IS WORK-FAMILY CONFLICT A MULTILEVEL STRESSOR LINKING JOB CONDITIONS TO MENTAL HEALTH? EVIDENCE FROM THE WORK, FAMILY AND HEALTH NETWORK

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ABSTRACT

Purpose – *Most research on the work conditions and family responsibilities associated with work-family conflict and other measures of mental health uses the individual employee as the unit of analysis. We argue that work conditions are both individual psychosocial assessments and objective characteristics of the proximal work environment, necessitating*

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multilevel analyses of both individual- and team-level work conditions on mental health.

Methodology/approach – *This study uses multilevel data on 748 high-tech professionals in 120 teams to investigate relationships between team- and individual-level job conditions, work-family conflict, and four mental health outcomes (job satisfaction, emotional exhaustion, perceived stress, and psychological distress).*

Findings – *We find that work-to-family conflict is socially patterned across teams, as are job satisfaction and emotional exhaustion. Team-level job conditions predict team-level outcomes, while individuals' perceptions of their job conditions are better predictors of individuals' work-to-family conflict and mental health. Work-to-family conflict operates as a partial mediator between job demands and mental health outcomes.*

Practical implications – *Our findings suggest that organizational leaders concerned about presenteeism, sickness absences, and productivity would do well to focus on changing job conditions in ways that reduce job demands and work-to-family conflict in order to promote employees' mental health.*

Originality/value of the chapter – *We show that both work-to-family conflict and job conditions can be fruitfully framed as* team *characteristics, shared appraisals held in common by team members. This challenges the framing of work-to-family conflict as a "private trouble" and provides support for work-to-family conflict as a structural mismatch grounded in the social and temporal organization of work.*

Keywords: Work-family conflict; multilevel; job conditions; stress; psychological distress; emotional exhaustion

Sociologists and social epidemiologists (cf., Berkman & Kawachi, 2000; House, 2002; Kawachi & Berkman, 2003; Krieger, 2011; Moen & Chesley, 2008; Oakes & Kaufman, 2006; Pearlin, Schieman, Fazio, & Meersman, 2005) have theorized social structures and contexts – more than individual attributes – as fundamental to individual stress, health, and well-being. Some have keyed in on specific social environments, such as social networks (Christakis & Fowler, 2007, 2008), schools (Aveyard, Markham, & Cheng,

2004), and residential neighborhoods (Sampson, Morenoff, & Gannon-Rowley, 2002). But most adults spend most of their waking hours *on the job*, meaning that the majority of nonfamily interactions are with coworkers, not neighbors or (nonwork) friends (Dahlin, Kelly, & Moen, 2008). Arguably the most potent forces affecting the stress or, conversely, the mental health, of workers lie within the understudied proximal social environments of paid work (Quick & Tetrick, 2011; Sennett, 1998). Moreover, members of work teams may have a shared sense of work-to-family conflict and well-being, both as a result of common conditions on the job and crossover in the assessments of coworkers within a team.

Even though it is commonly thought of as a characteristic of individuals, work-to-family conflict may be a stressor characterizing workgroups as well, socially patterned such that some teams experience greater levels of work-to-family conflict than others. Work-to-family conflict is typically viewed as a private trouble of individual workers, a stressor that can be reduced if they do a better job at "balancing" their multiple roles. But if work-to-family conflict differs across teams in identifiable ways, it suggests the primacy of job conditions in producing or reducing stressors affecting whole teams. Alternatively, if work-to-family conflict operates exclusively at the level of individual employees then more customized solutions may be called for. Some teams may also experience higher or lower collective levels of stress or well-being, again suggesting that team-level conditions or interventions may be key to enhancing the quality of life – and consequently the engagement and productivity – of employees.

We consider team members' collective perceptions of their job conditions and the ways employees perceive their job conditions as individuals. We investigate: (1) Are work-to-family conflict and mental health outcomes patterned at the team level, such that some teams experience greater work-to-family conflict and well-being than others? (2) Does work-to-family conflict operate as a mediator between job conditions and stress/mental health measures, at either the individual or team levels? (3) Are some groups more vulnerable to the negative mental health effects of work-to-family conflict than others?

This study makes three contributions to understanding work and family in the 21st century. First, we assess the primacy of the work environment in shaping of employees' work-to-family conflict and mental health. Like other key social contexts (neighborhoods, classrooms, networks), work environments shape life chances and life quality. This is important from a policy and practice perspective because interventions aimed at changing work environments may be more effective and reach a broader population

than those aimed at changing individuals' coping behaviors (e.g., worksite stress reduction workshops, yoga).

Second, we focus on information technology (IT) employees in a high-tech organization, an increasingly central component of the twenty-first century economy. As part of a larger study by the Work, Family and Health Network (WFHN), we collected data on IT employees in a large U.S. firm that we call TOMO. We are particularly interested in these professional and technical workers because their jobs represent both the promise (in terms of new technologies) and the perils (in terms of global off-shoring and rising time pressures) of white-collar employment today.

Third, this study underscores the importance of multilevel analysis of work-to-family conflict and mental health. We analyze one positive measure of mental health – job satisfaction – and three negative measures – emotional exhaustion, perceived stress, and psychological distress – using multilevel data on IT workers ($N = 748$ employees in 120 work teams). Perceived stress and psychological distress in particular have a long history as indicators of the stress process (Almeida & Wong, 2009; Pearlin, 2010; Pearlin et al., 2005).

BACKGROUND

Growing numbers of employees are reporting work-family conflict (Aumann, Galinsky, & Matos, 2011). Work hours, time pressures, supervisor and workplace support, and employees' control over their time (all measured at the individual level) have been shown to predict work-family conflict and mental health outcomes as experienced by individuals, as have job control and job demands (e.g., Hammer, Kossek, Yragui, Bodner, & Hanson, 2009; Kossek, Pichler, Bodner, & Hammer, 2011; Moen, Kelly, & Huang, 2008; Moen, Kelly, & Lam, 2013; Moen, Kelly, Tranby, & Huang, 2011). Moreover, work-family conflict has been associated with mood, anxiety, and substance disorders (Frone, 2000; Frone, Russell, & Barnes, 1996; Grzywacz & Bass, 2003), less healthy behaviors (Allen & Armstrong, 2006), high cholesterol, high body mass index, and poor physical stamina (Van Steenbergen & Ellemers, 2009), musculoskeletal disorders (Hammer, Cullen, Neal, Sinclair, & Shafiro, 2005; Hämmig, Knecht, Läubli, & Bauer, 2011), more self-reported chronic disease and obesity, all-cause sickness, and sickness absence (Sabbath, Melchior, Goldberg, Zins, & Berkman, 2012) as well as worse mental health and poorer self-rated health (Beutell,

2010). Because work-to-family conflict is a prime example of chronic role strain, "the felt difficulty in fulfilling role obligations" (Goode, 1960, p. 483) and is experienced as a chronic stressor, we theorize it may be a key mediator between job conditions and health – here mental health – outcomes.

Individual-Level Predictors

There are a number of studies of the effects of the work environment on work-to-family conflict and mental health outcomes; these typically rely on individuals' assessments of the psychosocial job conditions in which they work. Consider the large body of scholarship on the impacts of job control, defined by Karasek (1979, p. 290) as an employee's "potential control over his tasks and his conduct during the working day." Building on Karasek and Theorell (1990), scholars have found that individual-level perceptions of job control (i.e., control over how work is done) has both direct and buffering effects in reducing the risks of job demands and the impacts of stressors on health and well-being (see reviews by de Lange, Taris, Kompier, Houtman, & Bongers, 2003; Hausser, Mojzisch, Niesel, & Schulz-Hardt, 2010). Job control has been linked to exhaustion and depressive symptoms (e.g., Mausner-Dorsch & Eaton, 2000), psychological distress (Dalgard et al., 2009), physiological stress responses (e.g., Lundberg, 1996), blood pressure and mood (e.g., Rau & Triemer, 2004), and work-family conflict and strain (e.g., Thomas & Ganster, 1995).

Work-family researchers are increasingly focusing on *schedule control* as a distinct form of control at work, arguing that many employees are stressed because they do not feel in control of their *working time*. Individual assessments of schedule control appear to be related to, but distinct from, traditional measures of job control (Moen et al., 2008) and have been linked to lower work-family conflict and/or better reported health in cross-sectional (Moen et al., 2008; Thomas & Ganster, 1995), longitudinal (Grzywacz, Casey, & Jones, 2007), quasi-experimental studies (Kelly, Moen, & Tranby, 2011; Moen et al., 2013; Moen et al., 2011) and one randomized field trial (Kelly et al., 2014). However, some studies raise the issue of whether the greater autonomy and flexibility associated with job and schedule control might be detrimental for work-to-family conflict because it heightens the demands and pressures of work and blurs work-life boundaries (Blair-Loy, 2009; Glavin & Schieman, 2012; Kossek, Lautsch, & Eaton, 2006; Moen, Lam, Ammons, & Kelly, 2013; Roeters, Van der Lippe, & Kluwer, 2010; Schieman, Milkie, & Glavin, 2009). Greater flexibility in work schedules

may also lead to greater family demands and pressures, culminating in higher levels of work-family conflict (Hammer, Neal, Newsom, Brockwood, & Colton, 2005).

Scholars have also integrated social support into occupational health models, considering both supportive organizational climates and support from managers. Employees who perceive their organization to be supportive of family responsibilities report less work-to-family conflict (e.g., Allen, 2001). Understanding of concrete ways that supervisors support employees' family and personal lives has been advanced recently with new measures of "family-supportive supervisor behaviors" (FSSB; see Hammer et al., 2009) and a meta-analysis of the contributions of family-supportive supervisor support as compared to more general measures of supervisor support (Kossek et al., 2011).

This body of evidence to date using the individual as the unit of analysis offers important insights as to the distribution of both psychosocial job conditions and mental health outcomes across individuals. But such studies often draw on surveys of random samples of employees in different types of jobs located in a wide range of organizational contexts and therefore cannot investigate team-level conditions as either predictors or outcomes. Taken together, the extant evidence underscores the significance of individual perceptions of job conditions for work-to-family conflict and mental health outcomes, but cannot promote understanding as to what types of work environments appear optimal, such as which team-level conditions predict teams' experience of work-to-family conflict and mental health outcomes or whether work-to-family conflict operates as an intervening mechanism between job conditions and mental health.

Team-Level Analyses

Multilevel analyses of work-to-family conflict and stress outcomes that analyze individuals within the social organization of their work teams are rare, although there are some path-breaking exceptions. Team characteristics, such as team decision-making and job rotation, were found to be associated with job anxiety (Cruz & Pil, 2011) while team-level cohesiveness and support moderated the relationship between team job demands and emotional exhaustion (Westman, Bakker, Roziner, & Sonnentag, 2011). Hammer, Saksvik, Nytrø, Torvatn, and Bayazit (2004) found that organizational norms governing work performance and social relations were significantly related to job stress. Some studies tie team-level perceptions of job

demands and control to psychological health symptoms and sick days (Van Yperen & Snijders, 2000) and to self-reported health as well as other outcomes (Kossek et al., 2012). Furthermore, Bakker, van Emmerik, and Euwema (2006) find that team-level burnout and work engagement are related to individual burnout and work engagement after controlling for individuals' job demands and resources. These shared assessments also affect businesses; O'Neill et al. (2009) found that organizational work-family climate (time expectations, career consequences of using work-family benefits, and manager support for family) measured at both individual and worksite levels were associated with hotel employees' organizational commitment and turnover intentions.

Other studies consider work-to-family conflict explicitly. Bhave, Kramer, and Glomb (2010) used a sample of nonfaculty employees at a large Midwestern university in the United States to examine the effects of work-to-family conflict and support within work groups on individual employees' work-to-family conflict. Their results suggest that work group level work-to-family conflict influences individual work-to-family conflict over and above the shared work environment. Similarly, van Emmerik and Peeters (2009) used multilevel analyses on data from a sample of employees in a Dutch municipality, finding that team-level work-to-family conflict was associated with individual-level work-to-family conflict, net of team and individual job demands.

Taken together, these innovative studies point to the value of multilevel theory and analysis (Bliese & Jex, 2002; Klein & Kozlowski, 2000). But none made the "groupness" of job conditions, work-to-family conflict, and mental health measures a central focus as we do here, or investigated the

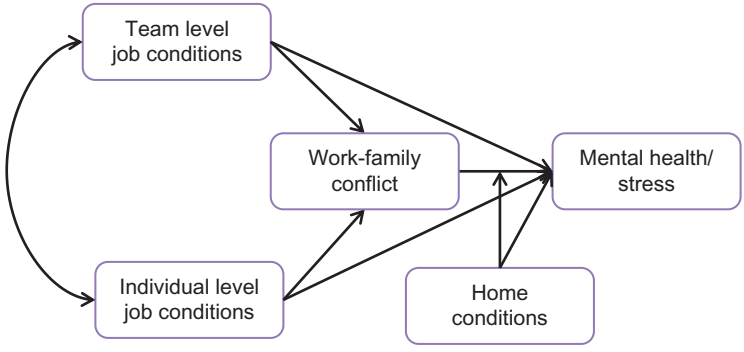

Fig. 1. Multilevel Pathways to Employees' Mental Health/Stress Outcomes.

potential mediating effects of work-to-family conflict on a range of stress/mental health measures. Neither did they examine whether some employees are more vulnerable to the effects of work-to-family conflict than others. We build on and extend these studies by examining both team-level and individual-level job conditions, work-to-family conflict, and mental health outcomes, hypothesizing the relationships shown in Fig. 1.

RESEARCH QUESTIONS

Our first research question is: *Are work-to-family conflict and mental health outcomes patterned at the team level, such that some teams experience greater work-to-family conflict and stress than others?* Following Bhave et al. (2010) and van Emmerik and Peeters (2009) we argue that work-to-family conflict and at least some mental health outcomes vary systematically across teams, as do job conditions. We anticipate that perceived stress and psychological distress may vary more across employees than teams, in light of individual-level differences in personal characteristics and unmeasured individual differences (such as each employees' unique past experiences and current goals and expectations). Thus the strongest argument is for teams to share work-to-family conflict, job satisfaction, and emotional exhaustion (a component of burnout), since team members share the same team structure, the same supervisor, and the same work, as well as working with one another.

Our second research question is: *Does work-to-family conflict (at either the individual or team levels) operate as a mediator between job conditions and mental health measures?* Related to this question, we also address: *What job conditions predict team-level work-to-family conflict and mental health outcomes?* We anticipate that team and individual appraisals of high job demands will be associated with higher work-to-family conflict and poorer mental health, while higher team and individual appraisals of job control, schedule control, and FSSB will be linked to lower work-to-family conflict and better mental health (Baltes, Briggs, Huff, Wright, & Neuman, 1999; Hammer et al., 2009; Kossek et al., 2011; Thomas & Ganster, 1995), as will a supportive organizational work-family climate (Kossek, Colquitt, & Noe, 2001). Additionally, we consider team-level job insecurity as a source of stress that may affect mental health (Burgard, Brand, & House, 2009; Ferrie et al., 2001; Lam et al., 2015). Teams reporting greater job insecurity may be working less effectively together as a team. For example, anxiety about losing one's job may push employees to act more competitively with each other

or provide less support to coworkers. Generally, we expect that individuals' own perceptions of working conditions are most proximal and will matter most for individual outcomes but team-level job conditions may also be important predictors of teams' and individuals' work-to-family conflict.

Our third research question is: *Are some subgroups more vulnerable to the deleterious mental health effects of work-to-family conflict?* We theorize gender, parental status, and caregiving responsibilities as key markers of vulnerability, proposing that work-to-family conflict effects may be especially pronounced for those with heavy home demands, with those sandwiched between caring for children and caring for infirm relatives especially at risk.

METHOD

Research Design

As part of a larger study by the WFHN, we collected and analyzed data on teams of IT employees in a large U.S. firm that we call TOMO. The WFHN study seeks to promote understanding of the impact of working conditions on work, family life, and health outcomes (see Bray et al., 2013; King et al., 2012). This chapter uses data from a survey of TOMO employees nested in teams that range in size from 4 to 28. TOMO was selected based on its size, the ability to logistically support data collection, and its openness to an intervention introduced after these data were collected. Because of the centralized organizational structure of the firm, recruitment to the study involved agreements with top leadership over all work units in this division, but individuals chose whether to participate in the survey.

Participants and Procedure

Managers and nonsupervisory employees were eligible to participate in the study if they were located in the two principal metropolitan locations of TOMO and were classified as employees rather than independent contractors. Of 1,182 nonsupervisory employees and 221 managers (who received a separate, substantially similar survey) eligible for the computer-assisted personal interview (CAPI), 1,044 completed it for a 78% response rate. Because we are interested in group-level characteristics, our analytic sample includes only teams with four or more CAPI respondents (including

managers); these restrictions limited our sample size to 782 employees. We also restricted our sample to respondents who did not have missing values for any of the covariates.[1] These restrictions resulted in an analytic sample of 748 employees in 120 teams.

We first investigated the distribution and "groupness" of job conditions, work-to-family conflict, and mental health outcomes. Second, we assessed whether team-level job conditions were associated with work-to-family conflict and the mental health of teams. We hypothesized that teams with more demanding or less supportive working conditions would have stronger team-level patterns of work-to-family conflict and some mental health outcomes (such as job satisfaction and emotional exhaustion) compared to teams reporting less stressful environments. We then fit multilevel models of individual employees' work-to-family conflict and mental health outcomes. Finally, we estimated whether work-to-family conflict at the individual or team level operates as a mediator between job conditions and mental health outcomes using the method outlined by Baron and Kenny (1986).

Work-to-Family Conflict

Work-to-family conflict is measured using a scale developed and validated by Netemeyer, Boles, and McMurrian (1996) with individual items measured on a five-point scale, ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Examples of questions in the work-to-family conflict scale include "The demands of your work interfere with your family or personal time" and "Due to your work-related duties, you have to make changes to your plans for family or personal activities." We consider work-to-family conflict at the team and individual level as both outcomes and mediators. For team-level models, we use the team mean to operationalize work-to-family conflict as an outcome. For multilevel models, however, we use the percent individuals on the team with high ($\geq$4) work-to-family conflict to operationalize work-to-family conflict at the team level in order to mitigate potential identification problems that would occur by including both the team mean and individual work-to-family conflict in our models (see Bakker et al., 2006).

Mental Health Outcomes

Job satisfaction is assessed using an established scale by Cammann, Fichman, Jenkins, and Klesh (1983). The three items allow responses

ranging from *Strongly Disagree* to *Strongly Agree* on a five-point scale. A sample item is: "In general, you like working at your job."

Emotional exhaustion is assessed using that component of the Maslach Burnout Inventory. We use three items with frequency responses ranging from *Every Day* to *Never* on a seven-point scale. A sample item is: "You feel emotionally drained from your work."

Perceived stress is assessed using a well-known scale by Cohen, Kamarck, and Mermelstein (1983) shown to predict many mental and physical health outcomes. We use four items with frequency responses ranging from *Very Often* to *Never* on a five-point scale. This scale is additive, and theoretical values range from 4 to 20. A sample item is: "During the past 30 days, how often have you felt confident about your ability to handle your personal problems?" (reverse coded). Perceived stress is only included on the employee survey.

Psychological distress is a widely used scale for mental health screening (the K6) which has been clinically validated (Kessler et al., 2003). It is a six-item additive scale, with a possible range from 6 to 30 and responses from 1 (*None of the time*) to 5 (*All of the time*). Two questions in the scale are: "During the past 30 days, how much of the time did you feel so sad nothing could cheer you up?" and "During the past 30 days, how much of the time did you feel nervous?"

Independent Variables

Collective appraisals of job conditions are obtained by aggregating reports by team members. Bliese and Jex (2002) note that "the group-level measure, by virtue of being a shared perception, can be considered more of an objective rating of the environment than can the individual-level assessment" (pp. 271–272). These collective appraisals of job demands, control, and support are operationalized as the percent individuals on the team with high values (usually ≥ 4) on the job condition. This approach mitigates potential identification problems that would occur by including both the team mean and individual job condition variables in our models (Bakker et al., 2006). Both team-level and individual-level psychosocial job conditions were derived from established scales or measures (see Appendix). We include organizational work-family climate (which assesses expectations of sacrificing family and personal life for the sake of work), FSSB, schedule control, job demands, job control, hours worked (in a typical week in this job), and job insecurity. Models also include gender, parental status, marital status, race/ethnicity, whether the respondent has children age 18 or

under living at home, whether the respondent cares for an adult relative for three or more hours per week over the past six months, and a birth cohort variable constructed using respondent's age.

Statistical Analysis

We first computed intraclass correlation coefficients (ICCs) and other descriptive statistics, assessing whether within-team correlations are higher than between-team correlations. We then fit models predicting work-to-family conflict, job satisfaction, and emotional exhaustion at the team level (due to their high ICCs). We next fit multilevel models that include both team- and individual-level characteristics theorized to predict individual employees' work-to-family conflict, using both team-level and individual perceptions of job conditions as well as employees' sociodemographics, testing also for any effects of team-level work-to-family conflict on individuals' perceptions of work-to-family conflict. We then tested whether work-to-family conflict mediates the relationship between job conditions and mental health outcomes. In addition to these main models, we also examined moderating effects by fitting models that included interactions between work-to-family conflict and various subgroups. In simplest notation, the multilevel models are of the format:

$$Y_{ij} = \alpha + \beta_1 X_{1ij} + \beta_2 X_{2j} + \zeta_j + \epsilon_{ij}$$

Y_{ij} is the outcome for an individual i in work team j, α is the intercept, X_{1ij} is the vector of individual conditions and characteristics for an individual i in team j. X_{2j} is the vector of work team conditions for team j. ζ_j is a random intercept and remains constant for all members of the team but potentially varies across teams. ϵ_{ij} is the individual error component that varies between individuals.

RESULTS

Means and standard deviations or percentages of dependent and independent variables are shown in Table 1. A total of 38% of respondents in the analytic sample were women, 46% had children age 18 or under, 23% were providing care for an adult relative, and 9.2% of employees were "sandwiched" between caring for children and an infirm adult. There are, not surprisingly, strong

Table 1. Collective and Individual Assessments of Work-Family Conflict, Mental Health/Stress Outcomes, and Job Conditions.

	Team-Level		ICC	Individual-Level	
	Mean	Standard deviation		Mean	Standard deviation
Work-family conflict					
Work-to-family conflict scale (1–5)	3.11	0.51	0.18	3.10	0.94
Percentage of team with high work-family conflict (≥4)	0.23	0.20			
Mental health/stress outcomes					
Job satisfaction scale (1–5)	3.99	0.43	0.17	3.98	0.78
Emotional exhaustion scale (1–7)	4.29	0.77	0.13	4.26	1.53
Perceived stress scale (4–20)			0.06	8.53	2.61
Psychological distress scale (6–30)			0.01	10.83	3.18
		Percentage of team "high"			
Team and individual job conditions					
Organizational work-family climate scale (1–5, 5 = best)	0.13	0.15	0.15	2.75	0.88
FSSB scale (1–5)	0.54	0.25	0.19	3.82	0.79
Schedule control scale (1–5)	0.32	0.22	0.14	3.56	0.69
Job demands scale (psychological job demands | 1–5)	0.39	0.25	0.14	3.61	0.71
Job control scale (decision authority | 1–5)	0.62	0.23	0.09	3.85	0.69
Hours worked per week	0.33	0.24	0.14	46.01	5.88
Job insecurity (1–4)	0.32	0.25	0.10	2.25	0.73
Manager (vs. employee) respondent				0.14	0.34
Team structure controls					
Core IT versus other business functions	0.36	0.48			
Team size (roster, including 1 manager per team)	11.02	5.48			
No manager CAPI respondent on Team	0.13	0.33			
Surveyed after merger announcement				0.43	0.50
Individual sociodemographics					
Birth cohort					
Gen X, ages 30–45, born 1965–1980			0.10	0.49	0.50
Trailing Edge Boomers, ages 46–54, born 1956–1964			0.02	0.33	0.47
Leading Edge Boomers, ages 55–64, born 1946–1955			0.04	0.18	0.38
Children age ≤18 at home			0.04	0.47	0.50
Female			0.13	0.38	0.49
Married/partnered			0.01	0.81	0.40

Table 1. (*Continued*)

	Team-Level		ICC	Individual-Level	
	Mean	Standard deviation		Mean	Standard deviation
Caregiver for adult relative			0.00	0.23	0.42
Race/ethnicity					
White, non-Hispanic			0.14	0.68	0.47
Asian or Pacific islander			0.25	0.22	0.42
Other race/ethnicity (nonwhite, non-Asian)			0.02	0.10	0.30

Note: $N = 748$ individuals in 120 teams. In the "Team and Individual Job Conditions" section, "team-level" is the team mean of the individual-level responses within each team unless otherwise indicated.

correlations between individual-level and team-level assessments of job conditions, ranging between .38 and .45 (table available from authors).

Question #1: Do Team Members Collectively Experience Work-to-Family Conflict and Mental Health?

Does work-to-family conflict operate only through the lens of individuals, or do team members share this stressor? ICCs, which gauge the proportion of variance in a variable that is between groups as compared to the total variance in that variable, can theoretically range from 0 to 1 (Raudenbush & Bryk, 2002). A high ICC means that there is a patterned "groupness" to that measure, and that team members share some commonality regarding it. Generally ICCs above .10 are considered high for psychosocial measures.

Work-to-family conflict has a statistically significant ($p < .001$) and high ICC of .18, indicating that almost one-fifth of the total variance of work-to-family conflict is attributable to team membership. This demonstrates that work-to-family conflict varies systematically across teams as well as across individuals. The ICCs for job satisfaction (.17) and emotional exhaustion (.13), also high and statistically significant ($p < .001$), indicate that these mental health outcomes similarly vary across teams. These outcomes both explicitly address the job context. By contrast, the ICCs for perceived stress and psychological distress are much lower and the group-level component is not statistically significant, possibly because individual differences in terms

of family status and other nonwork factors might better predict whether individual employees experience perceived stress or psychological distress.

A number of job conditions also have high ICCs; specifically, organizational work-family climate, FSSB, schedule control, job demands, and work hours are all .14 or above. These high ICCs show that much of the variability in job conditions is attributable to differences across teams. This supports our theoretical emphasis on job conditions, work-to-family conflict, and some mental health measures as constituting not only employees' individual assessments but also the collective experiences of team members.

Question #2: Does Work-to-Family Conflict Operate as a Mediator between Job Conditions and Mental Health Outcomes?

To address this question at the team level, we first fit team-level (ecological) models with team measures of both outcomes and independent variables. Five team-level job conditions are associated with teams' degree of work-to-family conflict (see Table 2, Model 1). Team-level assessments of high job demands and long (≥50 per week) work hours are both positively associated with higher mean work-to-family conflict, while team-level assessments of a supportive organizational climate, a supervisor supportive of family concerns, and schedule control are all negatively related to teams' work-to-family conflict. This model highlights both the collective experience by teams of work-to-family conflict, and the fact that teams with intensive work – putting in long hours with high job demands – report high work-to-family conflict, while teams with supportive organizational climates, supportive supervisors, and control over their schedules have lower collective appraisals of work-family conflict. Thinking about work-family conflict as varying across teams underscores that (1) teams differ in the nature of their working conditions and (2) some job conditions are associated with higher or lower team-level work-to-family conflict. This suggests that team-level job conditions *can be changed* in ways that might reduce the collective experience of work-to-family conflict.

Turning to mental health outcomes, recall that both job satisfaction and emotional exhaustion vary across teams. We find teams with greater job resources (supportive organizational climates, family supportive supervisors, greater job control) tend to experience greater job satisfaction, while teams with high job demands tend to experience lower job satisfaction (Table 2, Model 2). Teams with greater job resources (family supportive supervisors, schedule control) also are more apt to report lower collective

Table 2. Team-Level Predictors of Team-Level Work-Family Conflict, Job Satisfaction, and Emotional Exhaustion.

	(1) Team Mean Work-to-Family Conflict		(2) Team Mean Job Satisfaction		(3) Team Mean Job Satisfaction		(4) Team Mean Emotional Exhaustion		(5) Team Mean Emotional Exhaustion	
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Team job conditions (proportions of individuals in each team with "high" values on job conditions)										
Percentage of team perceiving supportive org. work-family climate (≥4)	−1.084***	(0.248)	0.601*	(0.243)	0.480 +	(0.263)	−0.403	(0.359)	0.221	(0.359)
Percentage of team perceiving family supportive supervisor (≥4)	−0.329*	(0.148)	0.340*	(0.145)	0.303*	(0.148)	−0.691**	(0.214)	−0.502*	(0.202)
Percentage of team with high schedule control (≥4)	−0.434*	(0.169)	0.179	(0.166)	0.131	(0.170)	−0.733**	(0.245)	−0.483*	(0.232)
Percentage of team with high job demands (≥4)	0.551***	(0.153)	−0.373*	(0.151)	−0.311 +	(0.159)	1.497***	(0.222)	1.180***	(0.217)

Percentage of team with high job control (≥4)	0.043	(0.166)	0.506**	(0.163)	0.511**	(0.163)	0.027	(0.241)	0.003	(0.223)
Percentage of team working 50 or more hours/week	0.560***	(0.155)	0.020	(0.153)	0.083	(0.161)	0.329	(0.225)	0.007	(0.220)
Percentage of team with high job insecurity (3 or 4)	0.126	(0.148)	−0.230	(0.145)	−0.216	(0.146)	0.609**	(0.215)	0.537**	(0.199)
Team mean work-to-family conflict					−0.112	(0.094)			0.575***	(0.129)
Constant	3.049***	(0.184)	3.540***	(0.181)	3.881***	(0.339)	4.084***	(0.267)	2.331***	(0.463)
Observations	120		120		120		120		120	
R-squared	0.587		0.424		0.432		0.613		0.674	

Note: Standard errors in parentheses. The above table shows results from OLS models. Models also control for team business function, team size, presence of manager CAPI respondent in each team, and timing of a merger announcement.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

emotional exhaustion, while teams with greater job demands and job insecurity are more likely to experience higher emotional exhaustion. We observe no statistically significant relationship between team-level work-to-family conflict and team members' collective job satisfaction (Table 2, Model 3), suggesting that *team-level* work-to-family conflict does not mediate the relationship between job conditions and team means of job satisfaction. However, there is evidence that work-to-family conflict at the team level does serve as a partial mediator between job conditions and a team's collective sense of emotional exhaustion (comparing Model 5 with Model 4 in Table 2).

We then examine whether team-level job conditions predict individual outcomes (see Table 3). Model 1 in Table 3 shows team-level supportive climate is significantly associated with lower work-to-family conflict, while employees in teams with greater job control (often associated with greater responsibilities) report higher work-to-family conflict. Note that these findings are net of individual workers' own sense of the organizational climate, job control, and other job conditions.

Some team-level job conditions also predict individual mental health outcomes, net of individuals' own perceptions of their job conditions. Specifically, employees in teams with a supportive organizational climate or with lower job demands report greater job satisfaction, even net of their own individual assessments of these and other job conditions (Table 4, Model 1). And employees in teams with greater job demands or greater job insecurity experience greater emotional exhaustion, again net of individual job conditions (Table 4, Model 3). All of these coefficients attenuate slightly once work-to-family conflict (measured at both the team and individual levels) are included (Table 4, Models 2 and 4), but only one meets the Baron and Kenny (1986) criteria for mediation. The relationship between team-level supportive climate and individual-level job satisfaction is mediated by individual employees' sense of work-to-family conflict.

Turning to individual-level effects, relationships between employees' perceptions of their job conditions and their mental health outcomes are, as hypothesized, mediated by their sense of work-to-family conflict. For example, the relationship between individual perceptions of the organizational climate, schedule control, and job control, on the one hand, and all the mental health outcomes, on the other, is mediated by individuals' work-to-family conflict. These job conditions affect mental health in part through the mechanism of work-to-family conflict. The models in Table 4 also show that work-to-family conflict mediates the relationship between

Table 3. Team- and Individual-Level Predictors of Individual Employees' Work−Family Conflict.

	(1) Individual Work-Family Conflict		(2) Individual Work-Family Conflict	
	Coefficient	Standard error	Coefficient	Standard error
Team job conditions (proportions of individuals in each team with "high" values on job conditions)				
Percentage of team perceiving supportive org. work-family climate (≥4)	−0.439*	(0.202)	−0.222	(0.194)
Percentage of team perceiving family supportive supervisor (≥4)	−0.047	(0.127)	0.074	(0.123)
Percentage of team with high schedule control (≥4)	−0.069	(0.138)	0.082	(0.133)
Percentage of team with high job demands (≥4)	−0.016	(0.127)	−0.105	(0.121)
Percentage of team with high job control (≥4)	0.281*	(0.138)	0.221 +	(0.131)
Percentage of team working 50 or more hours/week	0.077	(0.130)	−0.126	(0.128)
Percentage of team with high job insecurity (3 or 4)	0.203	(0.128)	0.045	(0.125)
Percentage of team with high work-family conflict (≥4)			0.906***	(0.155)
Individual job conditions				
Organizational work-family climate scale (1−5, 5 = best)	−0.280***	(0.032)	−0.264***	(0.032)
FSSB scale (1−5)	−0.154***	(0.036)	−0.145***	(0.035)
Schedule control scale (1−5)	−0.152***	(0.042)	−0.156***	(0.041)
Job demands scale (psychological job demands | 1−5)	0.418***	(0.039)	0.401***	(0.038)
Job control scale (decision authority | 1−5)	−0.085*	(0.040)	−0.080*	(0.040)
Hours worked per week	0.042***	(0.005)	0.041***	(0.005)
Job insecurity (1−4)	0.027	(0.036)	0.036	(0.035)
Manager (vs. employee) respondent	−0.026	(0.071)	−0.016	(0.070)
Individual sociodemographics				
Birth cohort (Gen X omitted)				
Trailing Edge Boomers, ages 46−54, born 1956−1964	−0.035	(0.056)	−0.034	(0.055)
Leading Edge Boomers, ages 55−64, born 1946−1955	0.077	(0.074)	0.073	(0.072)

Table 3. (*Continued*)

	(1) Individual Work-Family Conflict		(2) Individual Work-Family Conflict	
	Coefficient	Standard error	Coefficient	Standard error
Children age ≤18 at home	0.124*	(0.053)	0.101 +	(0.053)
Female	0.030	(0.050)	0.027	(0.049)
Married/partnered	0.059	(0.062)	0.054	(0.060)
Caregiver for adult relative	−0.004	(0.055)	−0.014	(0.054)
Race/ethnicity (white omitted)				
Asian or Pacific islander	0.026	(0.066)	0.004	(0.064)
Other race/ethnicity (nonwhite, non-Asian)	−0.131 +	(0.078)	−0.116	(0.077)
Constant	2.932***	(0.153)	2.783***	(0.147)
Model fit information and random effects				
Observations	748		748	
Number of groups	120		120	
Team variance	0.006		0.000	
Individual variance	0.376		0.365	
ICC	0.015		0.000	
Proportion of team-level variance explained	0.964		1.000	
Proportion of individual level variance explained	0.477		0.492	
Proportion of total variance explained	0.563		0.582	
BIC	1,600		1,573	

Note: Standard errors in parentheses. Models also control for team business function, team size, presence of manager CAPI respondent in each team, and timing of a merger announcement.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

long work hours and both emotional exhaustion and psychological distress. Additionally, we find that employees who report that their supervisor is supportive of family concerns (higher FSSB) are more likely to have higher job satisfaction, while employees with higher job insecurity are more likely to report greater psychological distress.

These findings add evidence that both individuals' own assessments *and* the collective assessments by team members of job conditions are important

Table 4. Team- and Individual-Level Predictors of Individual Employees' Mental Health/Stress Outcomes.

	(1)		(2)		(3)		(4)	
	Job Satisfaction				Emotional Exhaustion			
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Team job conditions (percentages of individuals in each team with "high" values on job conditions)								
Percentage of team perceiving supportive org. work-family climate (≥4)	0.503*	(0.226)	0.405 +	(0.228)	0.219	(0.370)	0.551	(0.350)
Percentage of team perceiving family supportive supervisor (≥4)	−0.064	(0.141)	−0.096	(0.142)	−0.321	(0.233)	−0.260	(0.221)
Percentage of team with high schedule control (≥4)	−0.076	(0.154)	−0.119	(0.157)	−0.256	(0.253)	−0.183	(0.240)
Percentage of team with high job demands (≥4)	−0.295*	(0.143)	−0.276 +	(0.143)	0.476*	(0.233)	0.472*	(0.219)
Percentage of team with high job control (≥4)	0.193	(0.155)	0.237	(0.154)	0.234	(0.253)	0.032	(0.237)
Percentage of team working 50 or more hours/week	0.093	(0.145)	0.150	(0.151)	−0.044	(0.238)	−0.133	(0.231)
Percentage of team with high job insecurity (3 or 4)	−0.210	(0.141)	−0.155	(0.144)	0.472*	(0.235)	0.304	(0.224)
Individual job conditions								
Organizational work-family climate scale (1−5, 5 = best)	0.096**	(0.033)	0.062 +	(0.034)	−0.293***	(0.061)	−0.097	(0.060)
FSSB scale (1−5)	0.188***	(0.037)	0.169***	(0.037)	−0.089	(0.068)	0.017	(0.064)
Schedule control scale (1−5)	0.081 +	(0.043)	0.065	(0.043)	−0.259**	(0.079)	−0.155*	(0.074)
Job demands scale (psychological job demands | 1−5)	0.001	(0.040)	0.050	(0.042)	0.638***	(0.074)	0.348***	(0.074)
Job control scale (decision authority | 1−5)	0.330***	(0.041)	0.320***	(0.041)	−0.283***	(0.077)	−0.225**	(0.071)

Table 4. (*Continued*)

	(1)		(2)		(3)		(4)	
	Job Satisfaction				Emotional Exhaustion			
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Hours worked per week	−0.004	(0.005)	0.001	(0.005)	0.030***	(0.009)	0.001	(0.009)
Job insecurity (1−4)	−0.010	(0.036)	−0.008	(0.036)	0.036	(0.068)	0.019	(0.064)
Manager (vs. employee) respondent	−0.102	(0.072)	−0.107	(0.071)	0.164	(0.135)	0.184	(0.125)
Work-family conflict mediators								
Percentage of team with high work-family conflict (≥4)			−0.201	(0.185)			0.155	(0.285)
Individual work-family conflict scale (1−5)			−0.111**	(0.038)			0.685***	(0.066)
Individual sociodemographics								
Birth cohort (Gen X omitted)								
Trailing Edge Boomers, ages 46−54, born 1956−1964	0.082	(0.057)	0.077	(0.057)	0.001	(0.106)	0.023	(0.099)
Leading Edge Boomers, ages 55−64, born 1946−1955	0.195**	(0.075)	0.204**	(0.075)	−0.005	(0.140)	−0.062	(0.130)
Children age ≤18 at home	−0.059	(0.055)	−0.042	(0.055)	0.167+	(0.101)	0.076	(0.095)
Female	0.056	(0.052)	0.060	(0.051)	0.009	(0.095)	−0.010	(0.088)
Married/partnered	0.076	(0.063)	0.083	(0.063)	−0.142	(0.117)	−0.183+	(0.109)
Caregiver for adult relative	0.020	(0.056)	0.021	(0.056)	−0.152	(0.105)	−0.153	(0.097)
Race/ethnicity (white omitted)								
Asian or Pacific islander	0.180**	(0.068)	0.188**	(0.067)	−0.626***	(0.124)	−0.649***	(0.115)
Other race/ethnicity (nonwhite, non-Asian)	0.206*	(0.080)	0.188*	(0.080)	−0.273+	(0.148)	−0.182	(0.138)
Constant	3.971***	(0.172)	3.984***	(0.173)	4.070***	(0.280)	4.156***	(0.266)

Model fit information and random effects				
Observations	748	748	748	748
Number of groups	120	120	120	120
Team variance	0.023	0.023	0.000	0.000
Individual variance	0.382	0.377	1.367	1.184
ICC	0.058	0.057	0.000	0.000
Proportion of team-level variance explained	0.781	0.786	1.000	1.000
Proportion of individual level variance explained	0.247	0.256	0.325	0.416
Proportion of total variance explained	0.340	0.349	0.413	0.491
BIC	1,640	1,642	2,555	2,461

	(5)		(6)		(7)		(8)	
	Perceived Stress				Psychological Distress			
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Team job conditions (percentages of individuals in each team with "high" values on job conditions)								
Percentage of team perceiving supportive org. work-family climate (≥4)	−1.512 +	(0.783)	−1.289	(0.788)	−0.967	(0.885)	−0.512	(0.886)
Percentage of team perceiving family supportive supervisor (≥4)	0.705	(0.499)	0.570	(0.503)	0.365	(0.559)	0.480	(0.559)
Percentage of team with high schedule control (≥4)	−0.115	(0.539)	−0.069	(0.540)	−0.281	(0.607)	−0.147	(0.608)
Percentage of team with high job demands (≥4)	−0.567	(0.490)	−0.534	(0.486)	−0.529	(0.558)	−0.563	(0.553)
Percentage of team with high job control (≥4)	−0.125	(0.534)	−0.286	(0.529)	0.258	(0.607)	0.004	(0.600)
Percentage of team working 50 or more hours/week	0.068	(0.498)	0.071	(0.511)	−0.207	(0.570)	−0.378	(0.583)

Table 4. (*Continued*)

	(5)		(6)		(7)		(8)	
	Perceived Stress				Psychological Distress			
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Percentage of team with high job insecurity (3 or 4)	0.630	(0.496)	0.575	(0.499)	0.770	(0.563)	0.522	(0.568)
Individual job conditions								
Organizational work-family climate scale (1−5, 5 = best)	−0.424**	(0.130)	−0.228 +	(0.135)	−0.377*	(0.147)	−0.143	(0.152)
FSSB scale (1−5)	−0.212	(0.140)	−0.102	(0.140)	−0.117	(0.163)	0.008	(0.162)
Schedule control scale (1−5)	−0.399*	(0.164)	−0.289 +	(0.164)	−0.335 +	(0.190)	−0.215	(0.188)
Job demands scale (psychological job demands | 1−5)	0.639***	(0.157)	0.394*	(0.164)	0.711***	(0.177)	0.369*	(0.187)
Job control scale (decision authority | 1−5)	−0.529***	(0.159)	−0.488**	(0.157)	−0.712***	(0.183)	−0.643***	(0.181)
Hours worked per week	0.002	(0.019)	−0.025	(0.019)	0.048*	(0.021)	0.014	(0.022)
Job insecurity (1−4)	0.198	(0.143)	0.179	(0.141)	0.474**	(0.163)	0.457**	(0.161)
Manager (vs. employee) respondent	0.000	(0.000)	0.000	(0.000)	−0.506	(0.322)	−0.479	(0.317)
Work-to-family conflict mediators								
Percentage of team with high work-family conflict (≥4)			−0.354	(0.639)			0.476	(0.721)
Individual work-to-family conflict scale (1−5)			0.652***	(0.148)			0.796***	(0.167)
Individual sociodemographics								
Birth cohort (Gen X omitted)								
Trailing Edge Boomers, ages 46−54, born 1956−1964	−0.249	(0.223)	−0.217	(0.220)	−0.588*	(0.255)	−0.561*	(0.251)

Leading Edge Boomers, ages 55–64, born 1946–1955	−0.266	(0.286)	−0.330	(0.283)	−0.798*	(0.334)	−0.867**	(0.329)
Children age ≤18 at home	0.465*	(0.212)	0.409 +	(0.210)	0.046	(0.243)	−0.068	(0.240)
Female	0.415*	(0.197)	0.401*	(0.194)	0.553*	(0.227)	0.531*	(0.224)
Married/partnered	−0.171	(0.239)	−0.200	(0.235)	−0.775**	(0.280)	−0.825**	(0.275)
Caregiver for adult relative	0.409 +	(0.218)	0.414 +	(0.215)	0.485 +	(0.251)	0.480 +	(0.247)
Race/ethnicity (white omitted)								
Asian or Pacific islander	−0.129	(0.257)	−0.127	(0.254)	0.473	(0.296)	0.438	(0.292)
Other race/ethnicity (nonwhite, non-Asian)	−0.951**	(0.307)	−0.868**	(0.303)	−0.721*	(0.355)	−0.611 +	(0.350)
Constant	8.578***	(0.596)	8.781***	(0.601)	10.616***	(0.671)	10.666***	(0.673)
Model fit information and random effects								
Observations	646		646		748		748	
Number of groups	120		120		120		120	
Team variance	0.000		0.000		0.000		0.000	
Individual variance	5.169		5.017		7.837		7.577	
ICC	0.000		0.000		0.000		0.000	
Proportion of team-level variance explained	1.000		1.000		1.000		1.000	
Proportion of individual level variance explained	0.206		0.230		0.211		0.238	
Proportion of total variance explained	0.243		0.266		0.221		0.247	
BIC	3,082		3,076		3,861		3,849	

Note: Standard errors in parentheses. Models also control for team business function, team size, presence of manager CAPI respondent in each team, and timing of a merger announcement.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

in understanding work-to-family conflict, job satisfaction, and emotional exhaustion. By contrast, it is their own perceptions of job conditions that appear most directly predictive of employees' perceived stress and psychological distress. We have also shown that work-to-family conflict operates as a mediator between some job conditions and mental health outcomes. However, the direct effects of job conditions on mental health remain, even after controlling for the indirect effects through work-to-family conflict.

Question #3: Are Some Subgroups More Vulnerable to the Deleterious Mental Health Effects of Work-to-Family Conflict?

It may be the case that work-to-family conflict (measured at either level) is more linked to the mental health and stress of some employees than others. To investigate this, we fit models like the even-numbered models in Table 4 with additional interaction terms between work-to-family conflict (at both levels) and employees' birth cohort, gender, combined gender and parental status, and adult caregiving status. We found only two statistically significant interactions. Fig. 2 shows that individuals in teams with higher work-to-family conflict – where more than half the team experiences high work-to-family conflict – who themselves care for an adult relative but do not have children at home tend to experience greater psychological distress than their peers who care for adult relatives and also have children. This points to caregiving for adult relatives as a private trouble that may not be as recognized as an "acceptable" time demand within teams. Perhaps adult caregivers who do not have children are focusing their full attention on caregiving for aging parents or other relatives, leading to greater psychological distress for themselves. It could be that "sandwiched" employees see that their coworkers are also experiencing high conflict from work to family and this puts their own difficulties in perspective. Fig. 3 shows that for a given level of individual work-to-family conflict above 3 (out of 5), members of Generation X (born 1965–1980) with higher levels of work-to-family conflict tend to experience greater psychological distress than members of either the leading edge (born 1946–1955) or the trailing edge (born 1956–1964) of the large Boomer age-cohort. This could reflect that Gen X'ers are in the middle of raising their families as well as building their careers, making them more vulnerable to work-to-family conflict as a chronic stressor in their lives.

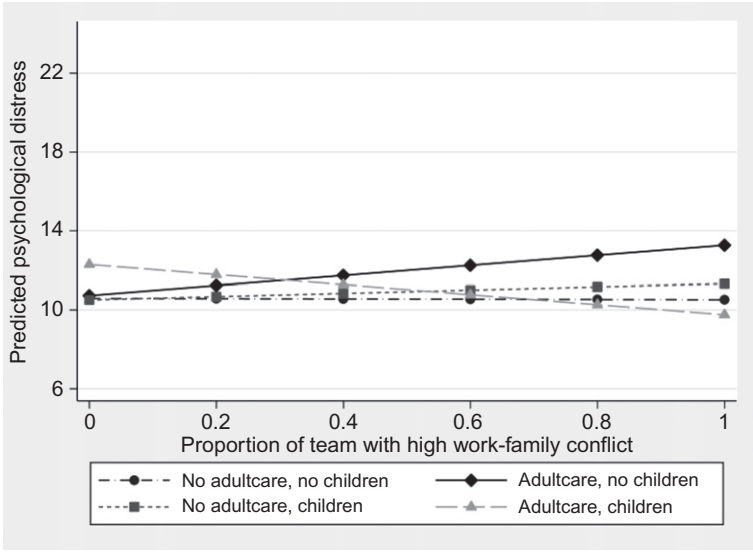

Fig. 2. Individuals Caring Only for Infirm Adults in Teams with High Work-Family Conflict Experience More Psychological Distress.

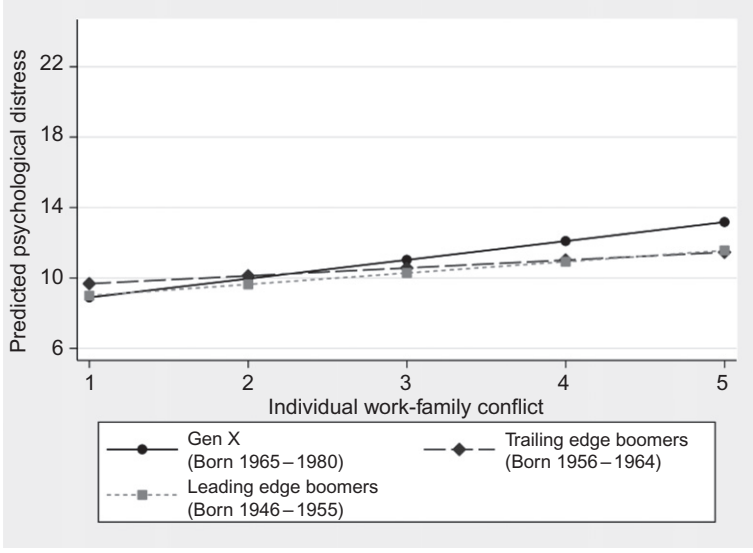

Fig. 3. Gen X'ers with High Work-Family Conflict Report Higher Psychological Distress than Boomers.

DISCUSSION AND CONCLUSIONS

Teams as a Focus of Theorizing and Analysis

Using individuals as the exclusive unit of analysis (as is the case in most mental health research) perpetuates conceptualization of individual rather than contextual forces shaping well-being. Thinking about and estimating the effects of team characteristics on both team-level and individual-level work-to-family conflict and mental health provides a structural framing of the demands and resources on the job that shape the mental health and life quality of employees. Our multilevel findings extend the conclusions from a meta-analysis of over 60 studies (Byron, 2005) conducted at the individual level that work conditions (in our study, a supportive climate, family-supportive supervisors, job control, schedule flexibility, and job demands) are more important predictors of work-to-family conflict than are family variables, while sociodemographic characteristics such as gender and parental status may be more relevant to mental health outcomes.

We have shown that both work-to-family conflict and job conditions, traditionally measured at the individual level, can be fruitfully framed as *team* characteristics, shared appraisals held in common by team members. Thinking about teams as varying in their degree of work-to-family conflict, job satisfaction, and emotional exhaustion suggests that the circumstances under which they work matter for their collective as well as individual well-being. Consider the case of work-to-family conflict, often framed as a private trouble of individual employees, a problem of "balance" rather than a structural mismatch grounded in the social and temporal organization of work (Moen & Roehling, 2005). The fact that we show work-to-family conflict is patterned at the team level challenges this "private troubles" framing. Rather, our findings suggest that work-to-family conflict varies across different team environments. Similarly, job satisfaction and emotional exhaustion are socially distributed across teams.

We have also shown that work-to-family conflict, particularly as measured at the individual level, is a key mechanism linking job conditions to individual employees' mental health outcomes. However, job conditions continue to affect well-being, over and above the indirect effects through work-to-family conflict. Executives and managers interested in employee engagement and productivity would do well to attend the conditions of work that reduce both individual- and team-level work-to-family conflict and promote their employees' mental health.

Note that we find that work-to-family conflict seems to have similar effects for women and men alike, suggesting that job conditions associated with work-to-family conflict may have broad impacts across the workforce. We do find that employees with elder care responsibilities in teams with high work-to-family conflict report higher psychological distress, but this may reflect the hidden nature of elder care as a chronic stressor. The fact that members of the Gen X age-cohort are more apt than Boomers to report higher psychological distress under conditions of high work-to-family conflict suggests that age, cohort, and life stage should be better theorized, rather than simply "controlled for," to promote understanding of mental health.

Implications for Future Research

Our findings suggest important future research directions. First, work-family and mental health research could be advanced if teams – shared environments with identifiable characteristics – were to be theorized and investigated in the same ways classrooms, neighborhoods, and networks have been. Second, little is known about the mechanisms shaping team-level conditions. Studies should consider the mechanism of crossover, often used to suggest that working conditions of one individual "crosses over" to affect the experience of others (Almeida & Wong, 2009). There is also the possibility that team members working under similar (adverse or supportive) conditions will experience these conditions in similar ways. Thus the same excessive job demands or rigid supervisor may elicit work-to-family conflict in most members of that team. Both mechanisms – crossover and similar job conditions – may be operating simultaneously. These suggest rich possibilities for understanding the specific ways that shared social context affects work-to-family conflict and mental health.

Third, we found team conditions to be more strongly associated with work-to-family conflict, job satisfaction, and emotional exhaustion than with perceived stress or psychological distress in this IT workforce, but additional research is needed in different organizational sectors and more varied outcomes. Clearly, multilevel modeling that locates employees within the multiple social contexts of their lives can be a fruitful research direction (cf., Bliese & Jex, 2002; Hammer et al., 2004). In all of this work, we would advocate for continued attention to the various ways that caregiving and home demands affect these relationships.

Implications for Policy and Practice

Krieger (2011, p. 31) points out, "to the extent there is spatiotemporal and/or social variation … it suggests modifiable causes are at play, whose mechanisms could presumably be altered by informed action." Team-level patterns are just such "spatiotemporal and social variations." Identifying team-level factors related to employee well-being is the first step in identifying ways of promoting healthy work environments. This is potentially a key policy issue for employers as well as governments, especially in light of the fact that work-to-family conflict and stress have increased over time, for men as well as women (Bond, Thompson, & Prottas, 2002; Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Sorensen et al., 2011).

The real test of organizational- or team-level effects is in fact whether *changes in them* cause changes in health, stress, and well-being outcomes. Experimental or quasi-experimental designs introducing change in team environments are necessary for understanding causal paths, given issues of selection and interdependence. However, analysis of team-level conditions has important research and policy implications, moving the focus to ways of *changing the social environments of work* rather than differences across individuals (cf., Hammer, Kossek, Anger, Bodner, & Zimmerman, 2011; Kelly et al., 2011; Kelly et al., 2014; Moen et al., 2011). Intervention studies investigating the impacts of changes in the social environment of work are ultimately necessary to fully understand these social processes, opening up new horizons in the study of work, family, and health.

NOTE

1. For respondents who answered at least 75% of the questions in a scale, we averaged their response to the remaining questions and used that as their scale score, rather than treating the overall response for that respondent as missing.

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APPENDIX

Table A1. Description of Scales/Questions.

Scale	Source	Variable Description	Cronbach's Alpha	Range
Work-to-family conflict	Netemeyer (1996)	The demands of your work interfere with your family or personal time. The amount of time your job takes up makes it difficult to fulfill your family or personal responsibilities. Things you want to do at home do not get done because of the demands your job puts on you. Your job produces strain that makes it difficult to fulfill your family or personal duties. Due to your work-related duties, you have to make changes to your plans for family or personal activities. *Response Choices (reversed): 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree, 5 = Strongly Agree*	0.91	1–5
Job satisfaction	Cammann et al. (1983)	In general, you like working at your job. In general, you are satisfied with your job. You are generally satisfied with the kind of work you do in this job. *Response Choices (reversed): 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree, 5 = Strongly Agree*	0.86	1–5
Burnout (emotional exhaustion)	Maslach and Jackson (1986)	You feel emotionally drained from your work. How often do you feel this way? You feel burned out by your work. How often do you feel this way? You feel used up at the end of the workday. How often do you feel this way?	0.89	1–7

Table A1. (*Continued*)

Scale	Source	Variable Description	Cronbach's Alpha	Range
		Response Choices (reversed): 1 = Never, 2 = A few times a year or less, 3 = Once a month or less, 4 = A few times a month, 5 = Once a week, 6 = A few times a week, 7 = Every day		
Perceived stress	Cohen et al. (1983)	During the past 30 days, how often have you felt that you were unable to control the important things in your life? During the past 30 days, how often have you felt confident about your ability to handle your personal problems? During the past 30 days, how often have you felt that things were going your way? During the past 30 days, how often have you felt difficulties were piling up so high that you could not overcome them? *Response Choices (not reversed): 1 = Very often, 2 = Fairly often, 3 = Sometimes, 4 = Almost never, 5 = Never*	0.76	4–20
Psychological distress	Kessler et al. (2003)	During the past 30 days, how much of the time did you feel so sad nothing could cheer you up? During the past 30 days, how much of the time did you feel nervous? During the past 30 days, how much of the time did you feel restless or fidgety? During the past 30 days, how much of the time did you feel hopeless? During the past 30 days, how much of the time did you feel that everything was an effort?	0.77	6–30

Table A1. (*Continued*)

Scale	Source	Variable Description	Cronbach's Alpha	Range
		During the past 30 days, how much of the time did you feel worthless? *Response Choices (reversed):* *1 = None of the time, 2 = A little of the time, 3 = Some of the time, 4 = Most of the time, 5 = All of the time*		
Organizational work-family climate scale	Kossek et al. (2001)	In your workplace, employees are generally expected to take time away from their family or personal lives to get their work done. In your workplace, employees are expected to put their families or personal lives second to their jobs. In your workplace, employees are expected to make work their top priority. *Response Choices (not reversed):* *1 = Strongly Agree, 2 = Agree, 3 = Neither, 4 = Disagree, 5 = Strongly Disagree*	0.79	1–5
FSSB	Hammer et al. (2009); Hammer et al. (2013)	Your supervisor makes you feel comfortable talking to him/her about my conflicts between work and nonwork. Your supervisor works effectively with employees to creatively solve conflicts between work and nonwork. Your supervisor demonstrates effective behaviors in how to juggle work and nonwork issues. Your supervisor organizes the work in your department or unit to jointly benefit employees and the company. *Response Choices (reversed):* *1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree, 5 = Strongly Agree*	0.88	1–5

Table A1. (*Continued*)

Scale	Source	Variable Description	Cronbach's Alpha	Range
Schedule control	Modified from Thomas and Ganster (1995)	How much choice do you have over when you take vacations or days off? How much choice do you have over when you can take off a few hours? How much choice do you have over when you begin and end each workday? How much choice do you have over the total number of hours you work each week? How much choice do you have over doing some of your work at home or at another location, instead of [insert company name/ location]? How much choice do you have over the number of personal phone calls you make or receive while you work? How much choice do you have over the amount or times you take work home with you? How much choice do you have over shifting to a part-time schedule (or full-time if currently part-time) while remaining in your current position if you wanted to do so? *Response Choices (reversed): 1 = Very Little, 2 = Little, 3 = A moderate amount, 4 = Much, 5 = Very Much*	0.79	1–5
Psychological job demands scale	Karasek et al. (1998)	You do not have enough time to get your job done. Your job requires very fast work. Your job requires very hard work. *Response Choices (reversed): 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree, 5 = Strongly Agree*	0.58	1–5

Table A1. (*Continued*)

Scale	Source	Variable Description	Cronbach's Alpha	Range
Job insecurity	Used in General Social Survey	Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off? *Response Categories (reversed): 1 = Not at all likely, 2 = Not too likely, 3 = Fairly Likely, 4 = Very Likely*		1–4