



# Mediation of work-and-family conflict in the relationship between social-and-organizational support and teaching self-efficacy: The case of parent-teachers working remotely

Eyal Rabin<sup>1</sup> · Shira Goldberg<sup>1</sup> · Ina Blau<sup>1</sup>

Received: 11 January 2024 / Accepted: 18 April 2024  
© The Author(s) 2024

## Abstract

In times of crisis (e.g., during the COVID-19 pandemic), teachers face the dual responsibility of caring for their own children, while adapting to remote instruction. This study explores the interplay between social and organizational support, teaching self-efficacy, and the mediating effect of work-family conflict in remote teaching. The participants were 472 teachers who are parents of children aged 0–12. This mixed-methods study revealed that low levels of family-work and work-family conflict were associated with higher levels of social and organizational support, and teaching self-efficacy. A mediation effect revealed that social and organizational support predicted family-work conflict, which in turn predicted teaching self-efficacy. Qualitative findings highlighted the challenges and coping strategies used while working remotely. This research enhances our understanding of the work-family conflict encountered by parent-teachers, with important implications for teacher education. Such understanding facilitates effective management of family-work conflict during remote work, future epidemics, military conflicts, or natural disasters.

**Keywords** Work and family conflict · Social and organizational support · Self-efficacy · Parent-teachers · COVID-19 pandemic · Remote work

---

✉ Ina Blau  
inabl@openu.ac.il  
Eyal Rabin  
eyalra@openu.ac.il  
Shira Goldberg  
shirago@openu.ac.il

<sup>1</sup> Department of Education and Psychology, The Open University of Israel, 1 University Road, P.O.B. 808, Ra'anana 43107, Israel

## 1 Introduction

The COVID-19 pandemic induced significant social change, particularly within the education system. The imposed lockdowns caused many teachers to transition to remote teaching from their homes. The transition of work-life to home during this period, especially in the context of social crisis, underscores the potential relevance of the conflict between work and family and the conceivable protective role of social and organizational support in workers' psychological functioning. The associations between work-family conflict, social and organizational support, and occupational functioning have been studied quite extensively in previous research. However, fewer studies have examined the associations between work-family conflict, social and organizational support, and occupational self-efficacy among workers who transitioned from on-site work to remote work, and even fewer among parent-teachers, a unique group that experienced work-family conflict intensively in the Covid-19 pandemic (Amri et al., 2020). Combining qualitative and quantitative self report data, this study is intended to shed light on the experience of family-work conflict among parent-teachers working remotely from home during this period and on the associations between work-family conflict, social and organizational support, and teaching self-efficacy.

## 2 Remote work among teachers

The spread of the COVID-19 pandemic caused many countries around the world to impose lockdowns on their residents and shut down education systems, in an attempt to stop the spread of the virus. Many parents were forced to work remotely from home while caring for their children, who were also confined to learning from home (Kantamneni, 2020). Among those parents were parent-teachers, who had to take care of their children while adapting and adjusting their teaching to distance teaching through the use of technology.

The rapid transition to distance teaching created many challenges for teachers, including technical difficulties in effectively utilizing technology for teaching (Hadad et al., 2021, 2024; Kasperski et al., 2023), problems with student participation in learning (Shamir-Inbal & Blau, 2021), and lack of experience in online teaching (Rasmitadila et al., 2020; Schwartz et al., 2023). In line with the many challenges teachers faced during this period, studies found that teachers experienced high employment pressure (Chitra, 2020) and parenting stress (Hong et al., 2021). In addition, it was found that difficulties in organizing distance learning during the COVID-19 pandemic were associated with a higher sense of pressure among teachers, with teachers' self-efficacy mediating this relationship (Rabaglietti et al., 2021). Unsurprisingly, it was found that remote teaching leads to more conflict between family and work roles among teachers (Loscalzo, 2021).

### 3 Work-family conflict

Work-family conflict is defined as “an inter-role conflict in which the demands in the areas of work and family create a mutual mismatch between the roles” (Greenhaus & Beutell, 1985). According to the research literature, each person has limited resources of time and energy to fulfill his various roles in life (Barnett, 1998). Conflict can arise when there is tension and competition between the demands posed by different roles (Geszler, 2016). The potential conflict between family and work can run in two directions – family-work conflict or work-family conflict. The term “family-work conflict” refers to family and household care interfering with work life, while the term “work-family conflict” refers to work pressures that interfere with family life (Mahpul & Abdullah, 2011).

Various factors are associated with a high level of conflict between family and work, including many demands from both roles, high workload, and stress (Bilodeau et al., 2020; Ghislieri et al., 2021). In addition, intensive work at home, along with caring for young children, has been associated with greater conflict between work and family roles (Schieman et al., 2021).

Among teachers, family-work conflict intensifies as the teaching profession becomes more demanding because of the integration of technology in teaching (Weisberger et al., 2021). For example, Shaukat et al. (2022) found that technostress was associated with increased work-family conflict among teachers working remotely during the Covid-19 pandemic. Indeed, work-family conflict increased during the COVID-19 outbreak due to the demands to work remotely, on the one hand (Görmüş & Baytur, 2023; Lizana & Vega-Fernandez, 2021), and to take care of parents’ own children staying at home, on the other hand (Chakravorty & Singh, 2021).

Several factors have been found to reduce family-work conflict, such as a high level of social support at home and at the workplace (Kossek et al., 2011). In the next section, we highlight the associations between social support, organizational support, self-efficacy, and family-work conflict.

### 4 Factors related to family-work conflict

Social support is a complex theoretical structure that is associated with stress reduction, improved mental health, and well-being (Cohen & Wills, 1985; House et al., 1988). Higher levels of family support from the spouse and extended family (Drummond et al., 2017; French et al., 2018; Liao et al., 2019; van Daalen et al., 2006), from friends (Kossek et al., 2011), organizational support from the management of the organization, the direct manager, and colleagues at work (French et al., 2018; Kossek et al., 2011; Liao et al., 2019; van Daalen et al., 2006), and receiving accurate information from the workplace in remote work settings (Chuang et al., 2024) have been found to be associated with lower levels of family-work conflict.

In addition, associations have been found between higher levels of family-work conflict and lower levels of self-efficacy at work (Lange & Kayser, 2022; Wang et al., 2010). Self-efficacy is a term coined by Albert Bandura (Bandura, 1994), referring to people’s belief that they are capable of performing a task successfully. Humans

have self-efficacy in various areas and roles in their lives, for example, self-efficacy at work. Teachers' self-efficacy was found to be related to their willingness to adopt innovations and changes in their work, their level of stress in school, their practices in culturally diverse classrooms and their general professional development and teacher relationships with students' parents (Friedman & Kass, 2002; Gao et al., 2024; Wang et al., 2023).

The associations between work-family conflict, social and organizational support, and occupational functioning have been studied quite extensively in previous research. However, fewer studies have examined the associations between work-family conflict, social and organizational support, and occupational self-efficacy among workers who transitioned from on-site work to remote work, and even fewer among parent-teachers in this situation. Previous findings have indicated a negative association between measures of self-efficacy (Andhini & Utami, 2022; Lange & Kayser, 2022) and work-family conflict among remote workers. Another study found that among remote workers, the association between receiving accurate information from the workplace, a form of organizational support, and workers' wellbeing was mediated by work-family conflict (Chuang et al., 2024). Similarly, the negative associations between work overload, parenting stress, and job satisfaction among pre-school teachers during the Covid-19 pandemic were found to be mediated by work-family conflict (Hong et al., 2021). This research aims to add to the literature by investigating the associations between work-family conflict, social and organizational support, and occupational self-efficacy among parent-teachers who had to transition to remote work during the COVID-19 pandemic.

## 5 Research questions and hypotheses

The current study examined the following **research questions**: (1) What are the associations between family-work conflict and social and organizational support among parent-teachers working remotely?, (2) What is the association between family-work conflict and teaching self-efficacy among parent-teachers working remotely?, (3) What is the role of family-work conflict in the associations between social and organizational support and teaching self-efficacy among parent-teachers working remotely?, and (4) What were the main challenges faced by parent-teachers working remotely, and what were their coping strategies?

Based on the research literature, the **research hypotheses** are:

1. Family-work conflict will be negatively associated with teaching self-efficacy among parent-teachers working remotely. This hypothesis is based on previous studies, which found that a high level of family-work conflict is associated with a low level of self-efficacy (Andhini & Utami, 2022; Lange & Kayser, 2022; Wang et al., 2010).
2. Social and organizational support will be negatively associated with family-work conflict among parent-teachers working remotely. This hypothesis is based on previous studies, which found that low levels of social and organizational

- support are associated with a high level of family-work conflict (Chuang et al., 2024; Drummond et al., 2017; French et al., 2018; Liao et al., 2019).
3. Higher levels of social and organizational support will lead to lower levels of family-work conflict, which, in turn, will be associated with higher levels of teaching self-efficacy among parent-teachers. This hypothesis is based on previous research findings which have shown that family and organizational support are associated with a lower level of family-work conflict (French et al., 2018; Liao et al., 2019; van Daalen et al., 2006), and that family-work conflict mediates the association between characteristics of the work-environment and workers' psychological functioning (Chuang et al., 2024; Hong et al., 2021).

In addition, using a qualitative research paradigm, the study also examined the main challenges and coping strategies used by parent-teachers working remotely during the COVID-19 lockdowns.

## 6 Method

### 6.1 Participants

The sample included 474 teachers who are parents of at least one child aged 0–12. 961 respondents began responding to the questionnaire. Among these respondents, only 600 (69%) were parent-teachers, and among the parent-teachers, 474 (79%) completed all of the questions in the questionnaire and met the criteria for inclusion in the study, i.e., were parents of at least one child aged 0–12 and worked as teachers.

The socio-demographic characteristics of the sample are presented in Table 1. In the study, stratum sampling was used to ensure the relative representation of different strata in the sample according to their size in the teachers' population. Information about the distribution of strata was made according to the information provided by the Israeli Ministry of Education (Zard, 2019). As can be seen, the sample included approximately 82% women and 18% men. This is similar to the gender distribution in Israel's teacher population, with approximately 79% of teachers being female, and 21% male (Zard, 2019).

Most participants were married (90.3%), with an average of approximately three children, and with the average age of the youngest child being approximately five years old. The number of children among teachers is similar to the number of children found among the general Hebrew-speaking Israeli population, namely 3 children (Central bureau of statistics Israel, 2022). The teachers' years of seniority ranged from 1 to 40 years, with an average of around 11 years of seniority. Approximately 55% of the participants taught in primary school, 17% in middle school, and 21% in high school. Approximately 53% of the teachers had no previous experience or had little experience in technology-enhanced teaching, and only around 13% had extensive experience in such teaching.

**Table 1** Socio-demographic characteristics of the sample ( $n=474$ )

Variables	Percentage (frequencies) / Average (SD)	Range
<b>Sex</b>		
<i>Male</i>	18.2% (86)	
<i>Female</i>	81.8% (387)	
<b>Age</b>	38.84 (6.85)	22–60
<b>Family status</b>		
<i>Single</i>	2.7% (13)	
<i>Married</i>	90.3% (428)	
<i>Divorced</i>	5.3% (25)	
<i>Separated</i>	0.6% (3)	
<i>Other</i>	1.1% (5)	
<b>Number of children</b>	3.16 (1.45)	1–10
<b>Age of the youngest child</b>	4.51 (3.35)	0–12
<b>Age of the oldest child</b>	11.18 (5.85)	0–35
<b>Seniority in teaching (years)</b>	10.93 (6.81)	1–40
<b>Supervision</b>		
<i>Secular public school</i>	71.9% (341)	
<i>Religious public school</i>	28.1% (133)	
<b>Educational stage</b>		
<i>Elementary school</i>	54.9% (260)	
<i>Middle school</i>	17.1% (81)	
<i>High school</i>	21.3% (101)	
<i>Other</i>	6.8% (32)	
<b>Previous experience in teaching with technology</b>		
<i>No experience at all</i>	11.4% (54)	
<i>Little experience</i>	41.4% (196)	
<i>Some experience</i>	34.6% (164)	
<i>Extensive experience</i>	12.7% (60)	

## 6.2 Research instruments

The research questionnaires included multiple-choice questions and several open-ended questions, as described below:

1. **Background variables** - Information was collected about gender, age, teaching seniority, previous experience working with educational technology (4 point-scale ranging from 'no experience at all' to 'extensive experience'), marital status, number of children, and children's ages.
2. **Family-work conflict** - was measured using the Hebrew translation of the Work-Home Conflict Scale (Haslam et al., 2014). This questionnaire measures two aspects of the conflict: work-family conflict (WFC) and family-work conflict (FWC). The questionnaire includes ten items rated on a 7-point Likert scale. Reliability (internal consistency) scores in the present study were 0.87 and 0.82, respectively. For each dimension, a general score was calculated by averaging the items belonging to it. A high score in each of the metrics indicates high levels

- of conflict. The questionnaire has been found to have structural validity and predictive validity for parent-child relationships and relationships within the family (Sanders et al., 2013).
3. **Teaching self-efficacy** - was measured using a self-efficacy in teaching scale (PTE). The questionnaire includes seven items rated on a 6-point Likert scale (Cronbach's  $\alpha=0.84$ ). The items relate to teachers' sense of personal ability to successfully cope with teaching and promote their students (Gibson & Dembo, 1984). The overall score was calculated by averaging the scores on the scale items. A high score indicates high levels of self-efficacy. The questionnaire was found to have highly distinct validity from the variables of organizational capacity, general capacity, self-esteem, and team capacity (Strychasz, 1996).
  4. **Social Support** - was measured using a Hebrew translation (Drori, 1998) of the Multidimensional Social Support Questionnaire (Zimet et al., 1988). This questionnaire includes 12 items and measures three sources of social support, from family, friends, and one's significant other (Cronbach's alpha reliability as internal consistency scores were 0.94 for the entire questionnaire, 0.88 for support from family, 0.92 for support from friends, and 0.88 for support from one's significant other). For each dimension, a general score was calculated by averaging the scores on the items belonging to it. A high score in each of the indices indicates high levels of social support. The questionnaire was found to be valid for predicting family-work conflict and stress among Israeli mothers (Kulik & Liberman, 2013), and workload and distress (Home, 1998).
  5. **Perceived organizational support** - was measured using the Hebrew translation of the Perceived Organizational Support Questionnaire (SPOS, Eisenberger et al., 1986). This questionnaire examines the employee's belief in the extent to which the organization values and cares about the employees' well-being. The questionnaire includes 22 items rated on a 4-point Likert scale (Cronbach's  $\alpha=0.94$ ). The overall score was calculated by averaging the items belonging to it. A high score indicates high levels of perceived organizational support. The questionnaire was found to have high structural validity (Liu, 2018; Shore et al., 1991), high predictive validity (Shore et al., 1991), and intercultural validity (Rockstuhl et al., 2020).
  6. **Open questions about family-work conflict** - To deepen the quantitative findings of the research questionnaires, teachers were also asked to answer two open-ended questions: "Describe the conflicts that you experienced between your family and work life during the lockdown.", and "What helped you deal with the conflict you experienced between your family and work life?". The purpose of the open-ended questions was to allow teachers to add information and freely describe the conflicts that they experienced between family and work demands when working remotely during the COVID-19 period and the coping strategies that they used to deal with the conflict.

## 6.3 Procedure

This study is a mixed-methods study, combining a quantitative and qualitative approach, through the use of retrospective self-report questionnaires. The retrospective examination referred to the period between March and October 2020, in which the first and second lockdowns took place in Israel during the COVID-19 pandemic. In this period, the education system canceled on-site teaching and the entire education system moved to distance learning. When answering the questionnaires, parent-teachers assessed the level of family-work conflict, teaching self-efficacy, and family and organizational support. Respondents also openly described the conflict that they experienced between family and work life during the COVID-19 pandemic and how they coped with it.

After receiving approval from the Ethics committee, the online questionnaire was distributed by the researchers through online social networks, and participants were also invited through a survey company's panel sample. The respondents from the panel sample received a modest reward of 10 dollars from the survey company for their participation in the study.

In the quantitative section, relationships between the study variables were examined using Pearson correlations. The role of family-work conflict and work-family conflict as mediators in the relationship between social support, organizational support, and teaching self-efficacy were examined through a mediation model (Baron & Kenny, 1986; Hayes, 2009) using the Lavaan package in R software (<https://lavaan.ugent.be/>).

In the qualitative section, among the 474 teachers who answered the questionnaires, 448 teachers answered the open-ended questions that addressed the challenges that they encountered during the COVID-19 pandemic and how they coped with them. Only full answers were taken into account in the analysis of the statements. The responses were analyzed using thematic-qualitative analysis. The resulting coding is not monolithic, meaning that different statements were attributed to several categories. To test the inter-rater credibility of teachers' statements, 25% of the statements were coded by two researchers, and a high level of agreement was found: Cohen's Kappa=0.88.

## 7 Results

### 7.1 Quantitative findings

#### **H1: Family-work conflict will be negatively associated with teaching self-efficacy among parent-teachers working remotely.**

To examine the first hypothesis regarding the relationship between the level of family-work conflict and teaching self-efficacy among parent-teachers who worked remotely during the COVID-19 pandemic, Pearson correlations were performed. Table 2 displays the means, standard deviations, and matrix of Pearson correlations between the study variables.



**Table 2** Averages, standard deviations, and matrix of Pearson correlations between the study variables ( $n=472$ )

Variable	M	SD	1	2	3	4	5	6	7	8
1 Work-family conflict	4.18	1.41	-							
2 Family-work conflict	2.89	1.21	0.36***	-						
3 General social support	5.75	0.98	-0.16***	-0.25***	-					
4 Significant other support	5.96	1.05	-0.13**	-0.23***	0.90***	-				
5 Family member support	5.85	1.11	-0.17***	-0.24***	0.89***	0.78***	-			
6 Friend support	5.43	1.19	-0.11*	-0.19***	0.84***	0.60***	0.56***	-		
7 Perceived organi- zation support	4.78	1.28	-0.27***	-0.15***	0.32***	0.26***	0.25***	0.32***	-	
8 Teaching self-efficacy	3.91	0.79	-0.17***	-0.22***	0.19***	0.19***	0.22***	0.10*	0.22***	-

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

As can be seen in Table 2, a negative association was found between the level of work-family conflict and family-work conflict and teaching self-efficacy among parent-teachers. Teachers who reported a higher level of work-family conflict and family-work conflict tended to report lower levels of teaching self-efficacy, and vice versa. These findings support the first research hypothesis.

## **H2: Social and organizational support will be negatively associated with family-work conflict among parent-teachers working remotely.**

Regarding the second research hypothesis, Table 2 shows that there is a negative relationship between general social support, social support from one's significant other, from a family member or friend, perceived organizational support, and the level of work-family conflict and family-work conflict. Teachers who reported lower levels of social support and organizational support tended to report higher levels of work-family conflict and family-work conflict, and vice versa. These findings support the second research hypothesis.

In addition, Table 2 indicates that there is a positive relationship between the social support that teachers generally feel, the support they feel from their significant other, family member, or friends, the perceived support of the organization, and their teaching self-efficacy. Higher levels of social support are associated with higher levels of perceived organizational support and teaching self-efficacy, and vice versa. Furthermore, a positive relationship was found between perceived organizational support

and teaching self-efficacy. Higher levels of perceived organizational support are associated with a higher sense of teaching self-efficacy, and vice versa.

### **H3: Family-work conflict and work-family conflict will mediate the association between social support and organizational support, and self-efficacy in remote teaching among parent-teachers.**

To examine the research hypotheses regarding the roles of family-work conflict and work-family conflict as mediators in the relationship between social support and organizational support and the self-efficacy of parent-teachers, a mediation model was calculated. The model findings are presented in Table 3.

An examination of the model's findings shows that the following direct paths were found; both an increase in social support and an increase in organizational support were accompanied by a significant increase in teaching self-efficacy among parent-teachers (significant *c* paths). A calculation of the significance of indirect mediation pathways using the bootstrapping method shows that family-work conflict mediates the association between social support and teaching self-efficacy among parent-teachers ( $b=0.03$ ,  $se=0.01$ ,  $95\%CI [0.01, 0.05]$ ). However, the other indirect pathways were not found to be significant. Hence, work-family conflict does not mediate the relationship between social support and teaching self-efficacy among parent-teachers

**Table 3** The mediation model for predicting teaching self-efficacy (standardized and non-standardized mediation model paths)

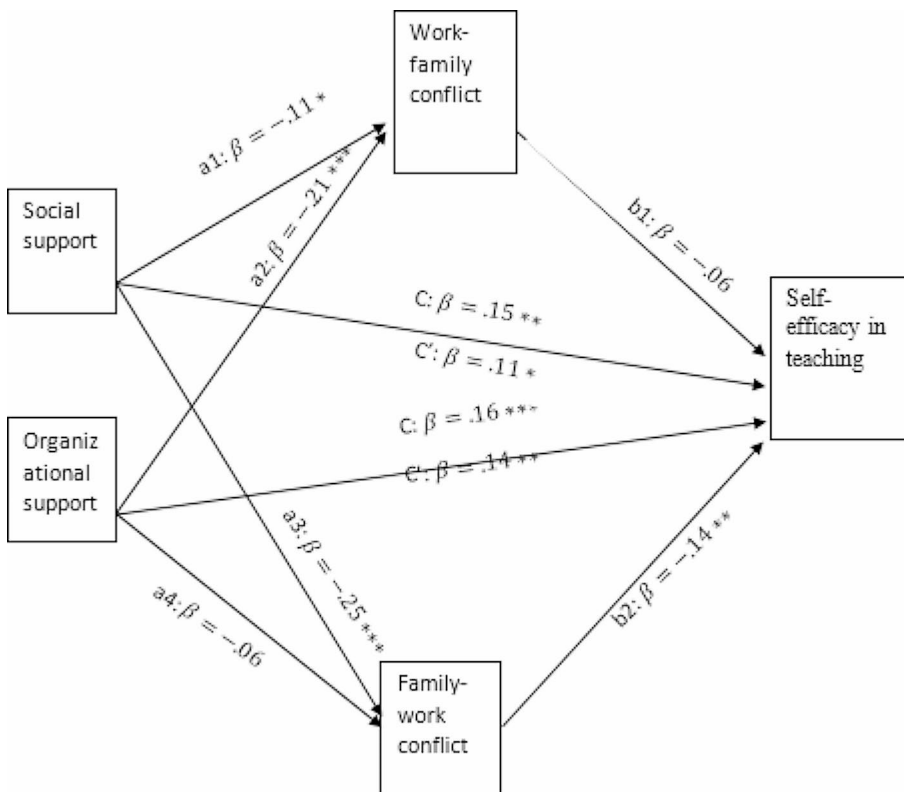
Variables	B	SE	Beta	<i>P</i>	95% CI
Intermediate variable: Work-family conflict					
$R^2=0.13$ , $F_{(4,467)}=18.13$ , $p<.001$					
Social support	-0.15	0.07	-0.11	<b>0.02</b>	(-0.28, -0.02)
Organizational support	-0.23	0.05	-0.21	<b>&lt;0.001</b>	(-0.33, -0.13)
Sex of the parent	-0.77	0.16	-0.21	<b>&lt;0.001</b>	(-1.08, -0.46)
Age of the young child	-0.02	0.01	-0.11	<b>0.01</b>	(-0.04, -0.01)
intercept	7.22	0.54		<b>&lt;0.001</b>	(6.16, 8.27)
Intermediate variable: Family-work conflict					
$R^2=0.09$ , $F_{(4,467)}=11.90$ , $p<.001$					
Social support	-0.31	0.06	-0.25	<b>&lt;0.001</b>	(-0.43, -0.20)
Organizational support	-0.06	0.04	-0.06	0.20	(-0.14, 0.03)
Sex of the parent	-0.04	0.14	-0.01	0.76	(-0.32, 0.23)
Age of the young child	-0.03	0.01	-0.15	<b>0.001</b>	(-0.04, -0.01)
intercept	6.01	0.47		<b>&lt;0.001</b>	(5.08, 6.94)
Dependent variable: Teaching self-efficacy					
$R^2=0.09$ , $F_{(6,465)}=7.95$ , $p<.001$					
Social support	0.09	0.04	0.11	<b>0.03</b>	(0.01, 0.17)
Organizational support	0.09	0.03	0.14	<b>0.003</b>	(0.03, 0.15)
Work-family conflict	-0.03	0.03	-0.06	0.26	(-0.09, 0.02)
Family-work conflict	-0.09	0.03	-0.14	<b>0.004</b>	(-0.16, -0.03)
Sex of the parent	0.01	0.09	0.01	0.89	(-0.17, 0.20)
Age of the young child	0.001	0.01	0.01	0.88	(-0.1, 0.01)
intercept	3.35	0.38		<b>&lt;0.001</b>	(2.59, 4.11)

Note statistically significant *p* values are presented in **bold** in the table

( $b=0.01$ ,  $se=0.01$ ,  $95\%CI [-0.004, 0.02]$ ). In addition, family-work conflict does not mediate the relationship between organizational support and teaching self-efficacy among parent-teachers ( $b=0.01$ ,  $se=0.01$ ,  $95\%CI [-0.01, 0.02]$ ). Finally, work-family conflict does not mediate the relationship between organizational support and teaching self-efficacy among parent-teachers ( $b=0.01$ ,  $se=0.01$ ,  $95\%CI [-0.003, 0.02]$ ). Since the direct path between social support and teaching self-efficacy among parent-teachers remained significant, the mediation obtained is only partial mediation. Figure 1 shows the mediation model obtained. All model calculations were performed while statistically controlling for the teachers' gender and the age of the teachers' youngest child.

## 7.2 Qualitative findings

To expand upon the quantitative findings that emerged from the research questionnaires, teachers were asked to answer two open-ended questions. The purpose of the questions was to allow a better understanding of the challenges and ways of coping that teachers encountered in remote teaching during the COVID-19 lockdowns. The teachers were asked to describe the challenges that they faced and the ways that they



**Fig. 1** The mediation model predicting teaching self-efficacy among parent-teachers. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

dealt with them during the lockdown period. Among the 474 teachers who completed the questionnaires, 448 teachers (94.5% of the respondents) answered the open-ended questions. The next section will introduce the four categories that emerged from the qualitative data.

### 7.2.1 Parent-teachers' challenges in remote teaching during the lockdown

This category was the most prevalently mentioned among the four categories (617 statements). Teachers reported seven major challenges that they faced in distance teaching during the COVID-19 lockdown. Another subcategory in this category addressed the absence of challenges and difficulties reported by some teachers. Table 4 displays the subcategories and their frequencies.

Below is a breakdown of the subcategories and representative citations:

*Dealing with one's children's and spouse's needs* - The most extensive number of statements addressed the difficulty of caring for and dealing with the needs of the teachers' children. The teachers reported that while they were teaching, their children were also learning, so they were not available to help them. Moreover, even after work hours, teachers found themselves taking care of their work at the expense of caring for their own children. As one of the teachers described: "The children have to go into their Zoom meetings while I am in charge of my students, and I cannot give my children attention at all. If they do not get up in time, I have no way to help. If there are technical difficulties, I cannot help. I am not available for them in the evening either, because I have to prepare lesson plans and check assignments all the time."

*Meeting the requirements of the administration and the school system, students, and parents* - Many statements referred to the requirements of the school administration and the requirements of the school system to teach many Zoom lessons, in addition to checking assignments and maintaining constant personal contact with students, as stated by a teacher: "Zero system flexibility. They expect that all the lessons will be synchronous via Zoom, without any asynchronous lessons. Constant demands, not a single good word. It feels like abuse". In addition to the principal's

**Table 4** Parent-teachers' challenges in remote teaching during the lockdown ( $N=617$ )

Subcategory	Number (percentage) of statements
Dealing with children's and spouse's needs	170 (27.5%)
Meeting the requirements of the administration and the system, students, and parents	134 (21.7%)
Workload, burnout, and instability	106 (17.2%)
Lack of separation between home and work	104 (16.9%)
Lack of understanding of the challenges of a teacher as a parent	39 (6.3%)
Organizational challenges and inefficiency	23 (3.7%)
Lack of personal time	11 (1.8%)
No challenges	30 (4.9%)
Sum of challenges	617

demands, the teachers addressed the demands of the students and their parents: “All day there are WhatsApp messages from a million groups of students and teachers and classes and parents, around the clock. There is no time to rest”. These feelings coincide with a sense of disrespect felt by teachers during this period: “There are new directives from the Ministries of Education and Health, the feeling that we and our work are not valued in any way”.

*Workload, burnout, and instability* - The uncompromising demands of work, while dealing with the needs of the teachers’ own children, led them to report feeling stress, burnout, helplessness, and instability: “Management demands caused stress all the time”. Another teacher added: “I have a lot of emotional difficulty and frustration at not being able to balance home and work demands”.

*Lack of separation between home and work* - Another challenge was the merging of work and family life: “The main difficulty is the constant presence of work and family in the same space. Due to working continuously all day and also needing to take care of the family, my family does not receive proper treatment”.

*Lack of understanding of the challenges of a teacher as a parent* - Teachers reported a sense of frustration that there was no understanding from the school, the Ministry of Education, parents, and the general public: “I felt a lot of difficulty, anger, and frustration since, despite the lockdown, I had to work so many hours while having no arrangement for my younger children”.

*Organizational challenges and inefficiencies* - Merging spaces, clutter, and demands created a sense of inefficiency: “Tasks that needed to be performed for work and home at the same time created clutter, lack of organization, and decreased efficiency”.

*Lack of personal time* - Teachers reported that due to the merging of work and home roles into one space, they had no time left for themselves: “There is not a moment for myself, no quiet!”.

*There were no challenges* - A minority of teachers reported a lack of challenges and difficulties during this period.

## 7.2.2 Parent-teachers’ ways of coping with remote teaching during the lockdown

In this category, which included 612 statements, the teachers reported eleven ways of dealing with the challenges that were posed to them by the period of distance teaching during the COVID-19 lockdown. Two other subcategories in this category addressed the feeling of failure in coping. Table 5 displays the subcategories and their frequencies.

Below is a breakdown of the subcategories and representative citations:

*Division of labor between spouses* - Teachers reported that the factor that helped them most to get through the challenging lockdown period was the division of labor between spouses. “I enlisted the help of my husband, and we defined a time when each of us could take a short break from work to be with the kids.”

*Setting boundaries in relation to time and work requirements* - Teachers reported that they learned to set boundaries for work requirements and limit them in time: “I coped by setting clear boundaries for work requirements and taking care of home needs, and worked on myself to feel comfortable with the limits I set for myself”.

**Table 5** Parent-teachers' ways of dealing with distance teaching during the Covid-19 lockdown ( $N=612$ )

Subcategory	Number (percentage) of statements
Division of labor between spouses	88 (14.4%)
Setting boundaries in time and work requirements	71 (11.6%)
Acceptance of the situation	70 (11.4%)
Obtaining help in childcare	59 (9.6%)
Preparation in advance	52 (8.5%)
Consultation with the family and transferring responsibility to the children	48 (7.8%)
Creating quality time with children and spouse	45 (7.3%)
Creating a separate physical space for work and purchasing equipment	31 (5.1%)
Applying for school help/staff sharing	22 (3.5%)
Requesting help from friends/professionals	21 (3.4%)
Looking after the teacher's own children while teaching	13 (2.1%)
A lack of involvement in the education of the teachers' own children	49 (8.2%)
A sense of failure in overall coping	43 (7.1%)

Teachers reported that in the third lockdown they learned to put their children first: "In the third lockdown, I started by saying, 'My family is a top priority', and from then on, everything was easier".

*Acceptance of the situation* - Teachers reported that they understood that this was the situation, and that they must face all of the challenges that the situation posed: "What helped me cope was the fact that this was the general reality of all workers in Israel and around the world".

*Obtaining help in childcare and at home* - One of the teachers' ways of coping was to get help in caring for their own children so that they would be free to work: "I found help from several babysitters and also received some help from my family".

*Preparation in advance* - Teachers said that they prepared in advance by preparing lesson plans, food, and taking care of the family's needs: "I checked assignments at night and also prepared lessons at night.", and "I tried to arrange creative activities for class time or prepare food in advance and tell them [my kids] right at the beginning of class what to do, so my kids were busy. In addition, I recorded myself and broadcasted the recordings to the students".

*Family consultation and transference of responsibility to the children* - Teachers reported that to deal with the children's needs and empower them, they held a family meeting in which they explained the complexity of their role to their children and spouse, as well as the need for the family to function well while they are teaching. Moreover, teachers reported that, due to their demanding role during this period, they transferred the responsibility for functioning at home and as students to their children, but also provided some support: "I arranged a timetable for each child and every child knew when he would do homework with me".

*Creating quality time with the children and the spouse* - The teachers tried to create quality time dedicated to the family: "My daughters understood that I should not

be disturbed during Zoom sessions. They knew that once I finished, I would devote significant quality time and attention to them”.

*Creating a separate physical space for work and purchasing equipment* - The teachers referred to the need to create an isolated corner for work without interruptions: “There was no privacy for working and teaching. So, I took a quiet side room and closed it off to be a study”.

*Applying for school help/staff sharing* - Some teachers reported asking the school for help, whether for help with work hours or different types of support: “I talked about this with a school counselor and colleagues, and realized I was not alone”. The help included both emotional and instrumental support.

*Asking for help from friends/professionals* - Teachers reported seeking advice from friends and even professionals. In addition, the teachers sought assistance in providing teaching materials and assistance in professional and personal functioning as parent-teachers: “I coped by talking and consulting with professionals and friends while experimenting with different practices”. The help included both emotional and instrumental support.

*Looking after the teacher’s own children while teaching* - Teachers reported that they included their own children in the Zoom lessons or seated them next to them during the lesson: “I had my children sit next to me during the lessons I taught on Zoom”.

Two subcategories addressed teachers’ reports of failure in general coping and in educating their children in particular:

*A lack of involvement in the teachers’ own children’s education* - Teachers reported neglecting their own children’s education during this period, both academically and educationally, and having to approve more screen time than they would prefer: “I hosted Zoom sessions while my own kids missed their Zoom sessions and sat in front of the TV for many hours”. Another teacher added: “At first I felt very angry, and in the end I gave up on trying to educate my younger children”.

*Feelings of failure in overall coping* - Many teachers reported feeling a sense of failure in their ability to cope, to the point of collapse: “I had to work six to eight consecutive hours on Zoom, and I was alone with three children ... it was inhuman. Our principal did not give us the option of asynchronous tasks”. Another teacher added: “I could not deal with the conflicts. There was a sense of failure in both personal and professional settings”.

## 8 Discussion

The present study aimed to examine the relationships between the experience of family-work conflict, social and organizational support, and teaching self-efficacy among parent-teachers engaging in remote teaching during the COVID-19 pandemic lockdowns. Teaching self-efficacy was chosen as a dependent variable for two primary reasons: (1) Previous studies have found self-efficacy to be related to family-work conflict (Wang et al., 2010), and (2) Teaching self-efficacy has been found to be related to teachers’ willingness to adopt innovations and changes in their work, school learning, and teacher relationships with students’ parents (Friedman & Kass,

2002), factors which may be particularly important in remote teaching. In addition, the challenges faced by parent-teachers and the ways that they dealt with those challenges were examined. Findings indicated that family-work and work-family conflict were negatively associated with social and organizational support and teaching self-efficacy. Family-work conflict was found to mediate the association between social and organizational support and teaching self-efficacy. Qualitative findings highlighted the challenges and coping strategies used while working remotely. Below we will address the main research findings and their implications.

### **8.1 The relationship between work-family conflict and teaching self-efficacy**

Consistent with the first study hypothesis, a negative association was found between the level of family-work and work-family conflict and teaching self-efficacy among parent-teachers during the COVID-19 pandemic. That is, the higher the level of conflict between work and family (in both directions), the lower the teaching self-efficacy reported. This is in line with previous findings (Andhini & Utami, 2022; Lange & Kayser, 2022; Wang et al., 2010) and highlights the great significance that work-family and family-work conflict experiences may have had for the psychological functioning of parent-teachers during the lockdown period. Moreover, self-efficacy is known to be of great importance, as it influences motivation and behavior in various areas of life and determines a person's performance on various tasks (Bandura, 1994). The findings are particularly important in relation to resilience in times of crisis and change, since teachers' self-efficacy is related to their willingness to adopt innovations and changes in their work (Friedman & Kass, 2002).

### **8.2 The role of work-family conflict in the relationship between social and organizational support and teaching self-efficacy**

In accordance with the second hypothesis, a negative relationship was found between social and organizational support and conflict between work and family. That is, the higher the level of social and organizational support, the lower the level of conflict between work and family reported by teachers. This finding is similar to previous results found in Israel among female teachers (Cinamon, 2009) and among male and female teleworkers (Abendroth, & Reimann, 2018), as well as in other countries (Chuang et al., 2024; Drummond et al., 2017; French et al., 2018; Kossek et al., 2011; Liao et al., 2019; van Daalen et al., 2006). In addition, a positive relationship was found between family and organizational support and teaching self-efficacy, with a higher level of support associated with a higher level of teaching self-efficacy. Similar results were found in other countries, such as at the USA (Guirguis & Plotka, 2022) and in Bali, Jakarta, and Makassar (Gathot et al., 2022). These results underscore the significance of perceived support among employees in mitigating work-family conflict and enhancing self-efficacy in the teaching profession.

Furthermore, and in line with the third hypothesis, family-work conflict mediated the relationship between organizational and social support and teaching self-efficacy. That is, the findings show that the degree of social and organizational support that teachers have access to has an effect on the degree of family-work conflict that they



experience, which in turn has an effect on their teaching self-efficacy. This finding is in line with related previous studies, indicating that family and organizational support are associated with a lower level of family-work conflict (French et al., 2018; Liao et al., 2019; van Daalen et al., 2006), and that family-work conflict mediates the association between characteristics of the work-environment and workers' psychological functioning (Chuang et al., 2024; Hong et al., 2021). Moreover, these findings have theoretical and practical implications in relation to the functioning of parent-teachers, and workers in general, in times of crisis that require lockdown and transition to remote work. Namely, the findings demonstrate the mechanism through which social and organizational support acts as a protective factor in remote work, through the reduction of conflict between work and family roles, leading to better psychological functioning at work. Thus, the findings emphasize the importance of strengthening support for teachers from various sources to ensure their mental well-being in remote teaching. Coping well with the challenges of lockdown and the transition to distance teaching during a pandemic may depend, in particular, on the degree of support that parent-teachers feel they receive from the school and the education system.

### **8.3 Challenges that parent-teachers faced while engaging in remote work**

The identification of the challenges faced by parent-teachers was done through the teachers' self-report and qualitative analysis of the main themes that arose in their responses to the question, "Describe the conflicts that you experienced between your family and work life during the lockdown.". The qualitative analysis helped identify the main challenges faced by parent-teachers and provides directions for intervention to raise their self-efficacy. These findings also provide a deeper understanding of the type of organizational and social support parent-teachers needed during the pandemic. The findings highlight various needs that parent-teachers had during the lockdown period. These include help in caring for their own children, flexibility and understanding on the part of the Ministry of Education and the school, instrumental and emotional assistance from the school, communities of professionals to share with and receive assistance from, receiving end devices, personal and family time, workload reduction, and greater organizational efficiency. Similar needs have been found in previous studies showing that parent-teachers needed more effective communication with their colleagues, assistance in interpreting educational tasks, and technological support for their children (Grobler, 2022; Mutch, 2022; Mutch & McKnight, 2023).

One of the issues that was very central to the difficulties experienced by teachers during this period was meeting the requirements of the administration and the system, as well as of the parents and students. These requirements included teaching many synchronous online classes, checking assignments, and maintaining constant personal contact with students, along with a lack of system flexibility about these requirements and a sense of lack of appreciation. In addition, teachers reported a very heavy workload. These findings are especially important in light of previous research that has shown that many workplace demands are associated with a higher level of work-family conflict (Nikmah et al., 2020).

At the same time, the parent-teachers also reported diverse coping mechanisms, from which it is possible to learn that frameworks should be created for the care of teachers' own children during a lockdown, promoting a more flexible and understanding position among schools and parents, creating a support system that provides assistance with digital devices (mostly laptops), as well as emotional support for teachers, and the creation of online professional communities for sharing challenges and ways of coping. It seems that these strategies would reduce the sense of burden that parent-teachers feel, reduce the work-family conflict and, in turn, increase teachers' sense of self-efficacy. These findings suggest, similarly to previous studies (Loezar-Hernández et al., 2023), that there is a need for policies to facilitate work-family reconciliation.

#### **8.4 Limitations and future research directions**

The study had various limitations, including a retrospective self-report design. Participants recalled their subjective experiences from remote teaching during the pandemic lockdown after the event had taken place. Data were collected at one time-point, rather than longitudinally. Thus, causality cannot be assumed, and longitudinal data are needed to examine these trends over time. Furthermore, a self-selection methodology was used in sample recruitment, possibly limiting the generalizability of the findings.

The data for this study was collected in the context of remote teaching among parent-teachers. Follow-up studies should examine whether parent-teachers have developed more effective coping mechanisms to deal with distance teaching since the pandemic lockdown, and whether parent-teacher support systems have improved over time. In addition, previous studies have shown that the relationship between social and organizational support and work-family conflict depends on cultural contexts (French, 2018). Therefore, follow-up studies should examine whether the challenges of remote teaching and parent-teachers' coping mechanisms are similar in different countries, in light of different policies in the education systems regarding remote teaching and learning. Another important research direction is to examine whether there are differences between teachers in their sense of conflict and in the relationship between the support that they receive and their self-efficacy as teachers and parents. In addition, to test the generalizability of the study findings, it is important to expand the study population and examine additional populations who work remotely, e.g., knowledge workers.

### **9 Summary and conclusions**

The findings of the study showed that teachers experienced a high level of work-family conflict during the lockdown period and that the level of conflict that they experienced was negatively related to their teaching self-efficacy. Social and organizational support were found to be associated with a reduction in parent-teacher conflict and a higher level of self-efficacy in parent-teachers' work. These findings indicate the potential importance of establishing a broad support system for instrumental and

emotional assistance for teachers in times of emergency, when there is a transition to distance teaching. In addition, the qualitative research findings shed light on the complexity of the experience of the conflict between work and family roles during the lockdown period, and on the factors that may assist teachers in dealing with this conflict in the future. This study contributes to understanding of the experiences of parent-teachers during emergency periods and the association with their self-efficacy as teachers. This understanding will help educators and decision-makers deal effectively, and in advance, with family-work conflict among teachers in preparation for remote teaching in general, and during emergency times, such as during epidemics, military conflicts, and natural disasters.

**Acknowledgements** This study was supported by the Chief Scientist Foundation, Ministry of Education [IL]. All the authors are the grant recipients.

**Funding** Open access funding provided by Open University of Israel.

**Data availability** The data will be available from the first author upon request.

## Declarations

**Ethical approval** The study was approved by the institutional ethics committee and by the Chief Scientist Ethics Committee, Ministry of Education.

**Consent for publication** The authors also declare that the manuscript has not been submitted simultaneously for publication elsewhere.

**Conflict of interests** The authors declare that they have no conflict of interest.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Abendroth, A., & Reimann, M. (2018). Telework and work–family conflict across workplaces: Investigating the implications of work–family-supportive and high-demand workplace cultures. *The work-family interface: Spillover, complications, and challenges* (pp. 323–348). Emerald Publishing Limited.
- Amri, A., Abidli, Z., Elhamzaoui, M., Bouzaboul, M., Rabea, Z., & Ahami, A. O. T. (2020). Assessment of burnout among primary teachers in confinement during the COVID-19 period in Morocco: Case of the Kenitra. *The Pan African Medical Journal*, 35(Suppl 2), 1–5. <https://doi.org/10.11604/PAMJ.SUPP.2020.35.2.24345>.
- Andhini, L. P. R., & Utami, N. M. S. N. (2022). Teacher's dilemma during Distance Learning: Work or/and family?(the important of work family conflict self-efficacy and spouse support). *Psikostudia: Jurnal Psikologi*, 11(2), 230–239.

- Bandura, A. (1994). Self-efficacy. In V. Ramachandran (Ed.), *Encyclopedia of human behavior* (4th ed., pp. 71–81). Academic.
- Barnett, R. C. (1998). Toward a review and reconceptualization of the work/family literature. *Genetic Social and General Psychology Monographs*, *124*(2), 152–184.
- Bilodeau, J., Marchand, A., & Demers, A. (2020). Work, family, work–family conflict and psychological distress: A revisited look at the gendered vulnerability pathways. *Stress and Health*, *36*(1), 75–87. <https://doi.org/10.1002/SMI.2916>.
- Central bureau of statistics Israel (2022). Births and Fertility in Israel, 2020. Retrived from: [https://www.cbs.gov.il/he/mediarelease/DocLib/2022/062/01\\_22\\_062b.pdf](https://www.cbs.gov.il/he/mediarelease/DocLib/2022/062/01_22_062b.pdf).
- Chakravorty, A., & Singh, P. (2021). Burnout among primary Government School teachers: The mediating role of work– family conflict. *Journal of Human Values*, *27*(2), 126–140. [https://doi.org/10.1177/0971685820953989/ASSET/IMAGES/LARGE/10.1177\\_0971685820953989-FIG2.JPEG](https://doi.org/10.1177/0971685820953989/ASSET/IMAGES/LARGE/10.1177_0971685820953989-FIG2.JPEG).
- Chitra, A. (2020). Study on Impact of Occupational Stress on job satisfaction of teachers during Covid-19 pandemic period. *Global Development Review*, *4*(2), 52–62.
- Chuang, Y. T., Chiang, H. L., & Lin, A. P. (2024). Information quality, work-family conflict, loneliness, and well-being in remote work settings. *Computers in Human Behavior*, 108149.
- Cinamon, R. G. (2009). Role salience, Social Support, and work—Family Conflict among jewish and arab female teachers in Israel. *Journal of Career Development*, *36*, 139–158.
- Cohen, S., & Wills, T. A. (1985). Stress, Social Support, and the Buffering Hypothesis. *Psychological Bulletin*, *98*(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>.
- Drori, Y. (1998). Multidimensional Scale for Social Support – Translation. *Unpublished Manuscript*.
- Drummond, S., O’Driscoll, M. P., Brough, P., Kalliath, T., Siu, O. L., Timms, C., Riley, D., Sit, C., & Lo, D. (2017). The relationship of social support with well-being outcomes via work–family conflict: Moderating effects of gender, dependants and nationality. *Human Relations*, *70*(5), 544–565. [https://doi.org/10.1177/0018726716662696/ASSET/IMAGES/LARGE/10.1177\\_0018726716662696-FIG1.JPEG](https://doi.org/10.1177/0018726716662696/ASSET/IMAGES/LARGE/10.1177_0018726716662696-FIG1.JPEG).
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>.
- French, K. A., Dumani, S., Allen, T. D., & Shockley, K. M. (2018). A meta-analysis of work-family conflict and social support. *Psychological Bulletin*, *144*(3), 284–314. <https://doi.org/10.1037/BUL0000120>.
- Friedman, I. A., & Kass, E. (2002). Teacher self-efficacy: A classroom-organization conceptualization. *Teaching and Teacher Education*, *18*(6), 675–686. [https://doi.org/10.1016/S0742-051X\(02\)00027-6](https://doi.org/10.1016/S0742-051X(02)00027-6).
- Gao, Y., Wang, Q., & Wang, X. (2024). Exploring EFL University teachers’ beliefs in integrating ChatGPT and other large Language models in Language Education: A study in China. *Asia Pacific Journal of Education*. <https://doi.org/10.1080/02188791.2024.2305173>.
- Gathot, F., Agung, A. A., Widyani, D., & Suardhika, I. N. (2022). Model of digital literacy and organizational support in determining teacher performance: An empirical study. *International Journal of Multidisciplinary Research and Analysis*.
- Geszler, N. (2016). Behaviour-based work-family conflict among Hungarian manager fathers. *Intersections East European Journal of Society and Politics*, *2*(3), 118–137.
- Ghislieri, C., Molino, M., Dolce, V., Sanseverino, D., & Presutti, M. (2021). Work-family conflict during the Covid-19 pandemic: Teleworking of administrative and technical staff in healthcare. An Italian study. *La Medicina Del Lavoro*, *112*(3), 229.
- Gibson, H., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, *76*(4), 569–582.
- Görmüş, A., & Baytur, M. (2023). Distance education and work–family conflict during COVID-19: Evidence from Turkey for a gender-moderated model. *International Review of Education*, *69*(5), 625–649.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, *10*(1), 76–88. <https://doi.org/10.5465/AMR.1985.4277352>.
- Guirguis, R. V., & Plotka, R. (2022). Strategies Supporting ECE Teachers’ Sense of Self-Efficacy. *HS Dialog: The Research to Practice Journal for the Early Childhood Field*, *25*(1). <https://doi.org/10.55370/hsdialog.v25i1.1380>.
- Hadad, S., Shamir-Inbal, T., & Blau, I. (2024). Pedagogical strategies employed in the emergency remote learning environment during the COVID-19 pandemic: The tale of teachers and school ICT coordinators. *Learning Environments Research*, 1–24. <https://doi.org/10.1007/s10984-023-09487-5>

- Hadad, S., Shamir-Inbal, T., Blau, I., & Leykin, E. (2021). Professional development of code and robotics teachers through small private online course (SPOC): Teacher centrality and pedagogical strategies for developing computational thinking of students. *Journal of Educational Computing Research*, 59(4), 763–791
- Haslam, D., Filus, A., Morawska, A., Sanders, M. R., & Fletcher, R. (2014). The work–family conflict scale (WAFCS): Development and initial validation of a self-report measure of work–family conflict for use with parents. *Child Psychiatry & Human Development*, 46:3(3), 346–357. <https://doi.org/10.1007/S10578-014-0476-0>. 46.
- Home, A. M. (1998). Predicting role conflict, overload and contagion in adult women university students with families and jobs. *Adult Education Quarterly*, 48(2), 85–97. <https://doi.org/10.1177/074171369804800204>.
- Hong, X., Liu, Q., & Zhang, M. (2021). Dual stressors and female pre-school teachers' job satisfaction during the COVID-19: The mediation of work-family conflict. *Frontiers in Psychology*, 12, 691498.
- House, J., Umberson, D., & Landis, K. (1988). Structures and processes of social support. *Annual Review of Sociology*, 14, 293–318.
- Kantamneni, N. (2020). The impact of the COVID-19 pandemic on marginalized populations in the United States: A research agenda. *Journal of Vocational Behavior*, 119, 103439. <https://doi.org/10.1016/J.JVB.2020.103439>.
- Kasperski, R., Porat, E., & Blau, I. (2023). Analysis of emergency remote teaching in formal education: crosschecking three contemporary techno-pedagogical frameworks. *Research in Learning Technology*, 31. <https://doi.org/10.25304/rlt.v31.2982>
- Kossek, E. E., Pichler, S., Bodner, T., & Hammer, L. B. (2011). Workplace social support and work-family conflict: A meta-analysis clarifying the influence of general and work-family-specific supervisor and organizational support. *Personnel Psychology*, 64(2), 289–313. <https://doi.org/10.1111/J.1744-6570.2011.01211.X>.
- Kulik, L., & Liberman, G. (2013). Work–family conflict, resources, and role set density: assessing their effects on distress among working mothers. <http://Dx.Doi.Org/10.1177/0894845312467500>, 40(5), 445–465. <https://doi.org/10.1177/0894845312467500>.
- Lange, M., & Kayser, I. (2022). The role of self-efficacy, work-related autonomy and work-family conflict on employee's stress level during home-based remote work in Germany. *International Journal of Environmental Research and Public Health*, 19(9), 4955.
- Liao, E., Y., Lau, V., P., Hui, R., Yin, T., Kong, K., & H. (2019). A resource-based perspective on work–family conflict: meta-analytical findings. *Career Development International*, 24(1), 37–73. <https://doi.org/10.1108/CDI-12-2017-0236/FULL/XML>.
- Liu, L. (2018). A review of Perceived Organizational support. *DEStech Transactions on Economics Business and Management*, 0(icsessed). <https://doi.org/10.12783/DTEM/ICSSSED2018/20255>.
- Lizana, P. A., & Vega-Fernandez, G. (2021). Teacher teleworking during the covid-19 pandemic: Association between work hours, work–family balance and quality of life. *International Journal of Environmental Research and Public Health*, 18(14), 7566.
- Loezar-Hernández, M., Briones-Vozmediano, E., Ronda-Pérez, E., & Otero-García, L. (2023). Juggling during lockdown: Balancing telework 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. <https://doi.org/10.3390/ijerph20064781>.
- Loscalzo, Y. (2021). The impact of workaholism and work engagement on distant learning and work-family conflict during the COVID-19 lockdown. *Amfiteatru Economic*, 23(58), 752–769. <https://doi.org/10.24818/EA/2021/58/752>.
- Mahpul, I. N., & Abdullah, N. A. (2011). *The prevalence of work-family conflict among mothers in Peninsular Malaysia / Irwan Nadzif Mahpul and Nor Azaian Abdullah*.
- Mutch, A. (2022). Teachers' experiences of parents' involvement in Foundation Phase learning during COVID-19. *Perspectives in Education*, 40(2), 17–31.
- Mutch, C., & McKnight, H. (2023). I couldn't do what I needed to do for my own family: Teacher-parents during COVID-19 lockdowns. *Social Sciences & Humanities Open*, 7(1), 100401.
- Rabaglietti, E., Latke, L. S., Tesauri, B., Settanni, M., & De Lorenzo, A. (2021). A balancing act during Covid-19: Teachers' self-efficacy, perception of stress in the distance learning experience. *Frontiers in Psychology*, 12, 1404. <https://doi.org/10.3389/FPSYG.2021.644108/BIBTEX>.

- Rasmitadila, Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *Online Submission*, 7(2), 90–109. <https://doi.org/10.29333/ejeecs/388>.
- Rockstuhl, T., Eisenberger, R., Shore, L. M., Kurtessis, J. N., Ford, M. T., Buffardi, L. C., & Mesdaghinia, S. (2020). Perceived organizational support (POS) across 54 nations: A cross-cultural meta-analysis of POS effects. *Journal of International Business Studies* 2020, 51:6(6), 933–962. <https://doi.org/10.1057/S41267-020-00311-3>. 51.
- Sanders, M. R., Morawska, A., Haslam, D. M., Filus, A., & Fletcher, R. (2013). Parenting and Family Adjustment Scales (PAFAS): Validation of a brief parent-report measure for Use in Assessment of Parenting skills and Family relationships. *Child Psychiatry & Human Development* 2013, 45:3(3), 255–272. <https://doi.org/10.1007/S10578-013-0397-3>. 45.
- Schieman, S., Badawy, P. J., Milkie, A., M., & Bierman, A. (2021). Work-life conflict during the COVID-19 pandemic. *Https://Doi.Org/10.1177/2378023120982856*, 7. <https://doi.org/10.1177/2378023120982856>.
- Schwartz, E., Shamir-Inbal, T., & Blau, I. (2023). Teacher prototypes in technology-enhanced instruction in elementary school second language acquisition: Comparing routine and emergency learning in different cultures. *Computers and Education Open*, 5, 100155. <https://doi.org/10.1016/j.caeo.2023.100155>
- Shamir-Inbal, T., & Blau, I. (2021). Facilitating emergency remote K-12 teaching in computing-enhanced virtual learning environments during COVID-19 pandemic-blessing or curse?. *Journal of Educational Computing Research*, 59(7), 1243–1271.
- Shaukat, S., Bendixen, L. D., & Ayub, N. (2022). The impact of technostress on teacher educators' work-family conflict and life satisfaction while working remotely during COVID-19 in Pakistan. *Education Sciences*, 12(9), 616.
- Shore, L., psychology, L. T. J., & of applied (1991). & undefined. (1991). A construct validity study of the survey of perceived organizational support. *Psycnet.Apa.Org*, 76(5), 637–643. <https://doi.org/10.1037/0021-9010.76.5.637>.
- van Daalen, G., Willemsen, T. M., & Sanders, K. (2006). Reducing work-family conflict through different sources of social support. *Journal of Vocational Behavior*, 69(3), 462–476. <https://doi.org/10.1016/J.JVB.2006.07.005>.
- Wang, P., Lawler, J. J., & Shi, K. (2010). Work-family conflict, self-efficacy, job satisfaction, and gender: Evidences from Asia. *Http://Dx Doi Org/10 1177/1548051810368546*, 17(3), 298–308. <https://doi.org/10.1177/1548051810368546>.
- Wang, X., Gao, Y., Sun, F., & Wang, Q. (2023). Unveiling the tapestry of teacher belief research: Tracing the present and forging the future through bibliometric analysis. *Current Psychology*, 1–14. <https://doi.org/10.1007/s12144-023-05546-5>.
- Weisberger, M., Grinshtain, Y., & Blau, I. (2021). How do technological changes in formal education shape the social roles of teachers who are mothers? *Teaching and Teacher Education*, 103, 103344. <https://doi.org/10.1016/j.tate.2021.103344>.
- Zard, A. (2019). *Teachers in the education system in Israel*.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale for perceived social support. *Journal of Personality Assessment*, 52(1), 30–41.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.