Understanding How Social Support Alleviates Work Interference with Family Among Faculty

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Abstract: *Research on work-interference-with-family (WIF) has grown rapidly over the past few decades. Despite efforts to reduce it, WIF continues to be a challenge for society, including university faculty. The buffering effects of three forms of social support (mentoring, climate of inclusiveness, and perceived organizational support) on WIF are examined, and gender differences in such effects assessed. Following an action research strategy, a sample of 135 full-time faculty participated in a project designed to explore the nature of the work setting and its relationship to important outcomes for faculty. The three forms of social support are seen to buffer the effects of WIF on organizational citizenship behavior, stress, and intention to leave. Implications for policies regarding enhancing social support and reducing WIF are discussed.*

Keywords: inclusiveness, perceived organizational support, buffering model, work interference with family (WIF), social support

Introduction

Employment enhances people's lives by providing a source of income and opportunities to improve self-esteem, interact with others, and

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contribute to society. However, people are challenged to meet competing demands and priorities of life and work in a context of limited time and resources. Many professionals are often "on" 24/7 schedules and face increasing time conflicts (Gerdenitsch et al., 2015; Greenhaus & Buetel, 1985; O'Toole & Lawler, 2006). Bond et al. (2002) showed that the combined workweeks of dual-career couples increased from 81 hours in 1977 to 91 in 2002; some reported working more than 100 hours per week. Among faculty, the evidence suggests time spent on both teaching and research has increased over the past few decades (Milem et al., 2000) to more than 60 hours per week by one estimate (Ziker et al., 2014). Despite ongoing research on work life balance (Powell et al., 2019; Sirgy & Lee, 2018), and the implementation of many policies to help employees meet these challenges (Kelly et al., 2014), WIF persists as a cultural reality. Employees continue to have problems balancing the pursuit of work and life goals (Dilmaghani & Tabvuma, 2019; Greenhaus & Allen, 2011; Sandburg & Grant, 2015). Moreover, in the context of the COVID-19 pandemic, women have suffered disproportionately (Amano-Patiño et al., 2020; Cardel et al., 2020, Gabster et al., 2020; Kramer, 2020).

Often referred to as work-life conflict or work-family conflict, this struggle to meet competing work and family priorities is a societal problem. With the increase in single working parents and dual-career couples, technology that blurs the boundary between work and non-work, including working from home, and global integration that requires working at odd hours, pressures to be engaged with work at the expense of life are ever-present (Kelliher et al., 2019; Mesmer-Magnus & Viswesvaran, 2006). The minimization of such conflicts is called work-life balance (Kelliher et al., 2019). Frone et al. (1992) was among the first to recognize that this issue is composed of two separate, but related issues: work interference with family (WIF) and family interference with work (FIW). The flip side of WIF/FIW is a complementary relationship between work and family; Grzywacz and Marks (2000) refer to this as positive spillover from work to family (PSWF) and positive spillover from family to work (PSFW). For example, a working parent may appreciate the time with their children in the evening after the opportunity to speak to adults all day at the office and feel good at work because they can balance work and life as good parents (Milkie et al., 2010).

Like other professionals, women in science, technology, engineering and math (STEM) also struggle with WIF (Berebitsky & Ellis, 2018; Kelly & McCann, 2019). "Although women comprise a significant and growing fraction of the U.S. STEM talent pool, recent studies demonstrate the adverse effects of attempting to balance the often extreme demands of career and life without adequate institutional support" (p. 1, National Science Foundation; NSF, 2011). The National Science Foundation ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (NSF ADVANCE) program (ADVANCE, 2019) is part of the NSF's Career-Life Balance Initiative. The aim is to address this challenge by funding universities to develop gender-neutral, family-friendly policies and practices, with the goal to increase the placement, advancement, and retention of women in STEM disciplines, particularly women who are seeking tenure in academe.

This research was funded by an NSF ADVANCE grant (#1409118), with the goal of providing a systematic institutional self-assessment on work experiences that could be explored to identify issues impeding the recruitment, retention, and promotion of women faculty in the STEM disciplines. This project collected information on both male and female faculty and served as the basis for an action plan (Argyris, 1993; Thompson, 1967) to transform the institutional climate (Chung et al., 2020; Härtel & Ashkanasy, 2010; Nishii & Rich, 2013; Shore et al., 2018). As part of this project, workplace context issues were explored in focus groups for qualitative purposes. These groups highlighted work interference with family (WIF) as a top complaint voiced by female STEM faculty. This is interesting because faculty work is flexible, a factor research suggests prevents WIF from arising (Halinski & Duxbury, 2020). That WIF would be a concern in this sample suggests that WIF is an intractable stressor; it is present even with high flexibility, as a societally embedded problem. As such, the current study sought to examine how the experiences of this unique sample of faculty men and women fit with the knowledge base on stress dynamics, in which WIF is the primary stressor.

Past research on stress suggests that social support is an important factor that helps people cope with and manage stress (Cohen & Wills, 1985). Given this, the current research focuses on three manifestations of social support in the work setting (Yousaf et al., 2020): mentoring, group

inclusiveness, and perceived organizational support (POS), as will be discussed in the next few sections.

Literature Review

A review of the literature on social support highlights its central role not only in the work setting, but in life more generally. Individuals use forms of social support as resources to support their efforts to be successful and satisfied with their work and relationships. Originally outlined by Cobb (1976) and elaborated by Cohen and Wills (1985), social support is hypothesized to have buffering effects, in that it mitigates the effects that stress has on psychological health when individuals experience high levels of stress. The buffering approach has extensive past and present research history (Kim et al., 2017; Li et al., 2021; Portoghese et al., 2017; Pow et al., 2017; Praharso et al., 2017; Szkody & McKinney, 2019; Yousaf et al., 2020). Specifically, we examine possible buffering effects of POS, mentoring, and inclusiveness as factors explaining variance in employee intention to leave, organizational citizenship, and stress.

Defining Social Support

While the construct of social support has been researched for its beneficial effects on health and well-being for many years (e.g., Caplan, 1974; Kaplan et al., 1977; Sarason & Sarason, 1985), the conceptual definition of it has evolved over time (Fenlason & Beehr, 1994). In general, it is thought to be the experience that one is valued, loved, cared for, and a part of a mutually supportive network (Wills, 1991). Early conceptualizations suggest social support takes four forms: *esteem support*, *informational support*, *social companionship*, and *instrumental support*. Definitions outlined by Cohen and Wills' (1985) seminal work, and further supported by Cutrona and Russell (1990), are as follows: *Esteem support* provides one with the sense of being valued, accepted, and validated. *Informational support* provides intellectual understanding, definition, and interpretation of the environment to facilitate one's effectiveness. *Social companionship* takes the form of affiliative activities, such as sharing leisure and recreational time, which promote positive affect or distract one from the stressor. *Instrumental support* provides material aid or resources, in some tangible form (Cohen & Wills, 1985; Cutrona & Russell, 1990). More recent work has focused on

a simplified, two-dimensional conceptualization of *emotional* and *instrumental* support (Ducharme & Martin, 2000).

A key aspect on which researchers agree is that the various types of social support co-occur (Cohen & Wills, 1985; LaRocco et al., 1980). In any particular supportive interaction, the provider is likely to present a multi-modal array of support types. For a faculty member experiencing WIF, a colleague may commiserate with them over a cup of coffee (esteem support, social companionship, and emotional support), advise them on human resource policies (informational support), and share a syllabus for a new class (instrumental support).

More recent research has moved away from specific types of social support to focus on identifying various sources (Fenlason & Beehr, 1994). Researchers generally agree that sources of social support include co-workers, supervisors, and family/friends (Byron, 2005; Irak et al., 2020; Kaufman & Beehr, 1986). The current study expands applications of social support to consider forms that relate to the work setting (Irak et al., 2020; Kim et al., 2017), in which support is viewed as a resource that comes from different sources. Thus, the current study aims to test three workplace sources of social support: mentoring (Kram, 1985), inclusiveness (Shore et al., 2018), and perceived organizational support (Eisenberger et al., 1997).

Mentoring

Mentoring refers to a process in which an experienced, senior person formally or informally advises and advocates for their protege, who benefits from the insights, tips, and career suggestions that arise from the relationship (Kram, 1985). The mentee accrues benefits such as enhanced job performance, early career socialization, and career advancement (Ragins, 2016; Ragins et al., 2000; Scandura & Williams, 2004). As a form of social support, mentoring is a dyadic interpersonal relationship, and a proximal feature of the social support system. It can include any number of aspects of social support, as delineated above (emotional, instrumental, informational, esteem; Cohen & Wills, 1985; Ducharme & Martin, 2000; Sandager, 2021).

Inclusiveness

Workplace inclusiveness encompasses a variety of constructs (Shore et al., 2018). The most relevant for the present study is the individual's experience of work group level inclusiveness, which refers to a sense that one is welcome, respected, and accepted (Brewer, 2005). Developing a positive work setting (Härtel & Ashkanasy, 2010) is consistent with many elements of social support, including social companionship, emotional, and informational (Cohen & Wills, 1985; Cutrona & Russell, 1990). In the work setting, inclusiveness is a source of social support more distant and less personal than mentoring. It is a source of support from the group of people in the immediate task environment, related to daily interactions. It could provide a variety of types of social support (e.g., instrumental, esteem, emotional, informational).

Perceived Organizational Support

At an organizational level, perceived organizational support (Eisenberger et al., 1997) is more abstract and distal compared to mentoring and inclusiveness. Reflecting a perception of the administration that might be aggregated from various personal and vicarious experiences (Eisenberger et al., 1997), perceived organizational support encompasses informational and instrumental forms of support. As a representation of the broader organizational setting, it reflects the most distal manifestations of support included here.

The Fundamental Importance of Social Support

It has been suggested that humans have a basic need to feel included (Williams et al., 2005), which, when met, enhances organizational effectiveness (Afsar et al., 2018; Leana & Rousseau, 2000; Pfeffer, 2008). The need to be a part of a community may be innate; alternatively, humans may be highly prepared to learn a relationship between inclusiveness and anxiety (Baumeister & Tice, 1990; Bowlby, 1982). This relationship is relevant in the work setting as individuals become attached to their workgroups (Bowlby, 1982; Smith et al., 1999) and experience benefits from those relationships.

For the individual employee, social support is manifested in various ways in the work context, across time, and becomes integrated into a

working cognitive model of beliefs and expectations (Bowlby, 1982; Smith et al.,1999) held by the individual about their lives in their work environments. This working model affects how an individual interprets and reacts to events (Leary, 1990), and affects decisions about behaviors to engage in for effective management of the work environment (Williams, 2007). The current research examines the dynamics these cognitions and related affect and behavior by applying and assessing the buffering hypothesis (Cohen & Wills, 1985).

Social Support: The Buffering Hypothesis

The premise of the buffering hypothesis is that social support interacts with the level of stressor to predict psychological and behavioral reactions. It blunts the negative effects of stress such that those who experience sufficient social support under challenging events (such as high WIF) will have outcomes more like those who are not in that challenging context (Cassel, 1976; Cobb, 1976; Cohen & Wills, 1985; LaRocco et al., 1980). Research on WIF has not addressed the idea that WIF is an intransigent stressor in the environment, nor that its effects might be mitigated by social support. Findings on buffering effects are mixed (Brown et al., 1987; Chisholm et al., 1986; Cohen & Wills, 1985; Praharso et al., 2017), although it continues to be examined and usefully applied (Kim et al., 2017; Mackin et al., 2017; Portoghese et al., 2017; Pow et al., 2017). This indicates that additional research is needed to understand the dynamics by which social support interacts with stressors such as WIF to affect important employee outcomes. The current study is an important step forward in understanding and managing the effects of WIF.

Employee Responses to WIF: Organizational Citizenship, Stress, and Intention to Leave

There are many reviews of the work-life interplay (Budhiraja & Kant, 2020; Byron, 2005). The work-life balancing act has been theorized to interact in such a way that there are both positive and negative effects of work and life (Grzywacz & Marks, 2000). That is, work can negatively affect life (work interferes with family, WIF), as the demands of work detract from time and energy devoted to one's family and life. Life might negatively affect work (family interferes with work; FIW), as problems at home cause negative affective reactions and distract employees. Work

can positively affect life, with enhanced security, opportunities to enhance esteem, and transfers of skills to life outside of work (positive spillover work to family, PSWF). Life can positively affect work, with warm, secure home-lives providing foundations of support to employees (positive spillover family to work; PSFW). Research on this topic highlights the role of WIF as the most problematic and relevant concept in this area of study (Major et al., 2002).

To examine the problem of WIF, social support may be a promising avenue. Work and family are inherently social, involving social norms and socially-focused goals nested in work and family communities. These communities create and adjust norms to accommodate the existence of the other (Pfeffer, 2008) over time in a dynamic flow (Emirbayer, 1997). Employee work experiences are a complex interaction of cognitions and affective responses. Outcomes to be examined here include organizational citizenship (Organ, 1997; Smith et al., 1983), intention to leave (Maertz & Campion, 1998), and stress (Cohen & Wills, 1985).

Stress: An Affective Response to WIF

It has long been known that stress has significant physical consequences for employees, such as cardiovascular disease (Milczarek et al., 2009), sleep disturbances (Pow et al., 2017), and early mortality (McEwen & Gianaros, 2010), to name a few. A growing literature on telomeres, the protective caps at the ends of chromosomes, reveals that stress causes attrition that compromises cell replication in a way that parallels biological aging (Chmelar et al., 2017; Liu et al., 2017). Feeling stressed by adversities and negative life events begins a negative health sequence of physiological consequences including inflammation and metabolic stress that reduces telomere length (Liu et al., 2017). Given WIF as an intractable problem that is challenging to manage, employee stress is a key affective reaction to include in the study. Based on this literature, it is hypothesized that:

> H1: WIF and social support, in the forms of POS, mentoring, and inclusiveness, will interact to predict stress responses, such that stress will be highest for those who experience high WIF and low social support, simultaneously.

Intention to Leave: A Cognitive Response to WIF

When employees leave an organization, the organization incurs many costs, including lost organizational knowledge, costs of recruiting and hiring a new person, and expenses associated with lost productivity. Not only are the remaining employees short-handed, but they may be distracted by the departure, or affected by the disorganized situation (Maertz & Campion, 1998; Watlington et al., 2010). Of course, such expenses are offset by short-term savings in salary and benefits, but these are trivial (cf., Leana & Rousseau, 2000). Turnover intentions are strongly related to actual turnover and are considered a good surrogate measure (Griffeth et al., 2000; Hom et al., 2017). The dynamic of social support may affect the cognitions regarding options and present versus future situations in the current organization compared to alternatives. WIF, as a stress feature, may be a factor that drives such comparisons. Thus, it is hypothesized that:

> H2: WIF and social support, in the forms of POS, mentoring, and inclusiveness, will interact to predict intention to leave, such that intention to leave will be highest for those who experience high WIF and low social support, simultaneously.

Organizational Citizenship: A Behavioral Response to WIF

Organizational citizenship behavior refers to activities and behaviors employees engage in which facilitate the work of others in a cooperative, flexible way. Such behaviors are not delineated as part of an employee's job description, but rather are voluntary, or discretionary. Organizational citizenship behaviors can be thought of as a manifestation of the individual employee's response to the environment in which they work, revealing how an employee is managing their situation. Early work on the construct suggested that such behaviors fell into five basic categories, including: *altruism, compliance, sportsmanship, courtesy,* and *civic virtue* (Organ & Konovsky, 1989). Later, Organ (1997) suggested there are three primary components: Altruistic behaviors are better thought of as *Helping* behaviors; these serve other employees as individuals. *Courtesy* includes behaviors serving to prevent problems in the system, such as giving advance notice about being unable to come to work. *Organizational behaviors* are those activities that serve the broader system by conserving resources or showing support for the system. They

enhance the social and psychological context of the workplace and facilitate its smooth functioning (Organ, 1997; Smith et al., 1983). Some examples of citizenship behaviors include helping new employees, covering or filling in for sick coworkers, bringing in food, and organizing social activities, to name a few.

From an organizational perspective, these behaviors have significant implications for the functionality of the organization in general. Citizenship behaviors reflect an element of job performance that complements task performance (Organ, 1997). They are related to the effective functioning of the organization overall because they facilitate achieving goals and fulfilling needs that might not otherwise be addressed in the formal organizational structure (Organ & Konovsky, 1989; Smith et al., 1983). It is important to note that OCB are optional and not in the job description per se. As such, employees may make choices about where to expend effort, and be more likely to withhold those efforts under situations where they experience low social support. Based on this, the following hypothesis is proposed:

> H3: WIF and social support, in the forms of POS, mentoring, and inclusiveness, will interact to predict OCB, such that OCB will be lowest for those who experience high WIF and low social support, simultaneously.

Method

Participants

Full-time faculty at a small, private, Midwestern university were surveyed on their work experiences. The recruiting effort emphasized that this was an NSF-ADVANCE funded effort, and that their engagement would benefit not only them but also contribute to extant knowledge of the faculty work experience. All full-time faculty were invited to take the survey; 143 faculty members participated. After removing those with incomplete data on one or more of the measures, the total sample was 135, representing a 38% response rate. The sample consisted of 44% men and 56% women; 71% of the sample identified their ethnic background as White/Caucasian, 5% identified as Asian/Pacific Islander, 4% identified as African American, 4% identified as Arab/Middle Eastern, less than 1% identified as Native

American/Native Alaskan, and 16% selected "prefer not to respond" or "other". Almost two thirds, 65%, were tenured, with 22% tenure track and 13% non-tenure-track. The average age was 50.7 years, with a standard deviation of 10.2 years.

Procedures

This research project was conducted in compliance with the protocols outlined in the NSF grant # 1409118 in a manner approved by the institutional review board at the institution. The goal of this grant is to assess the work climate of the university faculty and make recommendation for improvement based on information collected by survey. Activities began with the development and distribution of a survey, which was followed by an initial round of data cleaning and analysis to provide a summary of the results to various faculty committees and administrators. Specifically, participants were recruited to take part in the online survey sent via an email in which the purposes of the research were outlined, and the anonymization and voluntary nature of participation were emphasized. The email noted there was a small incentive of a $10 credit to a popular online retailer. Two follow up reminders were also sent.

Measures

In addition to gathering demographic data and other job-related information, the survey assessed a variety of factors related to the work experience. Seven-point response scales were used for all the measures, in which 1: Strongly Disagree and 7: Strongly Agree, except for the stress measure, which was a seven-point frequency scale, as noted below. All scales were coded such that higher scores reflected higher levels of the relevant construct.

Work-interference with Family (WIF)

WIF was assessed using Grzywacz and Marks' (2000) four item assessment. Sample items are, "Stress at work makes me irritable when I am not at work'' and "My job reduces the effort I can give to activities at home and/or in my personal life." It showed an internal consistency of .89.

Perceived Organizational Support (POS)

A seven-item scale from Eisenberger et al. (1997) was used here. Sample items are, "Help is available from [my organization] when I have a problem" and "<Organization> would forgive an honest mistake on my part." It showed an internal consistency of .91.

Inclusiveness

A nine-item measure was designed for the current study to assess perceptions of the group work climate as being respectful, friendly, and warm (Nishii, 2013; Nishii & Rich, 2013). Sample items are, "I find the work climate unfriendly" (reversed), and "When I offer suggestions, they are heard and valued." It showed an internal consistency of .88. See below.

Climate for inclusiveness

1. I do not feel integrated into the culture of my department/unit.*
2. I find the work climate non-supportive because I am one of the few males/females in the department/unit.*
3. My colleagues are generally eager to discuss work matters with me.
4. I am aware of an informal/casual network of communication among my colleagues.
5. I am included in an informal/casual network of communication that occurs among my colleagues.
6. When I offer suggestions, they are heard and valued.
7. I am comfortable talking about non work-related topics with my colleagues.
8. I find the work climate unfriendly.*
9. Compared to my colleagues, I am expected to follow a different set of rules*

* Reverse coded

Mentoring

A three-item assessment of satisfaction with mentoring was included here. This showed a reliability of .60. See below.

Mentoring

. I receive useful recommendations on how I can improve my job performance.
2. My job performance is reviewed in person with me at least once a year.
3. I am satisfied with the mentoring I receive at <organization>.

Stress

Cohen and Wills' (1985) four-item measure was used here. Participants were prompted to respond to these items in terms of their experiences in the past month, where 1: Never, to 7: Always. Sample items are, "I felt I was unable to control the important things in my life" and "Things were going my way." It showed an internal consistency of .75.

Organizational Citizenship Behavior (OCB)

Organ and Konovsky's (1989) six-item measure was used here. Sample items are, "I make innovative suggestions to improve the department" and "I am a good team member at work." It showed internal consistency of .69.

Intention to Leave

This three-item assessment from Griffeth et al. (2000) demonstrates strong correlation with turnover (Hom et al., 2017). Sample items are, "I frequently think of quitting this job" and "If I have my own way, I will leave <organization> to work in another organization one year from now." It showed internal consistency of .87.

Analyses

The current research examines the possible buffering effects of social support (POS, mentoring, and inclusiveness) on WIF in relation to the employee outcomes of stress, intention to leave, and OCB. To test these, hierarchical moderated regression analyses were conducted. Thus, in all, nine analyses were conducted, with each of the three outcome variables examined in the context of WIF and each of the three aspects of social support. Following the strategy outlined by Cohen et al. (2003), for each hierarchical moderated regression, the main effects were entered first, followed by the interaction term. A significant change in R^2 indicates the moderator effect is significant and should be examined to ascertain the nature of the relationship. Mean scores on the dependent variable were calculated and plotted for to discern the direction and nature of the interaction and charted as needed. When a hierarchical multiple regression examines an interaction with the finding that it was not significant interaction, the main effects were then examined.

As a follow-up analysis, the role of gender differences was examined. It is conceivable that one gender accrues larger buffering benefits of social support, while the other accrues less. To examine this possibility, a series of regression analyses were conducted in which gender was added to test the three-way interaction effects of WIF x social support forms x gender. These analyses were followed with two Hotelling's T^2 analyses. The first compared men and women on the predictor variables (WIF, POS, inclusiveness and mentoring). The second compared men and women on the set of outcome variables (stress, OCB, and intention to leave).

Results

Preliminary Analyses

Table 1 shows the intercorrelations among the variables to be examined, which reveal low to moderate relationships among them. This suggests the data is appropriate for conducting multiple regressions (Tabachnik & Fidell, 2018). Moreover, the measures used here demonstrated normality and reasonable internal consistencies. A review of the descriptive statistics provided in Table 1 shows that with regard to the three components of social support (inclusiveness, POS, and mentoring), the sample reports averages scores from 4.26 to 5.26 on a seven-point scale, indicating levels are in the positive range but not at maximum levels.

Table 1: Descriptive statistics, internal consistencies, and intercorrelations among variables included in the study.

	Mean	SD	Items	α	1	2	3	4	5	6
1. Inclusiveness	5.26	1.10	9	.86						
2. POS	4.47	1.32	7	.91	0.60†					
3. Mentoring	4.26	1.49	3	.60	0.49†	0.47†				
4. OCB	6.01	0.73	3	.69	0.30†	0.14	0.22*			
5. Intention to Leave	2.83	1.56	3	.87	-0.42†	-0.48†	-0.26†	-0.05		
6. Stress	2.75	1.11	4	.75	-0.40†	-0.56†	-0.32†	-0.30†	0.42†	
7. WIF	3.97	1.44	4	.89	-0.34†	-0.48†	-0.32†	-0.09	0.51†	0.53†

Note: n=135, approx. sig levels † p<.01 (.221), * p<.05 (.169). POS: Perceived organizational support; OCB: organizational citizenship behavior; WIF: work-interference-with-family

Regarding WIF, the level is about 4 (rounded from 3.97), the midpoint of the scale. Given faculty work is characterized by autonomy and flexibility, this moderate level is evidence that such flexibility does not

resolve the problem of WIF. Regarding the outcomes of stress and intention to leave, the means are observed to be below the midpoint of the scale, at 2.75 and 2.83, respectively. OCB in contrast, is 6.01.

Moderating Effects of Social Support on WIF-Stress Relationship

For the first hypothesis, which predicted that stress would be highest for those who experience high WIF and low social support, simultaneously, the results indicated a significant moderating effect of mentoring. As shown in Table 2, there was a significant change in R^2 when the interaction term was entered into the analysis, as R^2 increased from.31 to .34 ($p < .05$). To ascertain the nature of the moderated effect, mean stress scores were calculated for four groups based on high versus low WIF and high versus low mentoring (Cohen et al., 2003).

Table 2. Summary of regression results:

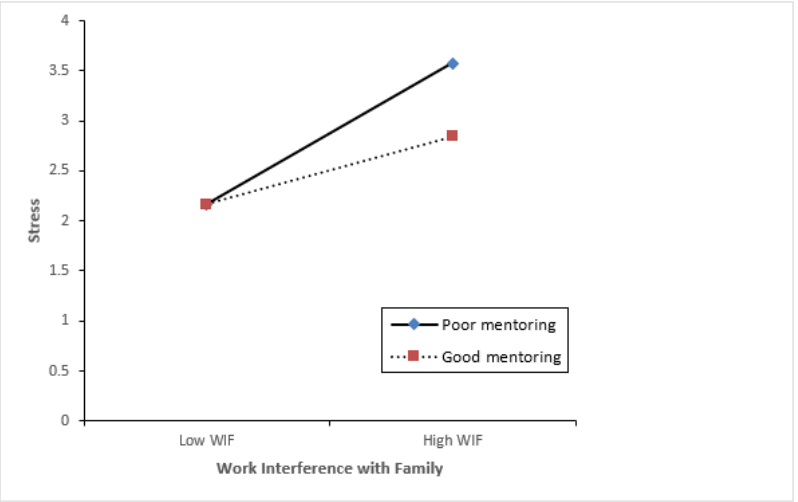
Significant ($F_{3,131}$) interaction of WIF and social support						
	Stress		Intention to Leave		OCB	
WIF X POS	N.S.		26.109†		4.541†	
WIF X Inclusiveness	N.S.		N.S.		7.297†	
WIF X Mentoring	21.980†		N.S.		N.S.	
Significant main effects of WIF (β)						
Outcomes / Social support	Stress		Intention to Leave		OCB	
	Social support	WIF	Social support	WIF	Social support	WIF
POS	-.398†	.337†	N/A		N/A	
Inclusiveness	-.245†	.445†	-.272†	.420†	N/A	
Mentoring	N/A		N.S.	.476†	.211*	N.S.

Note: POS: Perceived Organization Support, OCB: Organization Citizenship Behavior. WIF: Work interference with Family. sig levels † p<.01, * p<.05.

As shown in Figure 1, higher WIF was associated with significantly higher stress when mentoring was poor, compared to when mentoring was good.

Figure 1

Moderating Effects of Mentoring on the WIF - Stress Relationship



While POS and inclusiveness did not moderate the relationship between WIF and stress, both showed significant main effects in the expected directions. For POS, a significant main effect was observed with β= -.40, p <.05 with both WIF and POS entered into the regression ($F_{3,132}$ = 44.143, p <.000), indicating that higher levels of POS were associated with lower levels of stress. For inclusiveness, a significant main effect was observed with β= -.25, p<.05 with both WIF and inclusiveness in the equation ($F_{3,132}$ = 32.835, p <.001), indicating that higher levels of inclusiveness were associated with lower levels of stress. Thus, the buffering effect of social support on stress was significant for mentoring, while for POS and inclusiveness, only main effects were significant, providing mixed results for the first hypothesis.

Moderating Effects of Social Support on WIF-Intention to Leave Relationship

The second hypothesis predicted that intention to leave would be highest for those who experience high WIF and low social support, simultaneously. The results indicated a significant moderating effect for

POS. As shown in Table 3, there was a significant change in R^2 when the interaction term was entered into the analysis, as R^2 increased from .33 to .37 ($p < .05$). To ascertain the nature of the moderated effect, mean intention to leave scores were calculated for four groups based on high versus low WIF and high versus low POS (Cohen et al., 2003). The pattern of results is the same as what is seen in Figure 1, which depicts the buffering effect of mentoring. POS was seen to buffer the effects of WIF on intention to leave in a similar way.

Table 3

Summary of Hierarchical Regression Analysis Testing the Moderating Effect of Perceived Organizational Support (POS) on the Relationship Between Work-Interference-with-Family (WIF) and Intention to Leave (N = *135*)

	Model 1			Model 2		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
POS			-.31*			.21
WIF			.37*			.97*
POS x WIF						-.61*
R^2		.33*			.37*	
F for change in R^2					26.11**	

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

While mentoring and inclusiveness did not moderate the relationship between WIF and intention to leave, inclusiveness showed a significant main effect in the expected direction $\beta = -.27$, $p < .01$ with both WIF and inclusiveness entered into the regression ($F_{3,132} = 32.211$, $p < .000$), indicating that higher levels of inclusiveness were associated with lower levels of intention to leave. No main effect or interaction was observed for mentoring as it related to intention to leave. Thus, the buffering effect of social support on intention to leave was significant for POS, and a main effect of inclusiveness was also significant, providing mixed results for the second hypothesis.

Moderating Effects of Social Support on WIF-OCB Relationship

The third hypothesis predicted that OCB would be lowest for those who experience high WIF and low social support, simultaneously. The results indicated significant moderating effects of both POS and inclusiveness. As shown in Tables 4 and 5, there were significant increases in R^2 for both forms of social support when the interaction terms were entered into their respective analyses. For POS, R^2 increased from .02 to .09 ($p < .01$); for inclusiveness, R^2 increased from .09 to .14 ($p < .01$). To ascertain the nature of the moderated effects, mean OCB scores were first calculated for the groups based on high versus low WIF and high versus low POS and then again for inclusiveness (Cohen et al., 2003).

Table 4

Summary of Hierarchical Regression Analysis Testing the Moderating Effect of Perceived Organizational Support (POS) on the Relationship Between Work-Interference-with-Family (WIF) and Organizational Citizenship Behavior (N = *135*)

	Model 1			Model 2		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
POS			.12			.83*
WIF			-.03			.80*
POS x WIF						-.84*
R^2		.02			.09*	
F for change in R^2					4.54**	

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

Table 5

Summary of Hierarchical Regression Analysis Testing the Moderating Effect of Inclusiveness on the Relationship Between Work-Interference-with-Family (WIF) and Organizational Citizenship Behavior (N = *135*)

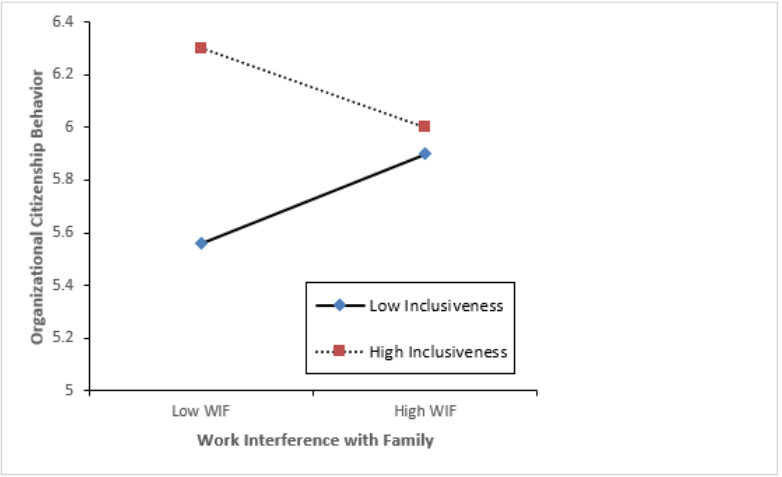
	Model 1			Model 2		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Inclusiveness			.30*			.93*
WIF			.15*			1.1*
Inclusiveness x WIF						-1.1*
R^2		.09*			.14*	
F for change in R^2					7.30**	

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

The pattern of results is similar for the two forms of social support, so only the inclusiveness moderating effect is presented here, and shown in Figure 2. This pattern of the moderating effect, while significant, indicates findings that are not consistent with the hypothesis, in that those who experienced higher WIF engaged in moderate levels of OCBs compared to those with lower WIF. Those with lower WIF and higher POS or inclusiveness engage in the highest levels of OCB and those with the lower levels of POS or inclusiveness engage in the lowest levels.

Figure 2

Moderating Effects of Inclusiveness on the WIF - Organizational Citizenship Behavior Relationship



While mentoring did not moderate the relationship between WIF and OCB, mentoring showed a significant main effect in the expected direction $\beta = .21$, $p < .05$ with both WIF and mentoring entered into the regression ($F_{3,132} = 3.295$, $p < .05$), indicating that higher levels of mentoring were associated with higher levels of OCB. Thus, the results reveal moderating effects of POS and inclusiveness with WIF on OCB, but not as predicted. This result is complicated and does not support the hypothesis that mentoring and POS would buffer the effects of WIF, since the interaction effect manifests most prominently for those with low WIF, rather than high.

Post-hoc Analysis of Gender Differences

Hierarchical multiple regressions included three-way interactive effects of WIF x social support factors x gender in the final models. Notably, no significant three-way interactive effects were observed for any outcome (OCB, stress, or intention to leave) as framed for any gender-by-WIF-by-social support (in any form; POS, inclusiveness, or mentoring) combination. Thus, it can be concluded that the buffering dynamics

observed are unrelated to gender differences. Men and women benefit similarly from the buffering effects of social support as observed here.

Further analyses were conducted to assess gender differences on the variables included in this study. Hotelling's T^2 analysis was conducted to examine gender differences on the predictors: WIF, POS, mentoring, and inclusiveness. The results revealed a significant Wilks Λ (.930, $F_{4,130}$ = 2.442, p =.05; partial η^2 = .07). Considered separately, only WIF was seen to be significant $F_{1,133}$ = 9.669, p <.00; partial η^2 = .07. None of the three forms of social support (POS, inclusiveness, and mentoring) was significant. The group means are presented in Table 6.

To examine gender differences on the outcomes, Hotelling's T^2 analysis was again conducted. The findings revealed no significant differences on the omnibus Wilks Λ (.953, $F_{4,130}$ = 2.166, p = .10). None of the individual outcomes significant on their own, with all p values greater than .07. These means are also included in Table 6.

Table 6

Estimated Marginal Means, Standard Errors, p Values and Partial Eta Squared for Men and Women Across Predictor and Outcome Variable Sets

	Men		Women			
	M	*SE*	*M*	*SE*	*p*	η^2
Predictor Variables						
WIF	3.54	.18	4.30	.16	*p* < .00	.07
POS	4.70	.17	4.30	.15	*p* =.08	ns
Inclusiveness	5.53	.20	5.19	.17	*p* =.19	ns
Mentoring	4.40	.20	4.15	.17	*p* =.34	ns
Outcome Variables						
Stress	2.59	.14	2.87	.13	*p* =.15	ns
Intent to leave	2.55	.20	3.04	.18	*p* =.07	ns
OCB	5.93	.10	6.08	.08	*p* =.23	ns

Note: Men *n*=59, Women *n*=76.

Discussion

Although WIF is a stressor that has proven to be a challenge for society to solve, this study's findings are promising in that they provide support for the idea that social support in the workplace, such as POS, inclusiveness, and mentoring, can provide a buffer that mitigates the effects of high levels of WIF. In many cases where social support factors did not buffer WIF, they had direct beneficial effects on outcomes. Moreover, post hoc analyses examining possible gender differences showed that men and women experience similar benefits of social support. On the other hand, the study shows that women experience greater WIF than male faculty, further confirming what COVID-19 has revealed: Societal expectations regarding gender roles is causing female faculty to suffer more than their male counterparts from the stay-at-home orders (Amano-Patiño et al., 2020; Cardel et al., 2020; Gabster et al., 2020; Kramer, 2020).

Social Support as a Buffer of Effects of WIF on Employee Outcomes

It was hypothesized that social support would moderate the relationships between WIF and employee outcomes, such that when WIF was high, social support would alleviate the negative consequences that are expected under high-WIF conditions. That is, environments featuring greater social support would be less stressful, discourage intention to leave, and promote OCB. The results provide mixed support for these hypotheses. The findings show that POS buffered the effects of WIF on intention to leave; under high WIF, those with high POS had no greater intention to leave than those with low WIF. The results show POS was a buffering factor, mitigating the negative consequences of WIF.

Similarly, mentoring buffered the effects of WIF on stress; under high WIF, those with good mentoring had no greater stress than those with low WIF. The results show that faculty with high WIF experienced less stress when they had better mentoring, and lower levels of intention to leave with higher POS. These results are consistent with research showing that mentoring is affectively-charged and highly personal (Sandager, 2021).

The results observed for the moderating effect of social support on the WIF-OCB relationship are not consistent with a buffering model in

which more social support mitigates negative consequences of WIF. The results show that under high WIF, all faculty engage in moderate levels of OCB. The interaction manifests among those with low levels of WIF. In that context, when faculty experience better inclusiveness and/or POS, they engage in higher levels of OCB; when they experience lower inclusiveness and/or POS, they engage in much lower levels of OCB. It was not the focus of this study but future research may explore the low-WIF context to explore those dynamics, which might be explained by equity (Adams, 1963; DeConick, 2010; Greenberg,1987; Konovsky & Pugh, 1994), or a resource allocation decision process (Hobfoll, 1989).

Main Effects of WIF and Social Support

When regressions showed no significant moderating effect of social support, it is appropriate to interpret the main effects of WIF and measures of social support. The results reveal effects that these were in the expected direction. Namely, main effects of POS, mentoring, and inclusiveness were associated with lower levels of stress and intention to leave, and higher levels of OCB. Higher WIF was related to negative outcomes such as higher stress and intention to leave (not, however, to OCB). These findings lend credence to assertions that more positive work settings will enhance the work experience (Härtel & Ashkanasy, 2010). As Pfeffer (2008) argued, sense of community is central to the work experience. Organizational efforts to improve the social environment are more universally valuable and instructive in providing insight into organizational cultures and norms (Brewer, 2005; Schein, 2016).

Gender Differences, Social Support, and WIF

The analysis of interactions including gender as a factor indicated no significant effects. These results suggest men and women experienced similar degrees of benefit from the buffering effects of social support on the effects of WIF. This makes sense in that the importance of social support is a fundamental human need (Baumeister & Tice, 1990; Bowlby, 1982). With that in mind, it is also important to be aware that nevertheless, women scored higher on WIF in this sample, compared to men. This is consistent with the literature on WIF (Byron, 2005).

Other gender comparisons, while not significant, show a notable and concerning trend in which, at nonsignificant levels, women have a more challenging work situation and experience. Noting they are not significant differences, women showed lower levels of social support, more stress, and greater intention to leave.

Limitations

An important limitation of the current study is the relatively small sample. The primary objective of the NSF ADVANCE grants is to address issues specific to female STEM faculty and make suggestions for systemic and institutional policy change to increase equity in gender, race and ethnicity among STEM faculty. The small sample size prevented an examination of the social support buffering model in which comparisons could be made between STEM and non-STEM faculty in general, or gender differences within STEM. Larger samples should be sought, as this model is applicable and worth examining in such samples.

In addition, the current study would have been improved by the addition of performance data such as quality of teaching, research, and service. The research here can only assert that improved outcomes are associated with retention of quality faculty. A longitudinal design would have also been preferable to having data from one point in time.

Implications and Recommendations

For organizations seeking to improve the work environment for employees, management practices and organizational strategies can be developed which would support employees in ways that are consistent with the findings discussed here. Kossek et al. (2013) outline three strategies for developing a positive work setting that sustains the workforce. The first is enacting practices and policies that enable employees to manage their careers and lives effectively. They also highlight the importance of safeguarding against work intensification (Gerdenitsch et al., 2015). Perhaps most relevant to the current research, Kossek et al. (2013) endorse the developing a culture of positive workplace social support as one of the three strategies.

The findings here regarding the efficacy of social support factors both as buffers and direct effects on employee outcomes provides evidence

supporting the work of Kossek et al. (2013). In a similar vein, Kelly et al. (2014) demonstrated the effectiveness of supervisor support for family and personal life, and schedule control as factors that help employees manage WIF. They discuss a mutually reinforcing system of policies, expectations and practices that taken as a whole, create a structure. By extension, the current study results indicate that this same structure (Kelly et al., 2014) can be construed as a system of social support practices that provide resources (Hobfoll, 1989) to encourage, welcome, and engage employees.

More specific suggestions pertaining to the academic work environment can be generated from this research. Regarding POS, policies and practices can be created that improve levels of POS. For example, meetings should be scheduled during normal working hours when possible because evening meetings place a burden on those individuals with family commitments such as elder- or child-care. Transparency and fairness in policy implementation are values that can be pursued to enhance POS. Finally, organizations should provide funding opportunities and training opportunities for employees to complete their work and develop new skills.

Regarding quality mentoring, research shows that when these relationships are satisfying, they have beneficial effects on employee attitudes (Ragins, 2016; Ragins et al., 2000). Similarly, our analysis supports the idea that more satisfying mentoring can reduce stress, especially under the situation with high WIF. Organizations would be well advised to develop policies and practices that enhance and promote formal and/or informal mentoring activities.

The current research also showed inclusiveness to be an important factor. Many organizations are already pursuing diversity goals, which often include efforts to create an inclusive work climate. This begins with policies and practices that shift the culture of the workplace to be more inclusive (Nishii, 2013; Nishii & Rich, 2013). The first step is to ensure that policies are comprehensive and offer a variety of needed protections. Once policies are in place, they must be implemented fairly. Deans, chairpersons, and directors need to receive training on how to respond respectfully to requests such as family leave. Training and professional development opportunities can be offered on topics such as interpersonal skills, implicit gender bias issues, work-life balance, negotiation skills

and use of Boyer's model of scholarship (Boyer, 1990; O'Meara, 2005) for research and scholarly activity recognition. This sends the message that the university values the faculty as people, not just their work.

Future Research

The implications of these findings and this line of inquiry are far reaching. Future research should study other, similar populations that also share high autonomy and flexibility, to strengthen and extend the results of the current study. Such professionals as accountants, lawyers, high-tech professionals such as computer scientists, pharmacists, medical doctors and other professionals who have high autonomy and flexibility, may well be experiencing WIF. Research may reveal that such populations also respond positively to an improved social support system.

Moreover, the research should be extended to other types of work. The effectiveness of interventions designed to reduce WIF may vary depending on the type of job under consideration, and specifically how much autonomy the job or profession already has (Hackman & Oldham, 1980). Less flexible jobs may benefit from both increases in flexibility and enhanced social support, while for jobs that are already flexible, the focus could be more strictly on social support.

Finally, while the current study focused on POS, inclusiveness and mentoring, future research should expand thinking on how social support is manifested in the workplace. The current study conceptualized social support using a distal-proximal environmental model. Co-worker support and supervisory support were not available here but could be added as elements of the social environment. For example, a supervisor might be a source of support for employees who have close supervision. Additionally, the findings here featured only informal mentoring; these results could be tested in settings with formal mentoring.

Conclusion

The purpose of this research was to study faculty responses to WIF by examining the possible buffering effects of three forms of social support: mentoring, inclusiveness, and POS. With the goal of NSF ADVANCE in mind, the results of this research add to the existing knowledge base by

showing that with adequate organizational support (real and/or perceived), quality mentoring, and climate of inclusiveness, high levels of WIF can be mitigated, helping to create a positive work environment that will enable faculty to be more effective and engaged at work.

This research emphasizes the importance of focusing on various sources of social support present in the work environment while at the same time continuing to work on policies to reduce WIF. Moreover, enhanced understanding of the nature of the faculty work experience may show how to create a more positive environment that will promote faculty satisfaction and productivity as well as positive relationships with students.

Taken together, this pattern of results supports past research (Grzywacz & Marks, 2000; Major et al., 2002) showing that WIF has negative consequences for employees, in general. More importantly, it moves the literature forward by treating WIF as a stressor subject to the same dynamics as other workplace stressors, including the buffering effect (Cohen & Wills, 1985). Social support as manifested in POS, inclusiveness, and mentoring, offered insight into possible sources of support present in the work environment.

References

Adams, J. S. (1963) Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, *67*, 422-436.

ADVANCE (2019). Retrieved from https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383.

Afsar, B., Shahjehan, A., & Shah, S. I. (2018). Frontline employees' high-performance work practices, trust in supervisor, job-embeddedness and turnover intentions in hospitality industry. *International Journal of Contemporary Hospitality Management, 30*(3), 1436-1452.

Amano-Patiño, N., Faraglia, E., Giannitsaruou, C., & Hasna, Z. (2020, May 2). Who is doing new research in the time of COVID-19? Not female economists. Retrieved from

https://voxeu.org/article/who-doing-new-research-time-covid-19-not-female-economists

Argyris, C. (1993). *Knowledge for action: A guide to overcoming barriers to organizational change.* Jossey-Bass.

Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology, 9*(2)*,* 165-195.

Berebitsky, D., & Ellis, M. K. (2018). Influences on personal and professional stress on higher education faculty. *The Journal of the Professoriate.* Retrieved from http://caarpweb.org/wp-content/uploads/2019/03/Influences-on-Personal-Berebitsky-and-Ellis-9_2.pdf

Bond, J., Thompson, C., Galinsky, E., & Prottas, D. (2002). *Highlights of the National Study of the Changing Workforce.* Families and Work Institute.

Bowlby, J. (1982). *Attachment and loss: Vol 1: Attachment* (2nd ed.). Basic Books.

Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton University Press.

Brewer, M.B. (2005). *The psychological impact of social isolation: Discussion and commentary.* In K. D. Williams, J. P. Forgas, and W. von Hippel, *The social outcast: Ostracism, social exclusion, rejection and bullying* (pp. 333-345)*.* Psychology Press.

Brown, S. D., Brady, T., Lent, R. W., Wolfert, J. & Hall, S. (1987). Perceived social support among college students: Three studies of the psychometric characteristics and counseling uses of the Social Support Inventory. *Journal of Counseling Psychology Monograph, 34*(3)*,* 337-354.

Budhiraja, S., & Kant, S. (2020). Challenges associated with work-life balance: A meta-analysis. *Journal of Strategic Human Resource Management, 9*(2 & 3), 11-16.

Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior, 67*(2), 169-198.

Caplan, G. (1974). *Support systems and community mental health.* Behavioral Publications.

Cardel, M. I., Dean, N., & Montoya-Williams, D. (2020). Preventing a secondary epidemic of lost early career scientists: Effects of COVID-19 pandemic on women with children. *Annals of the American Thoracic Society*, *17*(11), 1366-1370.

Cassel, J. C. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104,* 107-123.

Chisholm R. F., Kasl S. V., & Mueller L. (1986), The effects of social support on nuclear worker responses to the Three Mile Island accident. *Journal of Organizational Behavior*, *7*(3), 179-193.

Chmelar, C., Jörres, R. A., Kronseder, A., Müller, A., Nowak, D., & Weigl, M. (2017). Associations between age, psychosocial work conditions, occupational well-being, and telomere length in geriatric care professionals: A mixed-methods study. *Journal of Environmental Medicine, 59*(10), 949-955.

Chung, B. G., Ehrhard, K. H., Shore, L. M., Randel, A. E., Dean, M. A. & Kedharnath, U. (2020). Work group inclusion: Test of a scale and model. *Group and Organization Management, 45*(1), 75-102.

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*(5)*,* 300-314.

Cohen, J. Cohen, P. West, S. G. & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences, 3rd ed.* Erlbaum.

Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357.

Cutrona, C., & Russell, D. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. Sarason, I. Sarason & G. Pierce (Eds.), *Social support: An interactional view* (pp. 319-366). John Wiley.

DeConick, J. B. (2010). The effect of organizational justice, perceived organizational support, and perceived supervisor support on marketing employees' level of trust. *Journal of Business Research, 63*, 1349–1355.

Dilmaghani, M., & Tabvuma, V. (2019). The gender gap in work-life balance satisfaction across occupations. *Gender in Management: An International Journal, 34*(5), 398-428

Ducharme, L. J., & Martin, J. K. (2000). Unrewarding work, coworker support, and job satisfaction. *Work and Occupations, 27*(2)*,* 223-243.

Eisenberger, R., Cummings, J., Armeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology, 82*(5), 812-820.

Emirbayer, M. (1997). Manifesto for a relational sociology. *American Journal of Sociology, 103*(2)*,* 281-317.

Fenlason, K. J., & Beehr, T. A. (1994). Social support and occupational stress: Effects of talking to others. *Journal of Organizational Behavior, 15,* 157-175.

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology, 77*(1), 65–78. https://doi.org/10.1037/0021-9010.77.1.65

Gabster, B. P., van Daalen, K., Dhatt, R., & Barry, M. (2020). Challenges for the female academic during the COVID-19 pandemic. *Lancet, 395,*1968-1970.

Gerdenitsch, C., Kubicek, B., & Korunka, C. (2015). Control in flexible working arrangements: When freedom becomes duty. *Journal of Personnel Psychology, 14*(2), 61-69.

Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review, 12*, 9-22.

Greenhaus, J. H., & Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology (*2nd ed.*,* pp. 165-183)*.* American Psychological Association.
Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10,* 76-88.

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*(3)*,* 463-488.

Grzywacz, J., & Marks, N. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology, 5*(1), 111-26.

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Addison-Wesley.

Halinski, M., & Duxbury, L. (2020). Workplace flexibility and its relationship with work-interferes-with-family. *Personnel Review, 49*(3), 149-166.

Härtel, C. E. J., & Ashkanasy, N. M. (2010). Healthy human cultures as positive work environments. In N. M. Ashkanasy, *The Handbook of Organizational Culture and Climate* (pp. e1 – e17). Sage.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513-524.

Hom, P., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology, 102*(3), 530-545.

Irak, D. U., Kalkişim, K., & Yildirim, M. (2020). Emotional support makes the difference: Work-family conflict and employment related guilt among employed mothers. *Sex Roles, 82*, 53-65.

Kaplan, B. H., Cassel, J.C., & Gore, S. (1977). Social support and health. *Medical Care, 15,* 47-58.

Kaufmann G. M., & Beehr T. A. (1986). Interactions between job stressors and social support: Some counterintuitive results. *Journal of Applied Psychology*, *71*(3), 522-526.

Kelliher, C., Richardson, J., & Boiarintseva, G. (2019). All of work? All of life? Reconceptualising work-life balance for the 21st century. *Human Resource Management Journal, 29,* 97-112.

Kelly, B. & McCann, K. (2019). Women faculty on the tenure track: The compounding role of being the breadwinner. *Journal of the Professoriate, 10*(1), caarpweb.org/wp-content/uploads/2019/04/Women-Faculty-Spring-2019.pdf.

Kelly, E. L., Moen, P., Oakes, J. M., Fan, W., Okechukwu, C., Davis, K. D., Hammer, L. B., Kossek, E. E., King, R. B., Hanson, G. C., Mierzwa, F., & Casper, L. (2014). Changing work and work-family conflict: Evidence from the work, family, and health network. *American Sociological Review*, *79*(3), 485-516.

Kim, H. J., Hur, W., Moon, T., & Jun, J. (2017). Is all support equal? The moderating effects of supervisor, coworker, and organizational support on the link between emotional labor and job performance. *Business Research Quarterly, 20,* 124-136.

Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal, 37*(3), 656-669.

Kossek, E. E., Valcour, M., & Lirio, P. (2013). The sustainable workforce: Organizational strategies for promoting work-life balance and well-being. In C. Cooper & P. Chen, *Wellbeing in the workplace: From stress to happiness* (pp. 295-318). Wiley Blackwell.

Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life.* Scott Foresman.

Kramer, J. (2020, October 6). The virus moved female faculty to the brink. Will universities help? *New York Times.* https://www.nytimes.com/2020/10/06/science/covid-universities-women.html

LaRocco, J. M., House, J. S., & French, J. R. P., Jr. (1980). Social support, occupational stress, and health. *Journal of Health and Social Behavior, 21,* 202-218.

Leana, C. R., & Rousseau, D. M. (2000). *Relational wealth: The advantages of stability in a changing economy.* Oxford University Press.

Leary, M. R. (1990). Response to social exclusion: Social anxiety, jealousy, loneliness, depression and low self-esteem. *Journal of Social and Clinical Psychology, 9*(2)*,* 221-229.

Li, Q., Zhao, L., Xue, Y., & Feng, L. (2021). Stress-buffering pattern of positive events on adolescents: An exploratory study based on social networks. *Computers in Human Behavior, 114*, 106565. https://doi.org/https://doi.org/10.1016/j.chb.2020.106565

Liu, J. J., Wei, Y. B., Forsell, Y., & Lavebratt, C. (2017). Stress, depressive status and telomere length: Does social interaction and coping strategy play a mediating role? *Journal of Affective Disorders, 222*, 138-145.

Mackin, D. M., Perlman, G., Davila, J., Kotov, R., & Klein, D. N. (2017). Social support buffers the effect of interpersonal life stress on suicidal ideation and self-injury during adolescence. *Psychological Medicine, 47*, 1149-1161.

Maertz, C. P., Jr., & Campion, M. A. (1998). 25 Years of voluntary turnover research: A review and critique. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 13, pp. 49-86). John Wiley.

Major, V. S., Klein, K. J., & Ehrhart, M. G. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology*, *87*(3), 427–436. doi.org/10.1037/0021-9010.87.3.427

McEwen. B. S. & Gianaros, P. J. (2010). Central role of the brain in stress and adaptation: links to socioeconomic status, health and disease. *Annals of the New York Academy of Science*, *1186*, 190-222.

Mesmer-Magnus, J. R., & Viswesvaran, C. (2006). How family-friendly work environments affect work/family conflict: A meta-analytic examination. *Journal of Labor Research, 27*(4)*,* 555-574.

Milczarek, M., Schneider, E., & González, E. R. (2009). OSH in figures: Stress at work – Facts and figures. *European Risk Observatory Report*. Office for Official Publications of the European Communities, European Agency for Safety and Health at Work.

Milem, J. F. Berger, J. B., & Dey, E. L. (2000). Faculty time allocation: A study of change over twenty years. *The Journal of Higher Education*, *71*, 454-475.

Milkie, M., Kendig, S., Nomaguchi, K. M., & Denny, K. E. (2010). Time with children, children's well-being, and work-family balance among employed parents. *Journal of Marriage and Family*, *72*(5), 1329-1343.

National Science Foundation (2011), Balance the scale: NSF Career-life Balance initiative. (Report #nsf11201). Retrieved from https://www.nsf.gov/career-life-balance/brochure.pdf.

Nishii, L. (2013). The benefits of climate for inclusion for gender-diverse groups. *Academy of Management Journal*, *56*(6), 1754-1774.

Nishii, L., & Rich, R. E. (2013). Creating inclusive climates in diverse organizations. In B. R. Deane & B. M. Ferdman (Eds.), *Diversity at work: The practice of inclusion* (pp. 330-412). John Wiley.

O'Meara, K. (2005). Encouraging multiple forms of scholarship in faculty reward systems: Does it make a difference? *Research in Higher Education, 46*(5), 479-510.

O'Toole, J., & Lawler, E. E. III (2006). *The new American workplace.* Palgrave Macmillon.

Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance, 10*(2*)*, 85-97.

Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, *74*, 157-164.

Pfeffer, J. (2008). Working alone: Whatever happened to the idea of organizations as communities? In E. E. Lawler & J. O'Toole (Eds.), *America at work* (pp. 3 -21). Palgrave Macmillon.

Portoghese, I., Galletta, M., Burdorf, A., Cocco, P., D'Aloja, E., & Campagna, M. (2017). Role stress and emotional exhaustion among health care workers. *Journal of Environmental Medicine, 59*(10), e187-e193.

Pow, J. King, D. B., Stephenson, E., & DeLongis, A. (2017). Does social support buffer the effects of occupational stress on sleep quality among paramedics? A daily diary study. *Journal of Occupational Health Psychology, 22*(1), 71-85.

Powell, G. N., Greenhaus, J. H., Allen, T. D., & Johnson, R. E. (2019). Introduction to special topic forum: Advancing and expanding work-life theory from multiple perspectives. *Academy of Management Review, 44*(1), 54-71.

Praharso, N. F., Tear, M. J., & Cruwys, T. (2017). Stressful life transitions and wellbeing: A comparison of the stress buffering hypothesis and the social identity model of identity change. *Psychiatry Research, 247*, 265-275. https://doi.org/https://doi.org/10.1016/j.psychres.2016.11.039

Ragins, B. R. (2016). From the ordinary to the extraordinary: High-quality mentoring relationships at work. *Organizational Dynamics, 45,* 228-244.

Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, *43*, 1177-1194.

Sandager, J. (2021). Mentoring as affective governmentality: Shame, (un)happiness, and the (re)production of masculine leadership. *Gender, Work and Organization, 28*(4), 1304-1322. DOI:10.1111/gwao.12653

Sandburg, S., & Grant, A. (2015, March 5). How men can succeed. *New York Times,* SR5.

Sarason, I. G., & Sarason, B. R. (Eds.). (1985). *Social support: Theory, research and applications.* Martinus Nijhof.

Scandura, T. A., & Williams, E. A. (2004). Mentoring and transformational leadership: The role of supervisory career mentoring. *Journal of Vocational Behavior, 65*, 448-468.

Schein, E. H. (2016). *Organizational culture and leadership.* John Wiley & Sons.

Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human Resource Management Review, 28,* 176-189.

Sirgy, M. J., & Lee, D. J. (2018). Work-life balance: An integrative review. *Applied Research in Quality of Life, 13*(1), 229-254.

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68*(4)*,* 653-663.

Smith, E. R., Murphy, J., & Coates, S. (1999). Attachment to groups: Theory and measurement. *Journal of Personality and Social Psychology, 77*(1)*,* 94-110.

Szkody, E. & McKinney, C. (2019). Indirect effects of social support on psychological health through self-esteem in emerging adulthood. *Journal of Family Issues, 40*(17), 2439-2455.

Tabachnick, B. G., & Fidell, L. S. (2018). *Using multivariate statistics* (7th ed). Pearson.

Thompson, J. D. (1967). *Organizations in action: Social science bases of administrative theory.* McGraw-Hill.

Watlington, E., Schockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Educational Finance*, *36*(1), 22-37.

Williams, K. D. (2007). Ostracism. *Annual Review of Psychology, 58,* 425-452.

Williams, K. D., Forgas, J. P., and von Hippel, W. (2005). *The social outcast: Ostracism, social exclusion, rejection and bullying.* Psychology Press.

Wills, T. A. (1991). Social support and interpersonal relationships. In M.S. Clark (Ed.), *Prosocial behavior* (pp. 265-289). Guilford Press.

Yousaf, S., Rasheed, M. I., Haneed, Z., & Luqman, A. (2020). Occupational stress and its outcomes: The role of work-social support in the hospitality industry. *Personnel Review, 49*(3), 755-773.

Ziker, J. P., Wintermote, A., Nolin, D., Demps, K., Genuchi, M., & Meinhardt, K. (2014). Time distribution of faculty workload at Boise State University. *College of Social Sciences and Public Affairs Presentations,* 22. https://scholarworks.boisestate.edu/sspa_14/22