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Coworker Informal Work Accommodations to Family: Scale Development and Validation

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Abstract

Drawing on research regarding the utility of coworker support in mitigating work/family conflict, the authors developed a scale to measure Coworker-enacted Informal Work Accommodations to Family (C-IWAF). C-IWAF differs from coworker support in that it describes actual behaviors coworkers engage in to help one another deal with incompatible work and family demands. Results based on a sample of 390 working caregivers provide support for the independence of C-IWAF from other forms of coworker support. Analyses of the factor structure obtained for this instrument indicate that C-IWAF is composed of six unique factors: child care assistance, facilitating telework, continuing work modification, short-term work modification, helping behavior, and deviating behavior. Implications of these results for research and practice are discussed.

Keywords

work/family conflict, coworker support, organizational citizenship, coworker backup

Work/family conflict (WFC) is detrimental to organizational productivity, undermining job satisfaction and performance, and physical and mental well-being (Adams, King, & King, 1996; Allen, Herst, Bruck, & Sutton, 2000; Frone, Yardley, & Markel, 1997). WFC has negative implications for the family domain as well, contributing to family and marital dissatisfaction and withdrawal (Frone, 2003). As such, organizations are

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seeking ways to reduce the prevalence and effects of WFC, and they have turned to informal interventions such as family-supportive work environments (Allen, 2001; Mesmer-Magnus & Viswesvaran, 2006). Coworkers play an important role in such informal interventions (Carlson & Perrewe, 1999; Ray & Miller, 1994).

Much of the research on coworkers' support has examined the role of emotional support (e.g., Ray & Miller, 1994), though little attention has been paid to actual coworker behaviors. Understanding the nature and impact of coworker family-facilitative behaviors has important implications. From a research standpoint, a clear understanding of coworker family-facilitative behaviors permits a more complete articulation of the coworker support construct and a more complete investigation of its role in WFC; from a practical standpoint, organizations would benefit by understanding the behaviors employees can enact to help one another manage WFC.

We endeavored to create a scale to assess Coworker-enacted Informal Work Accommodations to Family (C-IWAF)—tangible actions undertaken by coworkers that help employees effectively juggle work and family requirements. Our aims were to (a) identify the unique behaviors coworkers may enact to help one another manage WFC, (b) develop and provide initial validation of scores on a measure to assess these behaviors, and (c) catalyze future research to examine the unique role such coworker family-friendly behaviors (as compared with other forms of coworker support) may play in employee management of WFC.

Work/Family Conflict

Work/family conflict is “a form of inter-role conflict in which the role pressures from the work and family domains are incompatible in some respect” (Greenhaus & Beutell, 1985, p. 77). Recent research has tended to study two distinct facets of the more global construct (work interference with family [WIF] and family interference with work [FIW]), recognizing conflict can originate in either domain and affect a variety of outcomes (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Frone, Russell, & Cooper, 1992). As either form of WFC can undermine organizational productivity (Allen et al., 2000; Byron, 2005; Kossek & Ozeki, 1999; Mesmer-Magnus & Viswesvaran, 2005), research on predictors of WIF and FIW has accelerated. Work domain predictors include stress and pressure at work, unpredictability in work routines, weekend or shift-work, abusive supervision, and perceptions of reward inequity (see Eby et al., 2005). Family domain predictors include parental status, concerns about child care, marital discord or tension, time pressures from family obligations, and lack of family/spousal support.

Given the diversity in antecedents of WFC, mitigating mechanisms can originate within either the work or family domain. Importantly, organizations have less control over family-facilitative support/mechanisms offered within the family context. As such, research that extends our understanding of how organizations may reduce the negative effects of employee WFC is particularly important (see Grzywacz & Carlson, 2007; Kelly & Moen, 2007).

Organizational interventions for work/family conflict. Organizations are increasingly offering a number of family-friendly benefits in an effort to curb the negative effects of WFC (e.g., child care resources, flexible work schedules; Kossek & Ozeki, 1999; Mesmer-Magnus & Viswesvaran, 2006). Organizations are also responding by creating family-friendly work cultures and promoting supervisory support for employee WFC (C. Thompson, Beauvais, & Lyness, 1999). Although relatively small reductions in WFC have been evidenced for formal support mechanisms (i.e., benefit programs; see, e.g., Eby et al., 2005; Goff, Mount, & Jamison, 1990), informal organizational support has been found to consistently positively affect work/family balance through effectively reducing WFC (Behson, 2005; Mesmer-Magnus & Viswesvaran, 2005, 2006). Such evidence has confirmed the importance of exploring the role of informal workplace initiatives in the reduction of WFC.

Informal work accommodations to family. Research suggests employees often bridge the work and family roles by attending simultaneously to both sets of demands (i.e., attending to family responsibilities while at work and work responsibilities while at home; Williams & Alliger, 1994). These informal work accommodations to family (IWAF) are typically temporary in nature and informally adjust work patterns to permit attention to work and family responsibilities (Behson, 2002). Although IWAFs modify how, when, and where work is completed, they do not ordinarily interfere with the quality of work output (Behson, 2002, 2005).

The Role of Coworkers in Reducing Work/Family Conflict

Job interdependence and C-IWAF. Organizations are increasingly adopting flatter, more team-based work structures in an effort to enhance motivation and flexibility (Mathieu, Maynard, Rapp, & Gilson, 2008). Team-based work structures may also facilitate an employee's efforts at managing WFC; the increasingly interdependent nature of jobs positions coworkers as instrumental in helping employees manage interference between work and family roles. By increasing the degree of interaction, job interdependence increases workers' knowledge of one another's jobs as well as their ability to back one another up when necessary (Campion, Papper, & Medsker, 1996). There are a number of ways coworkers can provide assistance in juggling work and family responsibilities, including covering/swapping job duties or shifts, providing materials or information a coworker may have missed while attending to a family matter, or backing up a coworker leaving work to attend to a sick child.

Other forms of coworker support. In addition to providing tangible backup, coworkers are also able to provide socioemotional support. Coworker support differs from C-IWAF in that it has an emotional rather than a behavioral aspect to it, describing coworkers taking the time to sympathize, understand, and listen to a fellow employee's problems. Coworker socioemotional support has been linked with decreased physiological strain and depression, as well as increased job performance, organizational commitment, and work-group and family cohesion (Beehr, Jex, Stacy, & Murray, 2000; B. Thompson & Cavallaro, 2007). The majority of coworker-related WFC research has focused on this more general form of support. Importantly, the socioemotional coworker

support construct is very general and is not tied explicitly to work–family balance issues. As such, current measures of coworker support are both contaminated and deficient as tools to assess the extent to which coworkers provide family-facilitative support. They are contaminated in that they assess support that is not tied directly to work–family issues, and they are deficient in that they do not assess tangible forms of family-facilitative support.

Another type of coworker helping includes organizational citizenship behaviors (OCBs). Although OCBs are enacted with the goal of facilitating organizational (rather than coworker) performance (Organ, 1988; Podsakoff, MacKenzie, Moorman, & Fetter, 1990), the results of such behaviors may indirectly benefit coworkers in their efforts to balance work and family demands. Like measures of coworker support, measures of OCB are both contaminated and deficient in their assessment of coworker family-facilitative support.

The Present Study

Our purpose in conducting this research was to identify the types of behaviors coworkers engage in to help one another balance the demands of work and family (C-IWAF) and to create a measure for use in future research. Such a measure fills a void in WFC research; whereas coworker support and OCBs may indirectly alleviate WFC, C-IWAJs explicate the types of behaviors that are enacted to directly address circumstances that contribute to it.

Method

Study Overview

We used a multiphase, mixed-methods approach (see Creswell & Plano-Clark, 2007) to develop a measure of C-IWAF and validate its scores. The approach permits a more complete understanding of the C-IWAF construct than would be possible using either a qualitative or quantitative method alone (Creswell & Plano-Clark, 2007; Johnson & Onwuegbuzie, 2004).

Stage 1: Scale Development

To develop a measure of C-IWAF, we first identified examples of behaviors that constitute family-facilitative coworker behavior by administering a qualitative, open-ended questionnaire to 57 employed adults. Participants were asked to list ways in which they or their coworkers had helped one another to accommodate the responsibilities of both work and family. Responses were then compiled, yielding a total of 75 instances of C-IWAF behaviors.

Next, each of the 75 behaviors identified through the qualitative questionnaire was transcribed onto an index card. Two groups of subject matter experts (SMEs; graduate students familiar with the extant WFC and coworker support literature but blind to the

study's hypotheses) were asked to sort these behaviors into unique categories of coworker informal work accommodations to family. The study's authors, together with the SME groups, compared the categories of C-IWAF created by each group. Identical categories were merged. Disagreements regarding a category and/or its content were resolved through discussion. This process yielded a total of six conceptually distinct categories of C-IWAF behavior: (a) offering child care assistance, (b) engaging in deviating behavior, (c) facilitating telework, (d) offering a continuing work modification, (e) offering a short-term work modification, and (f) engaging in helping behavior.

Then, the study's authors, together with the SME groups, generated items reflective of each of the six categories using the behaviors provided in the qualitative survey as a guide. In all, 31 items were generated. Final scale items were preceded by the prompt, "Some employees assist fellow coworkers in adjusting their typical work patterns in order to meet family responsibilities. How often have you or your coworkers done each of the following things?" Responses were made on a 5-point scale used in Behson's (2005) Informal Work Accommodations to Family scale. Anchors ranged from 1 = *never* (about once a year or less) to 5 = *very often* (once or more per day). The full list of scale items is provided in the appendix.

Stage 2: Validation Approach

Discriminant validity. Next we administered the fixed response survey including the newly developed 31-item scale along with measures of similar coworker helping constructs (coworker support and OCB) to a second sample of employed adults (described below) in order to examine discriminant validity (Pedhauzer & Schmelkin, 1991). *Organizational Citizenship Behavior* was measured using Podsakoff et al.'s (1990) 24-item scale, which taps five subcategories: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Responses ranged from 1 = *strongly disagree* to 5 = *strongly agree*. Two sample items were as follows: "my coworkers usually help others who have heavy workloads" (altruism) and "we believe in giving an honest day's work for an honest day's pay" (conscientiousness). *Coworker Support* was measured using Ray and Miller's (1994) 6-item scale, with anchors ranging from 1 = *never* to 5 = *very often*. Two sample items were as follows: "my coworkers listened to my problems" and "my coworkers were understanding or sympathetic."

Nomological net. We also assessed important work and family variables, including two dimensions of WFC (WIF and FIW), job satisfaction, organizational commitment, and turnover intentions, to further investigate the nomological network of C-IWAF. *Work/family conflict* was assessed using Carlson, Kacmar, and Williams's (2000) 18-item measure. The measure contains subscales for time-, behavior-, and strain-based conflict for both WIF and FIW. Although WFC was historically examined as a one-dimensional construct, recent research has conceptualized it as a bidirectional construct, recognizing that conflict can originate in either domain and have implications for the other domain (Byron, 2005; Frone, 2003; Mesmer-Magnus & Viswesvaran, 2005). A sample item of WIF is, "My work keeps me from my family activities more than I would like." *Job satisfaction* was measured using a 5-item scale used by Tsui,

Egan, and O'Reilly (1992). A sample item is, "Considering everything, I am satisfied with my current job situation." *Organizational commitment* was measured using Meyer and Allen's (1997) 17-item scale tapping affective, continuance, and normative commitment. A sample item is, "I would be very happy to spend the rest of my career with this organization." *Turnover intentions* were assessed using a 3-item scale used by Allen (2001) in a similar investigation of WFC. A sample item is, "I am seriously thinking about quitting my job." Responses to these scales were made on a 5-point Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

Sample and procedure. A convenience sample of 420 adults was employed in this phase. Surveys were distributed in person and via e-mail to employees and patrons of a commuter train during the peak hours of operation, local school board members, parents of children attending a daycare, employees at a hair salon, law firm employees, and employees of other local businesses. Participants were either randomly approached in these locations by the study's authors or were contacted via e-mail using contact information obtained from the authors' social and professional networks. Participants were offered the opportunity to enter a raffle to win one of three \$50 gift cards to a major national bookstore chain in exchange for their participation.

Average respondent age and job tenure were 39.89 ($SD = 10.98$) and 7.10 years ($SD = 7.18$), respectively. Respondents worked an average of 43.14 ($SD = 7.88$) hours per week. Approximately 54% of the sample was female, 79% indicated they were married or living as married, and 84% had one or more children. Of the participants who reported having at least one child, the average number of children was 2.05 ($SD = .95$), and the average age of the youngest child was 10.76 ($SD = 8.62$). In addition, 30% of the full sample reported providing dependent care to other relatives (e.g., elders). Approximately 5% of the sample was African American, 57% were Hispanic, 33% were Caucasian, 1% was Asian, and the remaining 4% indicated their race as "Other" or chose not to indicate their race. Thirty-six percent of our sample was college graduates, and 25% held graduate or professional degrees. Twenty-six percent of our sample held supervisory or managerial jobs, 37% held professional jobs, and the remainder held secretarial, clerical, service, or sales positions. Thirty-six percent of our sample reported earning less than \$50,000 per year, and 23% reported earning more than \$100,000 per year.

Sample data were screened at the item and composite variable level for outliers and normality using z scores of 3.29 as a cutoff point for univariate outliers and skewness ($p < .001$; Tabachnick & Fidell, 2001), resulting in a final sample size of 390. No multivariate outliers were found after the deletion of univariate outliers, but multivariate normality was violated.

Results

C-IWAF Scale Reliability

Tables 1 and 2 summarize coefficient alpha estimates along with the 95% confidence interval for coefficient alpha (Fan & Thompson, 2001; Henson, 2001; Vacha-Haase,

Henson, & Caruso, 2002) as well as the means, standard deviations, and intercorrelations for key study variables. Nunnally and Bernstein (1994) consider an obtained coefficient alpha of .80 as adequate for the final measure in a scale construction process (.85 is considered ideal). Coefficient alphas obtained for the C-IWAF scale were generally satisfactory, with four of the subscales exceeding .85. However, coefficient alphas for two subdimensions of C-IWAF (Child Assistance and Facilitating Telework) were below the .80 threshold. Specifically, the estimated coefficient alpha for Facilitating Telework was .77 (the 95% confidence interval ranged from .73 to .81), and the estimated coefficient alpha for Child Assistance was .59 (the 95% confidence interval ranged from .49 to .66). These dimensions were retained because they were relevant coworker-sponsored family-facilitative behavior patterns that emerged repeatedly in the qualitative surveys collected during the item-generation phase of this study and because the overall coefficient alpha estimated for C-IWAF with all six dimensions was .94 (its confidence interval ranged from .93 to .95). Furthermore, particularly with regard to Child Assistance, these items were eclectic, representing very different examples of support within each dimension that undoubtedly contributed to the lower reliability. Future research might explore the potential that the Child Assistance C-IWAF dimension has multiple subdimensions.

Confirmatory Factor Analysis

Confirmatory factor analysis was conducted to examine the multidimensionality of C-IWAF, OCB, and coworker support. As is recommended, we tested both the hypothesized model and two competing models (Liden & Maslyn, 1998; MacCallum & Austin, 2000). The hypothesized three-factor model indicated that the OCB, coworker support, and C-IWAF constructs were uncorrelated. The competing models were: (a) a one-factor model that placed all the variables on a single latent variable and (b) a two-factor model—one latent variable representing coworker support and C-IWAF variables and the other representing the OCB variables.

Using EQS 6.1 (Bentler, 1995), the goodness of fit of the three-factor model was compared with those of the competing models. Because of the violation of the multivariate normality assumption, confirmatory factor analyses with maximum likelihood robust as an estimation technique were used so that the Satora-Bentler χ^2 statistic was examined in all the model testings (Bentler, 1995). As sample size increases, the χ^2 becomes extremely sensitive (Bentler & Bonett, 1980), making it inadvisable to strictly rely on change in chi-square when evaluating model fit. Thus, an additional three fit indices were employed to assist in determining the model fit and misspecification (Hu & Bentler, 1998, 1999): (a) comparative fit indices (CFI; Bentler, 1990), (b) the incremental fit index (IFI; Bollen, 1989), and (c) the root mean square error of approximation (RMSEA), along with its 90% confidence interval (CI). These indices were selected based on their characteristics of sensitivity to model misspecification as well as their insensitivity to sample size and violations of normality (Hu & Bentler, 1998, 1999; B. Thompson & Daniel, 1996). CFI, IFI, and RMSEA have been found to be moderately sensitive to simple model misspecification and very sensitive to

Table 1. Means, Standard Deviations, Coefficient Alphas, and Intercorrelations of Coworker Support and Dimensions of OCB and C-IWAF

	M	SD	α	95% CI	1	2	3	4	5	6	7	8	9	10	11
C-IWAF															
1. Coworker Support	3.73	.66													
2. Child Assistance	1.76	.82	.59	.49-.66	-.02										
3. Deviating Behavior	1.47	.53	.90	.88-.92	.01	.42**									
4. Facilitating Telework	1.77	.92	.77	.73-.81	.02	.43**	.41**								
5. CWM	1.99	.72	.89	.87-.91	.03	.34**	.51**	.40**							
6. STWM	2.20	.81	.86	.84-.88	.04	.39**	.43**	.46**	.73**						
7. Helping Behavior	2.53	.77	.86	.83-.88	.16**	.37**	.42**	.40**	.73**	.65**					
OCB															
8. Conscientiousness	3.82	.66	.80	.76-.83	.38**	-.11*	-.27**	-.12*	-.04	-.08	.01				
9. Sportsmanship	3.57	.82	.87	.84-.89	.21**	-.05	-.21**	.07	-.01	.06	.02	.56**			
10. Civic Virtue	3.51	.75	.82	.79-.85	.27**	-.11*	-.17**	-.03	-.09	-.05	-.01	.47**	.41**		
11. Altruism	3.90	.65	.89	.87-.91	.43**	-.04	-.19**	-.05	.01	.04	.10†	.58**	.41**	.45**	
12. Courtesy	3.71	.71	.84	.81-.86	.34**	-.09†	-.17**	-.02	-.06	-.01	.06	.53**	.43**	.54**	.51**

Note: OCB = organizational citizenship behavior; C-IWAF = Coworker Informal Work Accommodations to Family; CI = confidence interval; STWM = short-term work modification; CWM = continuing work modification; WIF = work interference with family; FIW = family interference with work. CIs were computed on the basis of procedures described by Fan and Thompson (2001); n varies from 388 to 390.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$.

Table 2. Means, Standard Deviations, Coefficient Alphas, and Intercorrelations of Scale Variables

	M	SD	α	95% CI	1	2	3	4	5	6	7
1. C-IWAF	1.95	0.57	.94	.93-.95							
2. Coworker Support	3.74	0.65	.87	.84-.89	.06						
3. OCB	3.71	0.54	.77	.74-.80	-.07	.41**					
4. WIF	2.81	0.80	.86	.85-.88	.11*	-.32**	-.23**				
5. FIW	2.30	0.67	.83	.80-.85	.25**	-.31**	-.28**	.62**			
6. Job Satisfaction	3.64	0.71	.77	.73-.80	-.06	.37**	.36**	-.29**	-.23**		
7. OC	3.27	0.55	.82	.79-.84	.03	.15**	.26**	-.09†	-.07	.35**	
8. Turnover Intention	2.10	1.04	.90	.88-.92	.11*	-.16**	-.18**	.27**	.20**	-.52**	-.48**

Note: CI = confidence interval; C-IWAF = Coworker Informal Work Accommodations to Family; OCB = organizational citizenship behavior; WIF = work interference with family; FIW = family interference with work; OC = organizational commitment. Cls were computed on the basis of procedures described by Fan and Thompson (2001); *n* varies from 388 to 390.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$.

Table 3. Summary of Chi-Square and Fit Indices

Model	Satorra–Bentler χ^2 (df)	$\Delta\chi^2$ (Δdf)	CFI	IFI	RMSEA	90% CI for RMSEA
One-factor model	1365.82 (119)**		.43	.43	.17	.16-.18
Two-factor model	1012.55 (117)**	353.27 (2)**	.59	.59	.15	.14-.16
Three-factor model (hypothesized)	329.58 (114)**	682.97 (3)**	.91	.91	.07	.06-.08

Note: CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation; CI = confidence interval; C-IWAF = Coworker Informal Work Accommodations to Family; OCB = organizational citizenship behavior. Statistics reported are based on the use of a covariance matrix (Cudeck, 1989). The one-factor model represents a unidimensional factor of OCB, coworker support, and C-IWAF. The two-factor model represents one factor of OCB and the other factor of coworker support and backup combined. The three-factor model represents three factors onto which each of the corresponding variables were loaded.

** $p < .001$.

complex model misspecification (Bentler, 1995). CFI and IFI are not sensitive to distribution and sample size (Hu & Bentler, 1998; Tanguma, 2000), whereas RMSEA is sensitive to small sample size (e.g., less than 250; our sample size of 390 is not considered small). The confidence interval for RMSEA helps estimate the precision of model fit (MacCallum & Austin, 2000). Cutoff points were set at .95 for CFI and IFI and .06 for RMSEA (Hu & Bentler, 1999).

The results of Satorra–Bentler χ^2 and fit indices are summarized in Table 3. The results indicated a poor fit with the data for the one- and two-factor models, as expected; all fit indices were well below acceptable cutoff points (Hu & Bentler, 1999). The results demonstrated mixed support for the hypothesized model. Specifically, the Satorra–Bentler χ^2 was 329.58 ($p < .001$; $df = 114$), and the change in chi-square was significant ($p < .001$); however, the CFI and IFI were .91 and RMSEA was .07, with RMSEA 90% CI ranging from .06 to .08. Although the CFI, IFI, and RMSEA are slightly below the cutoff points established by Hu and Bentler (1999), the lower bound of the RMSEA 90% CI includes .06, and the upper bound of the interval still falls in line with Browne and Cudeck's (1992) as well as Bollen and Long's (1993) suggestions of a RMSEA value of .08 for reasonable fit. However, because the value for CFI is also below the cutoff point of .95, potential model misspecification was further analyzed using factor structure coefficients (Hu & Bentler, 1999).

Pattern and structure coefficients of the three-factor model are summarized in Table 4 (B. Thompson & Daniel, 1996). Inspection of structure patterns helps researchers identify model misspecification (Graham, Guthrie, & Thompson, 2003; B. Thompson, 1997). A model is misspecified if (a) parameters are estimated whose population values are zero or (b) parameters are fixed to zero when population values are not, or both (Hu & Bentler, 1998). Inspection of the structure coefficients reported in Table 4 suggests that model misspecification was likely due to the measurement of the

Table 4. Factor Pattern and Structure Coefficients for the Three-Factor Model

	PatternCoefficient	Structure Coefficient		
		Factor		
		Support	OCB	C-IWAF
Support				
Item 1	.55	.55	.29	.03
Item 2	.76	.76	.39	.05
Item 3	.73	.73	.37	.05
Item 4	.64	.64	.33	.04
Item 5	.74	.74	.38	.05
Item 6	.76	.76	.39	.05
OCB				
Conscientiousness	.79	.41	.79	-.05
Sportsmanship	.62	.32	.62	-.04
Civic virtue	.64	.33	.64	-.04
Altruism	.72	.37	.72	-.04
Courtesy	.71	.37	.71	-.04
C-IWAF				
Child assistance	.46	.03	-.03	.46
Deviating behavior	.58	.04	-.03	.58
Facilitating telework	.53	.04	-.03	.53
CWM	.87	.06	-.05	.87
STWM	.82	.05	-.05	.82
Helping behavior	.81	.05	-.05	.81
Factor intercorrelations				
Support	1.00			
OCB	.52	1.00		
C-IWAF	.07	-.06	1.00	

Note: OCB = organizational citizenship behavior; C-IWAF = Coworker Informal Work Accommodations to Family; CWM = continuing work modification; STWM = short-term work modification. The six observed variables for the Support latent factor are item variables. The observed variables for OCB and C-IWAF are composite variables. Paths between the latent variables and theoretically noncorresponding variables were fixed to 0. All the pattern coefficients are statistically significant ($p < .05$). The full figure can be provided to the reader on request.

Coworker Support and OCB factors rather than C-IWAF. Specifically, factor structures of Coworker Support and OCB were not clearly specified by their observed variables in this sample. Structure coefficients indicated that, in this sample, Coworker Support and OCB were moderately correlated with theoretically noncorresponding latent variables even though they were more strongly correlated with their theoretically corresponding latent variables. Structure coefficients of the C-IWAF scale demonstrated the same patterns as specified in pattern coefficients, indicating a clear factor structure, distinct from Coworker Support and OCB. The lower fit index values might

be improved by freeing fixed observed variables on Coworker Support and OCB latent variables. However, as these two scales have been validated extensively in the extant literature (Podsakoff et al., 1990; Ray & Miller, 1994), it was not theoretically meaningful to analyze the data in this way.

Importantly, the structure coefficients and interfactor correlations supported the multidimensionality in the model. The three latent variables had significant pattern coefficients with all the observed variables in this sample, ranging from .46 to .87 ($p < .05$). The latent variable of the C-IWAF was not correlated with the theoretically noncorresponding variables (Coworker Support and OCB); and Coworker Support and OCB were not correlated with C-IWAF in this sample. Although there was a moderate correlation of .41 between OCB and Coworker Support, the correlations of C-IWAF with the other two factors were nonsignificant. Thus, the results from the pattern and structure coefficients support the independence of C-IWAF from the other latent variables in our sample of working caregivers. Taken together, the results support the hypothesized three-factor model.

Dimensions of C-IWAF

Confirmatory factor analysis results support the distinctiveness of the six categories of behaviors used by coworkers in an effort to help one another balance the demands of work and family: (a) offering child care assistance, (b) engaging in deviating behavior, (c) facilitating telework, (d) offering a continuing work modification, (e) offering a short-term work modification, and (f) engaging in helping behavior. These behaviors exhibited moderate correlations with one another in this sample and were generally uncorrelated with Coworker Support and OCB. The exception is that Deviating Behavior is negatively related to all dimensions of OCB, suggesting that although Deviating Behavior may constitute a family-facilitative behavior used to assist a coworker in managing WFC, it is not as frequently offered by coworkers who are high in OCB.

Discriminant Validity and the Nomological Net

Table 2 summarizes correlations among the three coworker support variables and five relevant correlates: job satisfaction, organizational commitment, turnover intention, FIW, and WIF. The subfactors for both C-IWAF and OCB were combined to create composite variables. In this sample, the relationships among C-IWAF, OCB, and Coworker Support at the scale level were similar to those identified at the latent variable level. Across the correlate variables, a different pattern of correlations emerged between C-IWAF, OCB, and Coworker Support, indicating that the C-IWAF construct differs from other forms of coworker support. As expected, small to medium positive correlations (Cohen, 1992) were found between C-IWAF and both forms of WFC, indicating that individuals experiencing WFC make greater use of C-IWAF. Moderate negative correlations (Cohen, 1992) were found between WFC and other

forms of coworker helping behaviors, OCB, and CS, suggesting emotional coworker support and OCB may help mitigate WFC. It is noteworthy that correlations between C-IWAF and job satisfaction and organizational commitment were near zero. Past research has supported small to medium correlations between work-based support and job satisfaction, organizational commitment, and turnover intentions (Carlson & Perrewe, 1999; Thomas & Ganster, 1995; Viswesvaran, Sanchez, & Fisher, 1999), suggesting that coworkers indeed play a role in these relationships. We would, however, expect C-IWAF exhibits a more complex relationship with these outcomes; we further explore this point in the discussion.

Discussion

Although research has explored the role of coworker socioemotional support in relation to WFC, little attention has been paid to the sorts of *instrumental* assistance coworkers offer others actively managing the work/family interface. This is a crucial omission in the extant literature, as socioemotional and instrumental support operate in different ways to mitigate conflicting work and family demands and, thus, can have unique effects on felt WFC and its associated consequences. The scarcity of research on coworker family-facilitative instrumental support is likely because of the lack of a measure available to tap this construct. Our purpose in conducting this research was to develop a measure of specific behaviors coworkers enact to help one another juggle work and family demands.

Our results generally support the construct validity of scores on the C-IWAF scale for use in similar samples. Coefficient alphas and intercorrelations indicated the scale has a high degree of internal consistency, and factor analyses confirmed a six-component structure of C-IWAF that differed from other forms of coworker helping behavior (coworker support and OCB). Additionally, the pattern of correlations between the C-IWAF dimensions, coworker support, and OCB differed across relevant correlates, suggesting these forms of coworker support affect WFC, job satisfaction, organizational commitment, and turnover intentions differently.

Nomological Net of C-IWAF

As expected, C-IWAF evidenced small correlations (Cohen, 1992) with other measures of coworker helping behavior (coworker support and coworker OCB) in our sample. So, although a coworker may express sympathy and emotional support, this does not always translate into tangible attempts to help alleviate the causes and effects of WFC. The different pattern of correlations between C-IWAF, coworker support, and WFC suggests that each plays a unique role in helping employees manage the work/family interface. Similarly, although coworker OCBs may indirectly reduce WFC, these behaviors are not enacted with any specific family-supportive purpose. Thus, the C-IWAF scale taps into a construct not effectively assessed by existing measures of coworker helping behaviors.

Small to moderate positive correlations (Cohen, 1992) were found between C-IWAF and both forms of WFC. This finding is expected; employees experiencing WFC are more likely to use (and be offered) C-IWAF than employees not experiencing conflict. Furthermore, as FIW most directly affects performance in the work domain, it may be more feasible in many cases for coworkers to provide support to one another in these situations. Rather, as WIF most directly affects the family domain, spouses may be more prepared/willing (than coworkers) to offer assistance in minimizing the effects of WIF. Indeed, whereas our findings support a small correlation between C-IWAF and WIF, other studies have reported larger, moderate correlations between family instrumental support and WIF (e.g., Adams et al., 1996; Carlson & Perrewe, 1999). The relationship between C-IWAF and FIW can also be noted in the types of behaviors proffered by our behavior-generation sample. Specifically, these individuals supplied more examples of coworkers facilitating management of FIW than WIF, implying either (a) coworkers have a greater opportunity to offer these forms of assistance or (b) employees felt more comfortable soliciting such assistance in these situations. The factors involved in employees' decisions regarding where to solicit support is certainly an important avenue for future research.

The small positive relationship (Cohen, 1992) between C-IWAF and turnover intentions obtained in this sample is also not surprising. Individuals tend to use C-IWAF when WFC is high and long-term problems with WFC are known to increase turnover intentions (Allen et al., 2000; Frone, 2003). The low correlation between C-IWAF and both job satisfaction and organizational commitment is also likely the result of an indirect relationship. Medium negative correlations between WFC and these outcomes were found in our study as well as other reviews of the WFC literature (e.g., Allen et al., 2000; Carlson & Perrewe, 1999; Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007), suggesting factors that mitigate the incidence of WFC will also increase job satisfaction and organizational commitment. Similarly, although the prevalence of C-IWAF may not directly enhance job attitudes, it is likely that C-IWAF decreases stress associated with WFC and increases job performance and perceptions of a family-friendly work environment.

Implications for Research and Practice

As WFC research suggests informal organizational support from supervisors and coworkers may be more influential than many formal organizational policies/programs in reducing work–family interference (Behson, 2005; Eby et al., 2005), future research must further explore informal interventions. The C-IWAF measure permits the examination of a currently underexplored form of informal organizational support. Importantly, prior research on coworker support suggests the strength of its relationship to WFC is often relatively small (e.g., Beehr et al., 2000). Given the prevalence of team-based organizational structures, however, coworkers have the opportunity to play a big role in employee WFC. It may be coworker support is too vague a construct to tap

into the nature of coworker influence on WFC, as WFC is a very specific form of inter-role strain. C-IWAF allows the articulation of a cleaner construct describing specific family-facilitative behaviors enacted by coworkers that address sources of WFC. Indeed, our results suggest C-IWAF and coworker support offer unique assistance to employees juggling work and family demands.

In addition, our measure may be used as a tool by organizations seeking to create family-friendly work environments. Specifically, the behaviors included in this scale can be used to educate employees as to the types of behaviors they may engage in to reduce the negative implications of WFC and improve organizational and coworker performance. Organizational encouragement of short-term duty modifications, helping behaviors, and facilitation of telework, for example, may positively influence employee perceptions that the organization is family friendly. Such perceptions are known to increase job satisfaction and organizational commitment, as well as decrease turnover intentions and WFC (C. Thompson et al., 1999). Future research should explore factors that will increase the likelihood coworkers will exhibit informal work accommodations to family.

We recognize the behaviors included in the C-IWAF factor, Deviating Behavior, may not be behaviors organizations will want to promote within their employees, as often these behaviors are specifically disallowed by company policy. However, examples of deviating behaviors repeatedly surfaced in questionnaire assessments as actions coworkers engaged in to help one another balance work and family, and so we chose to retain this dimension in the interest of content validity. Future research might examine whether C-IWAF Deviating Behaviors are more prevalent in organizations with less family-supportive cultures.

Future research might also examine the role of C-IWAF in WFC within different industries and within different organizational cultures and structures. Also, given the differential variance in WFC explained by coworker support and C-IWAF, it may be fruitful to explore the unique role of different forms of supervisor support, namely, tangible family-facilitative behaviors versus socioemotional support. Similarly, the spouse/partner has the opportunity to assist the employee meet demands of both work and family through emotional and tangible support. As employees appear to be more likely to solicit C-IWAF to minimize FIW, future research might explore whether they are likely to solicit spousal tangible support to manage WIF.

An interesting avenue for future research is to further explore the nature of the relationship between coworker socioemotional support and C-IWAF. Specifically, although these are clearly different forms of coworker support and we would expect a low correlation between scales assessing them, it seems unlikely there is truly a nil correlation between these constructs. Coworkers who are willing to provide socioemotional support are also likely to engage in tangible actions. Future research might explore potential moderating and/or mediating variables of this relationship; factors such as the degree of job interdependence may dictate when an otherwise emotionally supportive coworker is able to provide tangible support.

Table 5. Means, Standard Deviations, and Chi-Square Results for the Prevalence of C-IWAF Behaviors by Job Type

	Job Type						Pearson χ^2	
	Managerial		Professional		Nonexempt			
	M	SD	M	SD	M	SD		
1. Child assistance	1.80	0.82	1.71	0.81	1.78	0.84	7.31	
2. Deviating behavior	1.44	0.49	1.47	0.53	1.52	0.55	18.59	
3. Facilitating telework	1.94	1.00	1.75	0.84	1.70	0.94	17.71	
4. CWM	2.10	0.68	1.86	0.69	2.08	0.77	56.65	
5. STWM	2.30	0.71	2.10	0.78	2.25	0.91	43.44	
6. Helping behavior	2.59	0.72	2.55	0.79	2.51	0.78	29.76	

Note: CWM = continuing work modification; STWM = short-term work modification. All Pearson χ^2 statistics were $p > .15$.

Use of in-depth case studies, diary methods, interviews, and/or policy-capturing studies may permit a more complete understanding of how coworker support and C-IWAJs are solicited, received, and employed by individuals struggling with specific instances of WFC. Such research methodology, at this point less frequently used by work–family researchers, might be useful for exploring the role of the coworker in WFC management (Casper et al., 2007).

A limitation of this study is our use of a convenience sample. Although our sample permitted the examination of C-IWAF without the constraints of a single organizational context, it does limit conclusions relevant to specific organizational features (e.g., nature of family-friendly culture). Importantly, the inclusion criteria we used when administering the surveys (e.g., full-time working caregivers) are relevant to the constructs we examined regardless of organizational context. Although future research is needed to replicate and expand on these findings, we have no reason to think our substantive conclusions would change with a different sample of working caregivers. Furthermore, an examination of C-IWAF behaviors by job level revealed no differences in the prevalence of these behaviors in professional, supervisory/managerial, or nonexempt occupations (see Table 5), suggesting these coworker behaviors are commonly provided by employees across job types and organizational contexts.

In sum, the C-IWAF measure permits an examination of the unique role of coworker family-facilitative behaviors in addressing employee WFC. Although the relationship between this scale and other relevant variables known to be influenced by coworker support/behavior still needs to be examined, because our measure is supported by initial evidence of construct validity within a sample of working caregivers (arguably the most widely studied population in WFC research; Eby et al., 2005), researchers may employ the scale with similar populations to advance research on the role of the coworker in the work–family interface.

Appendix

Coworker Informal Work Accommodations to Family (C-IWAF) Scale Items

1. Assisted a coworker with child care while they are working. **CA**
2. Supported a coworker who brought a child to work. **CA**
3. Lied to supervisors or clients so that a coworker could attend to a family matter during work hours. **DB**
4. "Looked the other way" when a coworker did something against company policy to attend to a personal matter. **DB**
5. Helped cover up a coworker's family-related absence/tardiness. **DB**
6. Altered time sheets/time cards so a coworker could attend to a personal matter during work hours. **DB**
7. Lied on a coworker's behalf to help cover up a family-related absence or negligence. **DB**
8. Helped cover up personal phone calls and/or e-mails made from work. **DB**
9. Facilitated communication between clients/colleagues and a coworker so they could work from home. **FT**
10. E-mailed/faxed/couriered/delivered things to coworkers so they could work from home. **FT**
11. Permanently changed regular work hours/days so a coworker could meet family demands. **CWM**
12. Shifted breaks permanently to accommodate a coworker's family responsibilities. **CWM**
13. Shifted workload/job responsibilities on a permanent basis to help a coworker meet family demands. **CWM**
14. Traded shifts with a coworker so they can attend to a family matter. **CWM**
15. Permanently took over one or more of a coworker's duties that conflict with family responsibilities. **CWM**
16. Took over a coworker's shift so they could attend to an ongoing family matter/conflict. **CWM**
17. Worked around a coworker's family needs. **STWM**
18. Temporarily covered for a coworker out on a family leave/vacation. **STWM**
19. Came in early or stayed late so a coworker could respond to a family matter. **STWM**
20. Swapped shifts or days off with a coworker so they could attend to family event or emergency. **STWM**
21. Temporarily covered a coworker's job so they could attend a family-related appointment during work hours. **STWM**
22. Performed a coworker's job duties so they could come in late or leave early to attend to a family matter. **STWM**
23. Temporarily covered the job duties of absent coworkers who were attending to a family matter. **STWM**
24. Updated coworkers on work-related events that were missed because of a family-related absence. **HB**
25. Spontaneously resolved an unexpected issue for a coworker that occurred during their family-related absence. **HB**
26. Provided a coworker with materials (e.g., meeting minutes/notes, etc.) he/she did not receive because of his/her family-related absence. **HB**
27. Offered emotional support to a coworker struggling to meet the demands of work and family. **HB**
28. Helped coworkers accommodate family in any way possible/feasible. **HB**
29. Reacted positively/supportively to coworkers who were late/absent because of a family event or emergency. **HB**
30. Helped a coworker "catch up" following a family-related absence from work. **HB**
31. Worked as a team to help coworkers balance the demands of work and family. **HB**

Note: CA = child care assistance; DB = deviating behavior; FT = facilitating telework; CWM = continuing work modification; STWM = short-term work modification; HB = helping behavior.

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