to continue to WFH or what the future of work will look like in terms of WFH, there are some important considerations for employers.

Employers are urged to provide adequate technical support and office equipment for employees and to enable regular exchange about an employee's technical requirements and problems. Employers must acknowledge personnel differences (such as gender, parental status, age, race, and ethnicity) and their impact on the ability and challenges of individual employees, including educating employees to expect and respect the differences of their colleagues. As one female respondent put it: "ascertain that working from home does not lead to an increase of household/caregiving duties, especially among female employees, thus impairing their work efficiency and career options." This suggests that females are quite capable of juggling their work, household, and caregiving obligations when WFH, but the juggling may be more complicated for them. Forced WFH should not affect the career progression of employees.

As the physical organizational landscape is changing, employers might also consider changes to policies and benefits to ameliorate the new challenges employees face. The standard 8-5 workday does not allow flexibility to those with children needing daytime attention. Offering flexible work hours helps caregivers to better integrate family and work within the same environment. *"Can we also finally consider a flexible work week as a nation?"* and – *"do we really need to grind 5 days a week with no breaks?"* Finally, employers should think about improving benefits to support workers. When survey respondents were asked for suggestions, childcare was mentioned often as something employers need to consider: *"organize childcare,"* "[provide] *adequate childcare plans"* -- but interestingly, only by women.

While we may not be able to answer the question of what a "new normal" looks like, these recommendations address some of the work-life challenges of those who must WFH.

## **Conclusion and Future Work**

This study aimed to investigate gender differences and parental responsibilities in work-life trade-offs related to home-office conditions during the COVID-19 crisis. We presented a conceptual model to understand the relationship between the personal characteristics of gender and parental status, and four constructs reflecting how workers respond while WFH during a time of crisis. Using survey data and open-ended comments collected from 445 employees who WFH, we explored the relationships among these variables and constructs.

Our findings show that gender and the presence of children under the age of 18 affect workers' control over time, technology usefulness, and WFH conflict, but not their WFH attitude. Of note, women experience more lack of control over their time and find technology to be less useful than their male counterparts. Also of interest is that women with children at home report much higher WFH conflict and even less control over time than men who have children at home.

Additional study is needed to better understand how this lack of boundaries – physical and conceptual - leads to increased WFH conflict, and how it bears out on worker productivity and job performance. In future studies, we will look at how WFH attitude can mediate some of these relationships. We anticipate that an employee's attitude toward WFH will directly affect productivity by mediating the relationship of family-work conflict and technology usefulness

This paper aims to provide an early window onto the challenges and obstacles of working from home during these unprecedented times. The widespread practice of working from home in today's pandemic world will provide insight into the ability of the telecommuters of tomorrow to maintain healthy and productive work-life boundaries.

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