#### **RESEARCH ARTICLE**



# Work environment characteristics as determinants of work to family conflict among working females, Egypt

Hanaa A. Zayed 1 · Ibrahim Ali Kabbash 2 · Rania Moustafa El-Sallamy 1 · Sanaa Abd El-fatah Abdo 2

Received: 21 January 2021 / Accepted: 6 April 2021 / Published online: 12 April 2021 © The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2021

#### **Abstract**

Background Positive work environment is the corner stone for control and relief of work to family conflict (WFC).

**Objectives** To determine the prevalence work-family spillovers and to study the relations between them and work environment characteristics among full-time female employees at Tanta University Medical Campus.

**Participants and methods** A cross-sectional study was carried among female employees working in the five faculties that are present at Tanta University Medical Campus. A total of 442 female workers were recruited. Data were collected using a self-administered questionnaire including personal characteristics, work-related data, and home responsibilities. Job characteristics scales, work to family, and family to work spillovers scales were used to study their correlation.

**Results** Participants' mean age was  $39.87 \pm 10.07$  years. Approximately half of participants had moderate degrees of both positive and negative work to family and family to work spillovers. Significant positive correlation was detected between skills discretion and both of positive work to family and family to work spillovers (r = 0.361, r = 0.288, P = 0.0001, respectively); similar relations were reported regarding decision authority, coworkers' support, and supervisors' support. The negative work to family and family to work spillovers significantly increased by increasing in work demands (r = 0.0.315, r = 0.218, P = 0.0001, respectively). Significant and negative correlations were found between each of skills discretion and supervisors' support scales and the negative impact of family to work spillover (r = -0.130; P = 0.006, r = -0.167; P = 0.001, respectively).

**Conclusion** The prevalence of both positive and negative work to family and family to work spillovers was relatively high. Significant relations were detected between work-family spillovers and work environment characteristics regarding skills discretion, work demands, decision authority, coworkers, and supervisors' support.

 $\textbf{Keywords} \ \ \text{Work environment characteristics} \cdot \text{Work to family conflict} \cdot \text{Female employees}$ 

## Introduction

Family-friendly work environments help positive outcomes for workforces, motivating them at work and increasing positive mood at home too [Van Steenbergen and Ellemers 2009; Sanz-Vergel et al. 2015]. In contrast, non-motivating work

Responsible Editor: Lotfi Aleya

- Hanaa A. Zayed hanazayed55@yahoo.com
- Occupational Health and Industrial Medicine Unit at Public Health and Community Medicine Department, Faculty of Medicine, Tanta University, Tanta, Egypt
- Public Health and Community Medicine Department, Faculty of Medicine, Tanta University, Tanta, Egypt

atmospheres have been related to troubles in family that may lead to poor outcome of employee [Anand et al. 2014].

Roehling and her colleagues (Roehling et al. 2003) constructed three different models to describe the relationship between working and nonworking life spheres. These frameworks were the compensation theory states that dissatisfaction or failure in one area might be compensated for by satisfaction and success in another area; the segmentation theory focuses on keeping the emotions and stress factors of these two spheres independent from one another. These models also assume that there is no overlap or connection between work life and the private life. Contrary to this, spillover theory claims that experiences in one sphere influence the other sphere.

Work life and family life interact with each other; both positive and negative spillover can be present in people's lives, and they interact in both directions (work-to-family



and family-to-work) (Roehling et al. 2003; Greenhaus and Powell 2006).

Spillover, however, means much more than a simple causeand effect influence from one sphere to the other, but rather the phenomenon that "activities in one role can benefit an individual's activity in another role" (Grzywacz et al. 2007, p.561).

Supporting a positive spillover between work and family is consequently critical for health and welfare of employee [Carvalho and Chambel 2014; Russo 2015]. Role pressures from family and work fields are mutually incompatible and turn into stressors [Greenhaus and Beutell 1985].

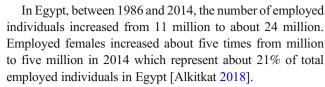
Job stress is progressively pointed to as one of the most serious occupational hazards that could potentially decrease workers' productivity, satisfaction, and increase turnover and absenteeism [Gianakos 2000]. Feeling unsecure due to poor working environment may be leading to job stress. Workfamily conflicts and work overload are a well-known cause of stress [Stamper and Johike 2003].

Stressors at work such as personal-professional conflicts and work overload are identified to generate boredom in work that spills over into the family [Fu and Shaffer 2001]. All over the world, women actively participate in work market to support their families' economy and to achieve their professional career.

Nearly all women employed in full-time work are energetic contributors in labor force. However, still preserving their customary roles and principal accountability for housework, childcare, possibly the care of the elderly parents, or any family member with special needs adding to stresses of work demands. Conflicts appear once performance in one role generates an incapability to perform the other role sufficiently [Ajala 2017].

Work-family-conflict (WFC) means the effect of work on the family, whereas family-work conflict (FWC) reports the effect of the family on the work activities [Fu and Shaffer 2001]. These conflicts have a serious negative effect on both women and work leading to decrease in work performance, job dissatisfaction, more psychological suffering, and high marital frustration [Ajala 2017]. Numerous studies stated that employed women have higher levels of family-work conflict than employed men, particularly women involved in management work [Apperson et al. 2002; Yavas et al. 2008].

Employed woman experiences contradicted role expectations between work and home. At work, she is anticipated to be energetic, dynamic, competitive, creative, and acts in a professional manner. At home, she is predicted to be sensitive, sweet, soft, and domesticated [Misra 1998]. These contradictions lead to family unhappiness and reduce the level of job performance among female employees. Consequently, loss at both sides will occur: the home and the workplace [Ajala 2017]. Correspondingly, as society is not isolated from any organizations and work place, this conflict will disturb the society in different ways: lower quality services and lower standards of performance.



Data about work to family conflict among working females is still insufficient in Egypt, so the objectives of this study were to determine the prevalence of work-family spillovers and to study the relations between them and work environment characteristics among full-time female employees at Tanta University Medical Campus.

## The study hypothesis

If full-time female employees at Tanta University Medical Campus are exposed to work-related stressors, that will be correlated with work-family spillovers.

# **Subjects and methods**

#### Type, time, and setting of the study

This cross-sectional study was conducted during September and October 2019 at Tanta University Medical Campus hosting five faculties: Medicine, Nursing, Dentistry, Pharmacy, and Faculty of Science. Communications were made with faculties' Deans to get their approval and cooperation.

## Study population and sampling

All female employees (n = 645) who were in service at Tanta University Medical Campus during the period of the study were our target population. Female employees with duration of work less than 1 year were excluded from the study. The sample size was calculated by utilizing the Epi Info software developed by CDC, Atlanta, Georgia, USA (Epi Info<sup>TM</sup> 7.2.2.6). 5. Criteria used for sample size calculation were 95% confidence limit, 5% margin of error, 80% power of the study, 50% expected prevalence of work-family spillovers among working females, and 1% design effect. The calculated sample size was 384 which was increased by 25% to compensate for nonresponse and incomplete data to be 480. The required sample was obtained from each faculty by convenience method. After the application of exclusion criteria (11 subjects) and formal consent from all subjects, the total number of study participants was 442 full-time female employees with a response rate of 94.24%. The main reason for nonparticipation was time constrains. The study was approved by Tanta Faculty of Medicine Research Ethics Committee (REC) and informed consent was obtained from all participants.



## Data collection and tools of study

Data was collected from all participants through:

- (1) A pre-designed self-administered questionnaire which included the basic demographic profile as age, qualifications, marital status, number of household members, duration of marriage, number off springs, monthly income, experience in current job, caring for a person with special needs, and home responsibilities.
- (2) Work to family and family to work spillover scales: to assess the work-family interface by evaluating 16 items adopted from psychosocial scales in the Midlife in the United States (MIDUS1) data sets, which is a national longitudinal study of health and well-being. Four distinct work-family spillover dimensions were assessed through the following scales [National Study of Health and Wellbeing 2004].
  - (a) Positive work to family spillover scale: included four questions ( $\alpha = 0.74$ ): "How often have you experienced each of the following in the past year? e.g., "The things you do at work help you deal with personal and practical issues at home." and "The things you do at work make you a more interesting person at home.""
  - (b) Negative work to family spillover scale: was measured by responses to four questions ( $\alpha = 0.84$ ): "How often have you experienced each of the following in the past year? e.g., "Your job reduces the effort you can give to activities at home." and "Stress at work makes your irritable at home."
  - (c) Positive family to work spillover scale: included four questions ( $\alpha = 0.73$ ): "How often have you experienced each of the following in the past year? e.g., "Talking with someone at home helps you deal with problems at work." and "Providing for what is needed at home makes you work harder at your job."
  - (d) Negative family to work spillover scale: was measured by responses to four questions ( $\alpha=0.81$ ): "How often have you experienced each of the following in the past year? e.g., "Responsibilities at home reduce the effort you can devote to your job." and "Personal or family worries and problems distract you when you are at work."

Response categories for each of these questions were rated on 5-point Likert scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, and 5 = all of the time.

(3) Job characteristics scales:

The work environment was operationalized by five job characteristic scales [National Study of Health and Wellbeing 2004].

- (a) Skill Discretion Scale: includes 3 questions ( $\alpha = 0.68$ ), e.g., "How often do you learn new things at work?" & "How often does your work demand a high level of skill or expertise?"
- (b) Decision Authority Scale: includes 6 questions (α = 0.85), e.g., "On your job, how often do you have to initiate things such as coming up with your own ideas, or figuring out on your own what needs to be done?" and "How often do you have a choice in deciding how you do your tasks at work?"
- (c) Job Demands Scale: includes 5 questions (α = 0.74), e.g., "How often do you have to work very intensively, that is you are very busy trying to get things done?" "How often do different people or groups at work demand things from you that you think are hard to combine?"
- (d) Coworker Support Scale: includes 2 questions ( $\alpha = 0.74$ ). "How often do you get help and support from your coworkers?" and "How often are your coworkers willing to listen to your work-related problems?"
- (e) Supervisor Support Scale: includes 3 questions ( $\alpha = 0.87$ ), e.g., "How often do you get the information you need from your supervisor or superiors?" and "How often do you get help and support from your immediate supervisor?"

Response categories for each of these questions were rated on 5-point Likert scale: 1 = all the time; 2 = most of the time; 3 = sometimes; 4 = rarely; 5 = never.

The mean time needed to completely fill-in the used questionnaire was  $15 \pm 3.53$  min.

## **Data management**

Data analysis was performed using Statistical Package for Social Sciences (SPSS) version 21. Qualitative data were presented as number and percent. Quantitative data were presented as mean and standard deviation (SD). Pearson's correlation was used to measure the strength and direction of the relationship between quantitative variables and the level of significance was adopted at  $p \le 0.05$ .

### **Results**

Four hundred forty-two full-time female employees (442) were recruited in this study with a mean age of  $39.87 \pm 10.07$  years and a mean duration of work was  $11.77 \pm 9.6$  years. Most of the participants (78%) had bachelor and diploma degrees and 79.2% were married. Approximately two thirds of them (64.6%) had 2 or 3 offsprings aged less than 20 years. The monthly income was not enough for more than



one half of participants (53.8%). Among participants, 82.4% were responsible for all home responsibilities and 33.7% had support for these responsibilities while 29.9% took care for a person with special needs (Tables 1 and 2).

According to the degree and impact of spillover of one role identity over the other, approximately half of participants had either moderate positive (52.9% and 51.6%) or moderate negative (50.5% and 48.0%) degree of work to family and family

 Table 1
 Sociodemographic characteristics of participants

Variables	Number $(n = 442)$	%	
Age in years			
20-	68	15.4	
30-	174	39.4	
40-	95	21.5	
50-60	105	23.8	
Qualifications			
Diploma	148	33.5	
Bachelor	197	44.6	
Master degree	38	8.6	
Doctorate degree	23	5.2	
Others	36	8.1	
Marital status			
Single	49	11.1	
Married	350	79.2	
Divorced	18	4.1	
Widow	25	5.7	
Number of household m	embers		
< 3	47	10.6	
3	93	21.0	
4	129	29.2	
5	109	24.7	
6+	64	14.5	
Duration of marriage in	years $(n = 393)$		
< 5	28	7.1	
5-	93	23.7	
10-	61	15.5	
15+	211	53.7	
Number of offspring (n :	= 393)		
0	25	6.4	
1	51	13.0	
2	151	38.4	
3	103	26.2	
4+	63	16.0	
Age of youngest sibling	in years $(n = 362)$		
≤ 2	67	18.5	
3–5	69	19.1	
6–12	97	26.8	
13–19	61	16.9	
20+	68	18.8	

 Table 2
 Work-related characteristics of participants

Variables	Number $(n = 442)$	%
Monthly income		
Not enough	238	53.8
Just enough	180	40.7
Enough and saving	24	5.5
Total experience in years		
< 5	53	12.0
5-	115	26.0
10-	100	22.6
15-	46	10.4
20+	128	29.0
Experience in current job		
< 5	101	22.9
5-	147	33.3
10-	72	16.3
15-	33	7.5
20+	89	20.1
Have house responsibilities		
None	15	3.4
Some	63	14.3
All	364	82.4
Caring for a person with special needs	132	29.9
Having support of house responsibilities	149	33.7
Having supportive family member in hard days	337	76.2
Need vacation to care for family member		
Many days	105	23.8
Sometimes	259	58.6
Rarely	78	17.6

to work spillovers, respectively. Approximately one third of female employees (34.6%) had high degree of positive family to work spillover while only 14% had high positive work to family spillover. Regarding job characteristics scales, more

Table 3 Distribution of participants by work-family-work conflict severity and work characteristics

Variable	Low		Moderate		High	
	n	%	n	%	n	%
Positive work to family spillover	146	33.0	234	52.9	62	14.0
Negative work to family spillover		33.3	223	50.5	72	16.3
Positive family to work spillover		13.8	228	51.6	153	34.6
Negative family to work spillover		44.3	212	48.0	34	7.7
Skills discretion		25.6	247	55.9	82	18.6
Decision authority		43.4	207	46.8	43	9.7
Work demands		20.4	307	69.5	45	10.2
Coworker support		19.5	265	60.0	91	20.6
Supervisor support		22.6	235	53.2	107	24.2



Table 4 Correlation of age, number of children, and income with work-family conflicts and work characteristics among participants

Variables	Age in years		Number of children		Monthly income	
	r	p	$\overline{r}$	p	r	p
Positive work to family spillover	0.076	0.112	0.103	0.041*	0.042	0.384
Negative work to family spillover	- 0.081	0.088	0.003	0.954	-0.102	0.032*
Positive family to work spillover	- 0.034	0.477	0.030	0.551	0.046	0.335
Negative family to work spillover	-0.095	0.045*	0.045	0.378	0.020	0.671
Skills discretion	-0.037	0.438	0.036	0.482	0.040	0.399
Decision authority	-0.003	0.955	0.052	0.301	0.169	0.001*
Work demands	-0.093	0.051	0.025	0.624	-0.075	0.114
Coworker support	0.001	0.992	0.024	0.632	0.015	0.758
Supervisor support	- 0.046	0.336	- 0.029	0.563	0.007	0.889

<sup>\*</sup>Statistically significant

than half of participants (55.9%) had moderate degree of skills discretion and 43.4% reported to have low degree of decision authority in planning their work environment. Moderate level of work demands was reported by 69.5% and 60% reported moderate degree of coworkers and colleague support while 53.2% of female employees reported moderate supervisors and management support (Table 3).

A significant positive correlation was detected between positive work to family spillover and number of children of participants (r = 0.103, P = 0.041). A significant negative correlation was shown between negative work to family spillover and monthly income of participants (r = -0.102, p = 0.032). Negative family to work spillover was significantly decreased as the age of participants increased (r = -0.095, p = 0.045). Significant positive correlation was found between decision authority at work and monthly income (r = 0.169, p = 0.001) (Table 4).

A significant good positive correlation was observed between positive work to family spillover and skills discretion (r = 0.361) and decision authority (r = 0.362). On the other hand, there was a weak significant positive correlation between work to family spillover and coworker support and supervisor support (r = 0.163 and 0.157, respectively). Negative work to

family spillover significantly correlated with work demand (r = 0.315, p = 0.001). Positive family to work spillover showed a good positive significant correlation with all work characteristics except for work load. Negative family to work spillover showed a significant negative correlation with both skills discretion (r = -130) and supervisor support (r = -0.167). The correlation between negative family to work spillover was significantly positive for work demands (r = 0.218) (Table 5).

#### **Discussion**

The present study reported that negative family to work spillover was significantly decreased as the age of female employees increased. This result was concurrent with a study conducted by Winslow (2005) who found that older parents suffer less work-family conflict than younger ones. This may be because older parents usually possess more resources as experience and financial support to deal with various duties of both work and family. Another explanation could be due to their established and more stable positions in their lives and are economically more independent than younger parents are.

**Table 5** Correlation between work characteristics and familywork conflict among studied female employees

Variables	Positive work to family spillover		Negative work to family spillover		Positive family to work spillover		Negative family to work spillover	
	r	p	r	p	r	p	r	p
Skills discretion	0.361	0.001*	0.007	0.883	0.288	0.001*	- 0.130	0.006*
Decision authority	0.362	0.001*	- 0.019	0.692	0.249	0.001*	0.086	0.071
Work demands	0.023	0.631	0.315	0.001*	0.046	0.330	0.218	0.001*
Coworker support	0.163	0.001*	0.010	0.841	0.238	0.001*	0.059	0.212
Supervisor support	0.157	0.001*	- 0.072	0.133	0.207	0.001*	- 0.167	0.001*

<sup>\*</sup>Statistically significant



Consequently, the increase in the age of parents may be associated with a decrease in work-family conflict.

In the present study, a significant positive correlation was detected between skills discretion and both of positive work to family and family to work spillovers. Similar relations were also reported regarding other job characteristics scales that included decision authority, coworker support, and supervisor support. We stated that the negative work to family and family to work spillovers significantly were increased by increasing work demands. Significant and negative correlations were found between each of skills discretion and supervisor support scales and the negative family to work spillover. These findings were supported by Taylor et al. (2009) who found that supervisor support, climate of work, and job characteristics impact work-family conflict.

Establishments can aid employees to recognize a positive spillover between work and family. They can provide job resources such as sense of control, job autonomy, coworker, and supervisor support [Barnett and Hyde 2001; Odle-Dusseau et al. 2012]. In the current study, a significant positive correlation was detected between decision authority scale items as (e.g., control the amount of time you spend on tasks) and positive work to family and family to work spillovers.

The negative work to family spillover significantly increased by an increase in work demands. These results were in line with other studies that indicated that employees applying such work arrangements as malleable schedules found to be more satisfied in their work and experienced less workfamily conflict and that their time and relations with their children had improved [Lee et al. 2002].

Demands of work and resources, for example, the number of worked hours and time limitations, are important causes connecting to work-family conflict. It is consequently important for establishments to not only encourage flexibility as work hours and schedules, but also promote other forms of employee autonomy (employees have to decide how, when, and where they do their work with self-control on the job) that would assist employees to manage their work-family conflict [Voydanoff 2004].

A study by Voydanoff (2004) reported that work demands are predictable to be salient in influencing work-family conflict principally the work interference with the family dimensions because they accompanied by processes that hinder the performance of family roles needed for contribution in family activities [Voydanoff 2004].

This study showed a significant positive correlation between positive work to family spillover and supervisor support. These findings supported by previous researches on supervisor support and work-family enrichment. Authors reported that a family supportive supervisor appears to increase employees' energy, enthusiasm, and positive attitude at work, which empowers employees to transfer knowledge and learned skills at work to their families. Supportive supervisor

look to aid establishments to produce high engaging work environments and create atmospheres of psychological satisfaction among employees [Siu et al. 2010; Straub et al. 2017].

#### Limitations

These data were cross-sectional; accordingly, it is important for future research to longitudinally study the determinants and consequences of both positive and negative spillovers for the individual, her family members, and the individual's performance at work. Also, our data were self-reported. So, it will be important for further research to rule out the probability that the correlations we found were due to commonmethod variance. The non-probability sampling technique limited our result generalization.

#### **Conclusion**

The prevalence of both positive and negative work to family and family to work spillovers was relatively high. Significant positive correlation was detected between work characteristics as skills discretion, decision authority, coworker support, and supervisor support and both of positive work to family and family to work spillovers. Negative work to family and family to work spillovers significantly increased by increasing in work demands. Significant and negative correlations were found between each of skills of discretion and supervisor support scales and the negative impact of family to work spillover.

#### Recommendations

Work-family conflict can be reduced through creating family supportive and comfortable work environments, as flexible work schedules, child and elder care services, adjustment of work demands, enforcement of decision authorities, skills discretion, and supervisor and co-worker support.

Author contribution Hanaa Abdelaziz Zayed participated in data collection, statistical analysis and was a major contributor in writing and revision of the manuscript. Ibrahim Ali Kabbash was responsible for the concept of the paper, statistical analysis of data and shared in writing and revision of the manuscript. Rania Moustafa El-Sallamy participated in data collection, statistical analysis and writing of the paper. Sanaa Abd El-fatah Abdo was a major contributor in preparation of questionnaire and data collection.

Availability of data and materials Not available.

#### **Declarations**

**Ethical approval** This study was approved by Tanta Faculty of Medicine Research Ethics Committee (REC).



**Consent to participate** Formal written consent was taken from all study participants.

Consent for publication Not applicable.

**Conflict of interest** The authors declare no competing interests.

### References

- Ajala E M (2017). Work-family-conflict and family-work-conflict as correlates of job performance among working mothers: implications for industrial social workers. African Journal of Social Work, 7 (1).52-62. Available at https://www.ajol.info/index.php/ajsw/article/view/160530. Accessed on March 9-2020
- Alkitkat H (2018) Egyptian female labor force participation and the future of economic empowerment. Springer Briefs Polit Sci. https://doi.org/10.1007/978-3-319-59644-0 1
- Anand S, Vidyarthi P, Singh S, Ryu S (2014) Family interference and employee dissatisfaction: do agreeable employees better cope with stress? Hum Relat 68:691–708. https://doi.org/10.1177/0018726714539714
- Apperson M, Schmidt H, Moore S, Grunberg L, Greenberg E (2002) Women managers and the experience of work- family conflict. Am J Undergrad Res 1:9–16
- Barnett RC, Hyde JS (2001) Women, men, work, and family: an expansionist theory. Am Psychol 56:781–796
- Carvalho VS, Chambel MJ (2014) Work-to-family enrichment and employees 'wellbeing: High performance work system and job characteristics. Soc Indic Res 119:373–387. https://doi.org/10.1007/s11205-013-0475-8
- Fu CK, Shaffer MA (2001) The tug of work and family; direct & indirect domain specific determinants of work-family conflict. Pers Rev 3(5):502–522
- Gianakos I (2000) Gender roles and coping with work stress. Sex-Roles 42(11-12):1059–1079
- Greenhaus JH, Beutell NJ (1985) Sources of conflict between work and family roles. Acad Manag Rev 10:76–88
- Greenhaus JH, Powell GN (2006) When work and family are allies: a theory of work-family enrichment. Acad Manag Rev 31(1):72–92
- Grzywacz JG, Arcury TA, Mårin A, Carrillo L, Burke B, Coates ML et al (2007) Work-family conflict: experiences and health implications among immigrant Latinos. J Appl Psychol 92(4):1119–1130
- Lee MD, MacDiarmid SM, Williams ML, Buck ML, Leiba-O'Sullivan S (2002) Contextual factors in the success of reduced-load work arrangements among managers and professionals. Hum Resour Manag 41:209–223
- Misra P (1998) Predictors of work-family conflict among Indian women. Indian J Psychol 25(1):13–19

- National study of Health and Wellbeing: Documentation of scales in MIDUS I. Midlife in the United States. University of Wisconsin, Institute on Aging. March 2004. Available at: http://www.midus.wisc.edu/midus1/documentationofscales.pdf. Accessed on 30 April 2019
- Odle-Dusseau HN, Britt TW, Greene-Short Ridge TM (2012) Organizational work family resources as predictors of job performance and attitudes: the process of work-family conflict and enrichment. J Occup Health Psychol 17:28–40. https://doi.org/10.1037/a0026428
- Roehling P, Moen P, Batt R (2003) Spillover. In: Moen P (ed) It's about time: Couples and careers. Cornell University Press, Ithaca, pp 101–121
- Russo M (2015) Work–home enrichment and health: an analysis of the mediating role of persistence in goal striving and vulnerability to stress. The International Journal of Human Resource Management, 26. Retrieved from: 10.1080. Accessed on May 20- 2020
- Sanz-Vergel AI, Rodreguez-Muoz A, Nielsen K (2015) The thin line between work and home: the spillover and crossover of daily conflicts. J Occup Organ Psychol 88(1):1–8. https://doi.org/10.1111/ joop.12075
- Siu O, Lu J, Brough P, Bakker AB, Kalliath T, O'Driscoll MP, Shi K (2010) Role resources and work-family enrichment: the role of work engagement. J Vocat Behav 77:470–480. https://doi.org/10.1016/j. jvb.2010.06.007
- Stamper LC, Johike CM (2003) The impact of perceived organizational support on the relationship between boundary spanner role stress and work out comes. J Manag 29:569–588
- Straub C, Beham B, Islam G (2017) Crossing boundaries: integrative effects of supervision, gender and boundary control on work engagement and work to-family positive spillover. Int J Hum Resour Manag. https://doi.org/10.1080/09585192.2017.1340324 Accessed on May 30 -2020
- Taylor R, Delcampo, Blancero (2009) Work-family conflict/facilitation and the role of work place supports for U.S Hispanic professionals. J Organ Behav 30:643–664. https://doi.org/10.1002/job.605
- Van Steenbergen EF, Ellemers N (2009) Is managing the work–family interface worthwhile? Benefits for employee health and performance. J Organ Behav 30:617–642. https://doi.org/10.1002/job.569
- Voydanoff P (2004) The effects of work demands and resources on workto family conflict and facilitation. J Marriage Fam 66(2):398-412
- Winslow S (2005) Work-family conflict, gender, and parenthood, 1977-1997. J Fam Issues 26:727–755
- Yavas U, Babakus E, Karatepe OM (2008) Attitudinal and behavioral consequences of work-family conflict and family-work conflict does gender matter? Int J Serv Ind Manag 19(1):7–31

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

