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Control at Work, Control at Home, and Planning Behavior: Implications for Work–Family Conflict

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This study offers a cross-domain perspective on both individual and situational factors relating to work–family conflict. Individuals' control at work and control at home were examined in relation to work interference with family (WIF) and to family interference with work (FIW). The authors also tested whether employees' use of planning behavior moderated these relationships. Results suggest that control at work was more strongly related to reductions in WIF among employees who used more rather than less planning behavior. Control at home was related to FIW, but this relationship did not vary with employee's use of planning behavior. Unexpectedly, control at home was also related to reductions in WIF.

Keywords: *control; planning; time management; work–family conflict*

Over the past several decades, a large body of research on work–family conflict has developed. In terms of the factors that contribute to difficulties managing work and family roles, most of the research has focused on demographic factors (e.g., number of children), role stressors, and workplace policies as the key predictors (Allen, in press; Byron, 2005). More recently, researchers have turned their attention to individual differences, examining factors such as personality characteristics and preferences for role segmentation and integration

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(e.g., Bruck & Allen, 2003; Kreiner, 2006). In the current study, we integrate both the situational and the individual difference perspectives by investigating the interplay between situational control and individual planning behavior.

Our study makes several unique contributions to the work–family literature. First, we examine the amount of control experienced at home as well as the amount experienced at work in relation to both directions of work–family conflict (work interference with family and family interference with work). Although some research has examined control at work in relation to work–family conflict, to our knowledge none has specifically addressed control at home, which work–family theory suggests is important to consider. As noted by Eby, Casper, Lockwood, Bordeaux, and Brinley (2005) in their review of the work–family literature, industrial–organizational psychology and organizational behavior research has tended to focus on the centrality of the work role rather than the family role in people's lives. This overemphasis on the work domain results in a limited perspective on the totality of work–family experiences.

We also contribute to the literature by investigating planning behavior as a moderator. Planning behavior is the core element of effective time management (Claessens, van Eerde, Rutte, & Roe, 2007). We argue that employees who use more planning behavior should be more adept at using control such that they avert interference between work and family. This is important in that there is little knowledge regarding the way in which individual strategies for managing work and family interact with the environment in predicting work–family conflict (Baltes & Heydens-Gahir, 2003).

Finally, our study contributes by using a methodology intended to reduce single-source biases that threaten the vast majority of work–family research. Specially, we temporally separated our predictor and criterion measures to help prevent common method-induced biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Control at Work, Control at Home, and Work–Family Conflict

Control (sometimes termed *autonomy* or *latitude*) denotes the extent that individuals feel they can directly influence their environments. Employees experiencing a high degree of control at work have the opportunity to self-manage in that they have the freedom to exercise their personal initiative and judgment by deciding what their work goals and responsibilities should be (i.e., which tasks or projects they should work on), how their work should be performed (i.e., which methods should be used), and which schedule they will use to carry out various work tasks (Dwyer & Ganster, 1991; Frese, Kring, Soose, & Zempel, 1996; Hackman & Oldham, 1980; Jackson, Wall, Martin, & Davids, 1993; Karasek, 1979). A high degree of control at work often implies that employees participate in, and thus have influence over, superiors' decisions that affect their work (Frese et al., 1996; Spector, 1986).

People may also vary in the amount of control they have at home. If one conceptualizes control at home as being analogous to control at work (i.e., a parallel construct), then having more control at home would mean having more influence over what one's home-related goals and responsibilities should be (e.g., whether one will do the laundry, purchase groceries, or plan a family outing on a given day), how home-related tasks should be carried out (e.g., doing all

the laundry at home vs. bringing some clothing to be professionally laundered and ironed), and when these tasks should be done (e.g., purchasing the groceries in the morning, the afternoon, or the evening). The amount of control someone has at work likely says little about the amount of control that person may have at home. For example, some people may have significant control at work but very little control at home because of personal circumstances (e.g., a controlling or directive spouse; routinely scheduled child-related activities, such as swim classes or hockey practices; sick parent or other family member who needs a specific type of support; etc.). Others may have considerable control at home but very little at work. Finally, some may have a great deal of or very little control in both roles. We view control in each role as distinct constructs that likely have limited covariation. Although some work–family research attention has been given to control at work (e.g., Clark, 2002; Thomas & Ganster, 1995), none has been given specifically to control at home. Investigating control at home as well as control at work seems important in that control at home is likely to explain variation in work–family interference above and beyond control at work.

It has been suggested that lack of control is a factor that contributes to the experience of work–family conflict (Greenhaus & Parasuraman, 1986; Higgings, Duxbury, & Irving, 1992). Greater control enables people to more easily avoid situations in which the demands of one role interfere with participation in the other role. Consistent with this view, some studies have found that greater control at work is associated with less work–family conflict (Clark, 2002; Greenhaus, Parasuraman, Granrose, Rabinowitz, & Beutell, 1989; Parasuraman & Simmers, 2001). Thomas and Ganster (1995) reported that employees' enhanced sense of control over the way they balance work and parenting functions (work- and parenting-focused items combined into a single measure of control) explained why family-supportive work variables (e.g., flexible scheduling and supportive supervision) related negatively to work–family conflict. While the results of these studies are in keeping with the view that employees' control over their environments could help them to avoid work–family conflict, the authors did not separately measure individuals' control at home and control at work (aspects of both constructs were combined in a single scale), nor did they separately measure both directions of work–family conflict. We believe there is merit in considering control at work separately from control at home and examining relationships with both directions of conflict.

It has been argued that work–family conflict occurs when the demands of one role deplete resources that an individual needs to meet the demands of the other role (e.g., Edwards & Rothbard, 2000; Grandey & Cropanzano, 1999; Greenhaus & Beutell, 1985; Lapierre & Allen, 2006). According to Edwards and Rothbard, finite resources such as time, attention, and energy that are expended in one role become unavailable for use in other roles. They refer to a "transfer of resources between domains" (p. 182). If more resources are devoted to the work role, fewer are available for family activities, leading to perceptions of work interfering with family. Conversely, if more resources are devoted to the family role, then fewer would be available at work, resulting in perceptions of family interfering with work. Supporting the resource drain perspective on work–family conflict, research has revealed that work role demands (e.g., work schedule and time spent at work, workload, work role conflict, work role ambiguity) are among the primary correlates of work interference with family (WIF) and that family role demands (e.g., time spent at home, schedule of family activities, amount of responsibility at home, family role conflict, family role ambiguity) are among the primary

correlates of family interference with work (FIW; Byron, 2005; Frone, 2003). Control at work and/or at home should help individuals allocate their finite resources in a way that helps prevent work–family conflict. People who have greater control at work have more autonomy or latitude in deciding what should be accomplished at work, as well as how and when work tasks should be carried out (Dwyer & Ganster, 1991; Frese et al., 1996; Hackman & Oldham, 1980; Jackson et al., 1993; Karasek, 1979). Put otherwise, more control at work suggests that people have more influence over their work demands (Parasuraman & Alutto, 1981, 1984). To the extent that people need to conserve some of their finite resources for family activities, greater control at work should give them an opportunity to prevent unnecessary draining of the time, energy, and/or attention that they require for home- or family-related activities. Analogously, those who have more control at home should be in a position to more easily manage family- or home-related demands such that sufficient resources are available for fulfilling their work obligations. Accordingly, because control at work is likely to help prevent WIF and control at home is likely to help prevent FIW, we posited the following two hypotheses:

Hypothesis 1: Control at work relates negatively to WIF.
Hypothesis 2: Control at home relates negatively to FIW.

The Moderating Role of Planning Behavior

Although control over the environment has the potential to help people avoid work–family conflict, this may be easier for some individuals than for others. Having more discretion over one's environment does not imply that one knows how to use this discretion in a way that prevents work–family interference. Having significant control implies that individuals must rely more on their own self-management skills to function effectively. Lacking effective self-management skills may result in one's autonomy being squandered. Having greater latitude in deciding what, how, and when things should be done may be significantly more helpful in avoiding work–family conflict if people have the skills to use such latitude in a way that prevents unnecessary wasting of time, attention, and energy.

One type of skill that seems particularly salient is time management. It has been argued that time management is a crucial skill that employees must possess to function effectively in work settings that afford them a great deal of control (Claessens, van Eerde, Rutte, & Roe, 2004). A recent review of the time management literature indicates that the core element of effective time management is *planning behavior* (Claessens et al., 2007), which refers to a person's skill at "setting of goals concerning what the person wants or needs to accomplish and the prioritizing of tasks necessary to achieve these goals" (Macan, 1994, p. 391). Planning behavior should enable people to make more efficient use of their time by distributing their attention and energy more effectively, thereby managing work–family overload (Claessens et al., 2004).

Planning behavior reflects self-management with regard to the performance of multiple tasks within a certain time period (Claessens et al., 2007). Those who are less skilled at planning may squander the control they have by wasting their limited time, attention, and energy

on lower priority or irrelevant activities. Control may therefore be more useful for the prevention of work–family conflict among employees who engage in more planning behavior. Moreover, planning behavior may be one form of effective resource allocation (Edwards & Rothbard, 2000). Work demands compete with family demands for time and attention. On a daily basis, individuals are confronted with the need to make resource allocation decisions. Planning behavior may facilitate the individual's ability to effectively shift resources such as time and energy from one domain to the other.

To our knowledge, Adams and Jex (1999) are the only scholars who have addressed the potential benefits of planning behavior in relation to work–family conflict. However, they did not consider these benefits as resulting from an interaction between control and planning. Some of their results warrant discussion. Zero-order correlations between planning behavior (i.e., "setting goals and priorities") and both directions of work–family conflict (r = .02 for WIF and r = –.10 for FIW) failed to reach statistical significance, suggesting that planning behavior is of little consequence to work–family conflict. They tested a series of structural models building upon Macan's (1994) process model of time management, where time management behavior enhances employees' sense of control over time (a narrower conceptualization of control), which in turn yields positive outcomes. Although their modeling results were generally consistent with the pattern of relationships they expected, they found a significant positive relationship between planning behavior and WIF. This suggests that planning behavior may lead to an *increase* in work–family conflict, which is difficult to theoretically explain. Adams and Jex's puzzling results made us question if their conceptualization of the interrelationships among planning behavior, control, and work–family conflict was misspecified, thus spurring our desire to consider an alternative view.

Consistent with the time management literature (Claessens et al., 2007), we view control not as a consequence of one's planning behavior, as advanced by Macan (1994), but rather as an *opportunity* to more successfully use planning behavior. However, as implied by time management research, even in contexts where individuals have the opportunity to use planning behavior (i.e., in high-control contexts), we believe that there are individual differences in the degree that it is effectively used. Some people may have a great deal of control but still fail to engage in the planning behaviors that facilitate effective resource allocation, thus limiting the potential benefits that control might offer in terms of work–family conflict avoidance. For example, while a person may have discretion over when certain work tasks get completed, priority may not be given to the most important tasks. As a result, this individual may be forced to work overtime to complete the high-priority tasks on time, leaving less time (and probably less energy) for family activities. Had that person finished the top-priority tasks before going on to less important ones, sufficient resources could have been conserved for family activities.

Having greater control at work should enable those who use more planning behavior to more easily avoid the work delays and overload that would limit the time and energy they need for their family activities. Analogously, having more control at home should enable those who use more planning behavior to avoid the delays and overload in the family domain that would sap the resources they need to fulfill their work role obligations. Thus, among those who plan more, greater control at work would be more instrumental in preventing WIF and greater control at home would more be more useful in preventing FIW. Accordingly, we hypothesized the following:

Hypothesis 3: Planning behavior moderates the relationship between control at work and WIF such that the relationship is stronger among employees who use more rather than less planning behavior.

Hypothesis 4: Planning behavior moderates the relationship between control at home and FIW such that the relationship is stronger among employees who use more rather than less planning behavior.

Method

Sample

Study results were based on data from 205 employees representing various jobs, managerial levels, and organizations. In terms of job tenure, 16% had been working in their jobs for less than a year, 16% between 1 and 2 years, 25% between 3 and 5 years, 18% between 6 and 9 years, 7% between 10 and 14 years, 8% between 15 and 19 years, and 8% for more than 20 years. Regarding age representation, 3% were between 18 and 24 years old, 21% were between 25 and 34, 37% were between 35 and 44, 27% were between 55 and 64, and fewer than 1% were 65 or older. For managerial level representation, 13% were top-level managers, 18% were middle-level managers, 20% were first-level supervisors, and 49% had no managerial responsibility (i.e., no direct reports). Our sample was 24% male. Most of our respondents were married or cohabitating (83%) and employed full-time (89%). Finally, the three most frequently represented industry sectors were health/social welfare (40%), government (20%), and service (7%).

Sampling and Data Collection Procedure

Our sampling goal was to recruit participants from a diverse set of jobs and organizations to maximize the range of our focal variables. Our solicitation efforts involved informing potential participants of the study and asking them to tell us via e-mail whether they were willing to receive participation instructions. Using e-mail distribution lists, we contacted Canadian municipal government managers, Canadian business school alumni, and the members of three Canadian health-related professional associations. Ultimately, 354 people informed us of their desire to receive participation instructions.

Although we used single-source data, we used "temporal separation," as recommended by Podsakoff and colleagues (2003), to reduce the likelihood of common method biases. To do so, we created two online questionnaires. The first contained the planning behavior and control scales, while the second, administered 10 days later, contained the work–family conflict scales. Control variables (discussed below) were divided between both questionnaires. Podsakoff et al. suggested that introducing a time lag between the measurement of predictor and criterion variables has several beneficial effects. First, it should reduce method biases likely to affect the retrieval stage of the response process by eliminating the saliency of any contextually provided retrieval cues (e.g., measurement context, question context, transient mood states). Second, it should reduce participants' ability and motivation to use previous answers to fill in gaps in retrieved memories and/or to infer details missing from such memories when trying to respond to subsequent questions. Temporal separation does this by allowing

previously recalled information to leave short-term memory. Third, this technique should reduce method biases affecting the response reporting or editing stage of the response process by making prior responses less salient, available, or relevant. This reduces participants' ability and motivation to use their prior responses to answer subsequent questions, thereby reducing method-induced biases such as consistency motifs and demand characteristics. We limited the time lag to 10 days because inordinately long time lags have the potential to mask existing relationships (Podsakoff et al., 2003).

To match data from both questionnaires for each participant while maintaining the participant's anonymity, we asked participants at the beginning of each questionnaire to provide a unique alphanumerical code consisting of the first and last letter of their first names, the first and last letter of their last names, and the day of their birth dates (ranging from 01 to 31). An example code would be "MAGZ23." We explicitly informed participants that their responses would be anonymous, in order to reduce social desirability bias (Podsakoff et al., 2003).

Participation instructions were e-mailed to all 354 individuals. This e-mail reiterated the study's purpose and provided a web link (URL) to the first questionnaire. A second e-mail containing the link to the second questionnaire was sent to all participants 10 days later. The response rates were 92% for the first questionnaire and 74% for the second one. After eliminating cases with missing data, we were able to match data from both questionnaires for 205 participants.

Measures

Planning behavior. We used Macan's (1994) 10-item goal-setting and prioritization scale. Respondents indicated to what extent each item accurately describes their activities and experiences in general. Example items include "I set short-term goals for what I want to accomplish in a few days or weeks" and "I set priorities to determine the order in which I will perform tasks each day." Response options ranged from 1 (*never true*) to 7 (*always true*). The Cronbach's alpha reliability estimate in our sample was .86.

Control at work and at home. For control at work, we used Frese et al.'s (1996) four-item scale. Respondents were asked to indicate how much they typically experienced control at work. We added two items to more fully capture the breadth of control at work. The first of these two items ("Do you have flexibility in choosing when you perform your work responsibilities?") was added to be more consistent with other scales of job control that capture influence over the timing of work activities (e.g., Dwyer & Ganster, 1991; Jackson et al., 1993). The second ("How much control do you have over choosing your goals/responsibilities at work?") was added to better capture employees' influence over their work goals and responsibilities, which is consistent with other measures of control at work (e.g., Dwyer & Ganster, 1991). To measure control at home, we reworded the six items to denote control over home- and family-related matters, and respondents were asked to indicate how much they typically experienced control at home or with their families. Response options for these two measures ranged from 1 (*very little*) to 5 (*very much*). The Cronbach's alpha reliability estimates in our sample were .86 for control at work and .85 for control at home.

Work–family conflict. We used Gutek, Searle, and Klepa's (1991) work–family conflict measure, which includes four items that measure WIF and four items that measure FIW. Example items include "My family/friends dislike how often I am preoccupied with my work while I am at home" (WIF) and "My personal demands are so great that it takes away from my work" (FIW). Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha reliability estimate in our sample was .81 for WIF and .74 for FIW. Previous research has shown that these WIF and FIW scales are factorially distinct from each other (Frone, Russell, & Cooper, 1996; Gutek et al., 1991; Judge, Boudreau, & Bretz, 1994).

Other variables. The following variables were statistically controlled in all hypothesis tests: job tenure, age, managerial level, gender, marital status (married/cohabitating or not), number of dependents living at home, industry sector, and locus of control.

Response options for job tenure (in years) included *less than 1, 1–2, 3–5, 6–9, 10–14, 15-19,* and *20 or more*. Response options for age (in years) included *18–24, 25–34, 35–44, 45–54, 55–64,* and *65 or older*. Response options for managerial level included *non-supervisory (no direct reports), first-level supervisor (only non-supervisory staff as direct reports), middle-level manager (mostly first-level supervisors as direct reports),* and *top-level manager (mostly middle-level managers as direct reports)*. Industry sector options reflected the dominant sectors in the geographic area in which the sample was drawn. They included government, health/social welfare, service, education, and "other."

Locus of control was controlled to help rule out the possibility that our measures of control at work and at home are more indicative of personality than of situational control. Locus of control was measured using the International Personality Item Pool's (IPIP) Total Locus of Control scale (Goldberg et al., 2006). This scale was developed as an overall measure of locus of control and includes items reflecting three aspects of control (Levenson, 1981)—internality (i.e., expectations regarding the control one has over one's life), powerful others (i.e., expectations as to whether powerful others have control over one's life), and chance (i.e., expectations concerning the degree to which chance or luck has control over one's life). This measure has yielded internal consistency estimates that are superior to measures separately capturing facets of control (e.g., only focusing on internality) and to a measure that collapses (sums) across the items of scales separately measuring facets of control (Goldberg, 2010; Judge, Erez, Bono, & Thoresen, 2002). Also, the IPIP Total Locus of Control scale has been shown to relate to other variables in its nomological network (e.g., Hamlyn-Wright, Draghi-Lorenz, & Ellis, 2007; Phelan & Alder, 2006). To avoid artifactual factors resulting from positively and negatively worded items, which have been shown to exist in some measures of personality, including locus of control (Spector, 1992; Spector, Van Katwyk, Brannick, & Chen, 1997), we included only the scale's 10 positively worded items (the original scale has a total of 20 items), which yielded a Cronbach's alpha reliability estimate of .89.

Except for the number of dependents living at home and locus of control, all other control variables were dummy coded for the regression analyses because they were categorical or measured as ordered categories. When dummy coding the ordered category variables, we used the category with the lowest rank (e.g., *less than 1* in the case of job tenure) as the reference category.

Table 1
Descriptive Statistics and Correlations Among Continuous and Ordinal Variables

	Mean/Median	*SD*	1	2	3	4	5	6	7	8	9
1. Age	3.00[a]	N/A									
2. Job tenure	3.00[a]	N/A	.37***								
3. Number of dependents	.28	0.61	–.01	–.03							
4. Managerial level	3.00[a]	N/A	.19**	.08	.03						
5. Locus of control	4.03	0.61	.14	–.02	.10	.11					
6. Control at work	3.78	0.76	.13	–.04	.07	.28***	.28***				
7. Control at home	4.15	0.65	.18*	.03	–.12	–.11	.26***	.15*			
8. Planning behavior	4.80	0.92	.15*	–.02	.00	.08	.41***	.39***	.21**		
9. WIF	3.00	1.01	–.02	–.01	–.05	.25***	–.15*	–.09	–.29***	–.12	
10. FIW	1.72	0.67	–.17*	.02	.04	–.05	–.18*	–.12	–.25***	–.16*	.35***

Note: Relationships involving ordinal variables (age, job tenure, and managerial level) were estimated using the Spearman Rho. WIF = work interference with family; FIW = family interference with work.
a. Median.
*$p < .05$. **$p < .01$. ***$p < .001$.

Results

Descriptive statistics and zero-order correlations among continuous and ordinal variables are reported in Table 1. In the case of ordinal variables (i.e., age, tenure, and managerial level), we report the median instead of the mean and standard deviation, and we report the Spearman Rho instead of the Pearson product moment correlation.

A few correlations are worth noting. The correlation between control at work and control at home was significant but small ($r = .15$), supporting our belief that control in one domain says little about one's control in the other domain. Also, the correlation between planning behavior and WIF was not significant, replicating Adams and Jex's (1999) finding.

We conducted a principal axis factor analysis with direct oblimin factor rotation (to allow for the possibility of correlated factors) to examine the discriminant validity of our control at work, control at home, and planning behavior scale items. The locus of control items were also included to assess any possible overlap with our control at work and at home measures. Results supported the discriminant validity of all items. As shown in Table 2, all items loaded onto their corresponding factors with no cross-loadings of .30 or higher. The four factors cumulatively explained 46% of the nonerror variance across all items.

All hypotheses were tested using ordinary least squares multiple regression with hierarchical entry of variables. Controls were entered in the first step. In the second step, we added planning behavior, control at home, and control at work. In the third step, we added the interaction term (e.g., Control at Home × Planning Behavior) to test for moderation. To facilitate

Table 2
Results of Principal Axis Factor Analysis of Control at Work, Control at Home, Planning Behavior, and Locus of Control Items

Item	Control at Home	Control at Work	Planning Behavior	Locus of Control
If you look at your job as a whole: How many decisions does it allow you to make?		.–.72		
Can you determine how you do your work?		–.76		
Can you plan and arrange your work on your own (e.g., calculate which material/tools you need)?		–.62		
How much can you participate in decisions of your supervisor (e.g., the supervisor asks you for your opinion and asks for suggestions)?		–.68		
Do you have flexibility in choosing when you perform your work responsibilities?		–.63		
How much control do you have over choosing your goals/responsibilities at work?		–.77		
If you look at your family or home life: How much decision-making power do you have?	.71			
Can you determine how you fulfill your home or family responsibilities?	.72			
Can you plan and arrange how you fulfill home or family responsibilities on your own?	.70			
How much can you participate in decision-making at home (e.g., other family members ask you for your opinion and ask for suggestions)?	.70			
Do you have flexibility in choosing when you will devote time to home/family responsibilities?	.62			
How much control do you have over choosing home/family-related goals/responsibilities?	.76			
When I decide on what I will try to accomplish in the short term, I keep in mind my long-term objectives.			.43	
I review my goals to determine if they need revising.			.58	
I break complex, difficult projects down into smaller manageable tasks.			.56	
I set short-term goals for what I want to accomplish in a few days or weeks.			.65	
I set deadlines for myself when I set out to accomplish a task.			.54	
I look for ways to increase the efficiency with which I perform my activities.			.50	
I finish top priority tasks before going on to less important ones.			.44	
I review my daily activities to see where I am wasting time.			.64	
During the day, I evaluate how well I am following the schedule I have set down for myself.			.73	
I set priorities to determine the order in which I will perform tasks each day.			.72	
I feel comfortable with myself.				–.53
I believe that my success depends on ability rather than luck.				–.39
I just know that I will be a success.				–.64
I come up with good solutions.				–.77
I love life.				–.72
I act comfortably with others.				–.65
I feel up to any task.				–.67
I like to take responsibility for making decisions.				–.71
I take the initiative.				–.77
I make a decision and move on.				–.67

the interpretation of regression coefficients, all continuous variables were centered before creating the interaction term and running the analyses (Cohen, Cohen, West, & Aiken, 2003). Table 3 provides results of the regression analyses.

Table 3
Hierarchical Regression Results With Work Interference With Family (WIF) and Family Interference With Work (FIW) as Dependent Variables

Variable	WIF	FIW
Step 1		
Job tenure	.00 to .10	–.14 to .09
Age	.01 to .14	–.07 to .16
Managerial level	.11 to .28***	–.06 to .06
Gender	.05	.13
Marital status	.04	–.05
Number of live-in dependents	–.12	.01
Industry sector	–.09 to .10	–.06 to .03
Locus of control	–.15*	–.14*
Step 2		
Planning behavior	–.06	–.05
Control at home	–.19*	–.16*
Control at work	–.07	–.01
Step 3		
Control at Work × Planning Behavior	–.17*	–
Control at Home × Planning Behavior	–	.15
ΔR^2 at Step 2	.04	.02
ΔR^2 at Step 3	.02	.02

Note: Standardized regression coefficients are reported. Coefficients correspond to the step in which the variables were entered. The range of coefficients (from lowest to highest) is reported for each control variable that required the creation of multiple dummy vectors. The regression coefficient for each dummy vector is available upon request.
*$p < .05$. ***$p < .001$.

Results for Step 2 reveal that control at work did not explain unique variation in WIF but that control at home was significantly related to FIW. Thus, while we did not find support for Hypothesis 1, we did for Hypothesis 2. Interestingly, although not originally hypothesized, we also found that control at home was significantly related to WIF.

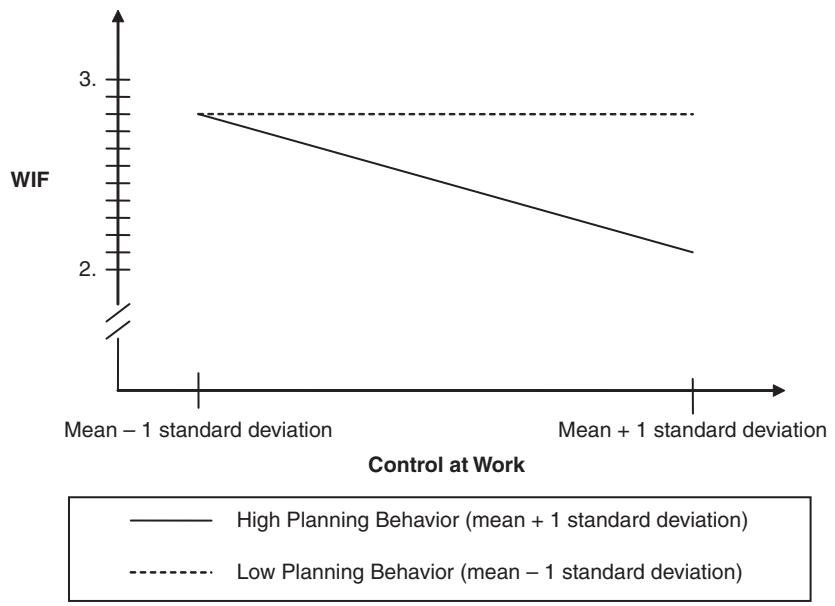
Step 3 results show that planning behavior significantly moderated the relationship between control at work and WIF. Specifically, the interaction term explained a significant amount of variation in WIF above and beyond the variance explained by all other variables in the model. We plotted the significant moderation effect to determine if it was in the expected direction. Figure 1 shows that the relationship between control at work and WIF was more negative among employees who engage in more planning behavior. Thus, Hypothesis 3 was supported.

Hypothesis 4 was not supported. Step 3 results show that the interaction term did not explain a significant amount of variance in FIW over and above the other variables in the model, suggesting that planning behavior did not moderate the relationship between control at home and FIW. Thus, the significant relationship between control at home and FIW, as reported in Step 2, does not seem to depend upon individuals' use of planning behavior.

Discussion

The purpose of the current study was twofold. One objective was to extend knowledge regarding how control, experienced within the work environment and within the family

Figure 1
Planning Behavior as a Moderator of the Relationship Between Control at Work and WIF



environment, relates to work–family conflict. The second objective was to contribute to our understanding of how individual differences in the use of planning behavior may impact the nature of the relationship between the environment and work–family conflict. Our results reveal several key findings.

We found that individuals who reported greater control at home also reported less FIW. To our knowledge, the current study is the first to examine the relationship between control at home and work–family conflict. Moreover, more control at home was associated with less WIF. This latter finding was unexpected. Perhaps having more control at home enables people to adjust their home activities around their work obligations, thus enabling them to fulfill their work demands without sacrificing their home responsibilities as much. Greater control over family decision making and responsibilities may be a way that individuals are able to manage both directions of the work–family conflict.

A different pattern of results was found with regard to control at work. Surprisingly, control at work was not associated with WIF. This finding is inconsistent with the findings of previous studies (e.g., Adams & Jex, 1999; Thomas & Ganster, 1995). One reason for the discrepant findings may be different operationalizations of control across studies. For example, Adams and Jex examined one specific aspect of control, perceived control over time. The measure of control used by Thomas and Ganster was designed to assess "perceptions

of control over areas of work and family that have been show to contribute to work–family conflict" (p. 9). The measure included items that emphasized control over dependent care (e.g., "How much control do you have over the amount and quality of care available for a sick child?") and scheduling (e.g., "How much choice do you have over when you begin and end each workday or each workweek?"). Our measure examined control more broadly over the work environment and is thus more similar to a measure of job autonomy. Perhaps this means that the specific type of control matters. For example, control over *how* the work gets done may not be helpful in terms of avoiding work–family conflict unless there is also control over *when* the work gets done. Because how and when the work gets done were captured in our measure, it was not possible to examine the separate and/or joint effects of such aspects of control. In future studies it may be useful to deconstruct the workplace control construct and examine different forms in relation to work–family conflict in order to better illuminate what is most beneficial for employees in terms of managing work and family. It is important to note that another possible explanation for the discrepancy between our findings and those previously reported may be our use of temporal separation between our measures of control and of work–family conflict, which previous studies did not use. It is possible that previously reported relationships between control and work–family conflict were at least partly reflective of common method biases.

Results regarding planning behavior as a moderator were mixed. While planning behavior moderated the relationship between control at work and WIF, it did not moderate the relationship between control at home and FIW. There was no relationship between control at work and WIF for those who were lower in planning behavior. However, for those who were higher in planning behavior, the relationship between control at work and WIF was negative. Such moderation qualifies the (nonsignificant) relationship between control at work and WIF discussed above and suggests that providing control within the workplace may provide little benefit to those who lack planning skills. Overall, our results suggest that planning behavior is more beneficial for realizing the benefits of control at work than for benefiting from having more control at home. Perhaps the work domain is generally more complex to manage than one's home domain, making planning behavior relatively more important for being efficient with one's time and energy at work than at home.

There are several limitations associated with the current study that require discussion.

Although we used temporal separation between our predictor and criterion variables to reduce common method biases, this approach cannot be assumed to completely eliminate every possible common method bias. Also, our data are correlational, and therefore, causal conclusions cannot be drawn from our findings. Our theorizing that control precedes work–family conflict is consistent with previous research (e.g., Thomas & Ganster, 1995) but cannot be confirmed based on the data gathered in the present study. Finally, most of our sample was female, implying that our results may be more generalizable to women than to men. However, the only predictor variable that men and women differed on in our sample was control at home (women reported more control at home than did men: $M = 4.26$ vs. $M = 3.79$; $t = 4.44$, $p < .001$), and gender did not significantly moderate any of our hypothesized relationships.

Our findings have implications for both theory and practice. One practical implication for the current study is that managers may look for employee planning behavior as a cue to help

determine which employees would benefit from greater control at work. As an individual difference variable, planning behavior is amenable to change and is a trainable skill. Time management training has generally been shown to be effective at increasing time management and planning behaviors (Claessens et al., 2007; Green & Skinner, 2005). Offering more control without also providing information and/or training on planning behavior may be of limited benefit, at least in terms of preventing WIF. It is also important for employees to realize that having more control at home is associated with lower levels of WIF and of FIW. Thus, another practical implication may be for employees to think of the degree of control they have at home and, when they feel they have little, to work with their families in identifying why this may be the case and what potential solutions may exist. Finding a way to have more influence over home-related matters may help attenuate both directions of work–family conflict.

Our findings also have theoretical implications regarding perceived control. As discussed earlier, control may be operationalized in different ways. Moreover, control may vary across different domains of life. Our results indicated that the relationship between perceived control at work and perceived control at home was small in magnitude ($r = .15$). Combined with our factor analytic results, this suggests that perceptions of environmental control are unlikely to be based primarily on dispositional control (i.e., locus of control). Moreover, from an applied perspective, this suggests that organizational policies could have a substantial impact on control perceptions. It is also possible that the amount of control experienced in a given role has as much to do with the way a person behaves with key stakeholders in that role (e.g., a person "negotiating" more decision-making latitude with his or her boss or spouse) as with the objective characteristics of a role (e.g., situational constraints). In future studies it would be interesting to determine the strongest antecedents of control at work and of control at home.

The current study opens several additional avenues of future research. Further investigation of control at home seems to have particular potential. To date, most of the research on the family domain has examined outcome variables (e.g., family satisfaction, marital satisfaction) or demands within the family (e.g., number of children, family responsibilities). Less attention has been given to trying to understand dynamics within the family that may contribute to work–family conflict. Given that FIW is indicative of difficulty in keeping family from interfering with work, dynamics within the family that contribute to FIW should be of great interest to organizational scholars. This is important in that some studies have shown that workplace policies designed to provide greater control to employees such as flexible work arrangements actually demonstrate positive relationships with FIW (Hammer, Neal, Newsom, Brockwood, & Colton, 2005; Lapierre & Allen, 2006).

Future studies should also gauge whether people's use of planning behavior varies significantly from one role to another. Perhaps some people engage in planning behavior more at work than at home, even if roles are similar in the degree of latitude experienced. Perhaps people's values concerning work versus family (e.g., work centrality) play a role in the degree that they use planning behavior in a specific role.

Research is also needed to better understand the relationship between workplace flexibility policies, perceived control, planning behavior, and work–family conflict. Flexible work arrangements are thought to be predictors of perceived control. However, several authors have noted that there is variation in the degree that flexibility actually promotes individual

autonomy and control (Allen & Shockley, 2009; Kossek, Lautsch, & Eaton, 2006). Moreover, results regarding the relationship between flexibility and work–family conflict have been mixed (Allen & Shockley, 2009). Our significant moderator results imply that future studies should investigate whether planning behavior moderates the relationship between flexible work arrangements and work–family conflict.

In conclusion, our research offers a cross-domain perspective on both individual and situational factors relating to work–family conflict. Knowing that planning behavior may significantly enhance the degree to which employees can use greater control at work to avoid WIF contributes to the very small work–family literature addressing time management skills. Moreover, having found that control at home is empirically distinct from control at work, and that it may help employees avert both directions of work–family conflict, should hopefully spur additional research on this construct. Hopefully, future studies will elucidate what actions employees can take to augment their control in both domains.

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