

A Meta-Analysis of Work–Family Conflict and Various Outcomes With a Special Emphasis on Cross-Domain Versus Matching-Domain Relations

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A literature review of studies analyzing work–family conflict and its consequences was conducted, and 427 effect sizes were analyzed meta-analytically. Work–family conflict was analyzed bidirectionally in terms of work interference with family (WIF) and family interference with work (FIW). We assessed 3 categories of potential outcomes: work-related outcomes, family-related outcomes, and domain-unspecific outcomes. Results show that WIF and FIW are consistently related to all 3 types of outcomes. Both types of interrole conflict showed stronger relationships to same-domain outcomes than to cross-domain outcomes. Thus, WIF was more strongly associated with work-related than with family-related outcomes, and FIW was more strongly associated with family-related than with work-related outcomes. In moderator analyses, parenthood could not explain variability in effect sizes. However, time spent at work did moderate the relationships between WIF and family-related outcomes, as well as FIW and domain-unspecific outcomes.

Keywords: work–family conflict, meta-analysis, well-being

Many studies have examined the relationship between work–family conflict and several potential consequences. Investigators have focused on well-being indicators, such as depression or strain (e.g., Kossek, Lautsch, & Eaton, 2006), and on work, family, and life satisfaction (e.g., Aryee, Fields, & Luk, 1999). Several meta-analyses of these findings have been reported (Allen, Herst, Bruck, & Sutton, 2000; Ford, Heinen, & Langkamer, 2007; Kossek & Ozeki, 1998). For two reasons, however, we think that our meta-analysis can add to this literature. First, research in the domain of work–family conflict is growing at a fast rate (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). It therefore is important to update meta-analytic findings regularly (Ioannidis & Lau, 2001). Second, none of the existing meta-analyses provided a comprehensive review of the literature in terms of (a) different directions of work–family conflict, (b) diverse outcomes, and (c) poten-

tial moderators. The purpose of this article is to fill this gap.

We begin with a discussion of work–family conflict and its dimensions as well as its diverse consequences for individual well-being at work and in family life. We then discuss potential moderators of the relationship between work–family conflict and its consequences before presenting the results of our meta-analysis.

Work–Family Conflict

Work–family conflict typically is defined as “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p. 77). This interrole conflict can take two directions (Frone, 2003): The work role can interfere with the family role (WIF), or the family role can interfere with the work role (FIW). Research has shown these concepts to be related (the meta-analysis by Mesmer-Magnus & Viswesvaran, 2005, found a weighted mean observed correlation between WIF and FIW of $r_{wm} = .38$). Nevertheless, Mesmer-Magnus and Viswesvaran (2005) concluded that “despite some overlap, the two

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measures have sufficient unique variance to warrant independent examinations” (p. 228). Differential correlation patterns of WIF and FIW with outcomes have been found in longitudinal studies as well (e.g., Frone, 2000; Grandey, Cordeiro, & Crouter, 2005; Hammer, Cullen, Neal, Sinclair, & Shafiro, 2005; Kelloway, Gottlieb, & Barham, 1999). Another reason for considering both directions of work–family conflict is that the prevalence of interrole conflicts is reported to be different, with WIF being more prevalent than FIW (Eagle, Miles, & Icenogle, 1997; Frone, Russell, & Cooper, 1992b). It therefore is important to differentiate between WIF and FIW so that the possibly different mechanisms underlying these interrole conflicts can be determined.

Consequences of WIF and FIW

Work–family conflict is often considered to be a potential source of stress that has negative effects on well-being and behavior (e.g., Geurts, Kompier, Roxburgh, & Houtman, 2003). Potential consequences of work–family conflict can be divided into three distinct categories: work-related, family-related, and domain-unspecific outcomes (Bellavia & Frone, 2005).¹

Both directions of work–family conflict have been found to be associated with work-related outcomes, such as job satisfaction (e.g., Perrewé, Hochwarter, & Kiewitz, 1999), organizational commitment (e.g., Aryee, Srinivas, & Tan, 2005), intention to quit (e.g., Shaffer, Harrison, Gilley, & Luk, 2001), burnout (e.g., Peeters, Montgomery, Bakker, & Schaufeli, 2005), absenteeism (e.g., Kirchmeyer & Cohen, 1999), work-related strain (e.g., Netemeyer, Brashear-Alejandro, & Boles, 2004), and organizational citizenship behavior (OCB; e.g., Netemeyer, Maxham, & Pullig, 2005), as well as family-related outcomes, such as marital satisfaction (e.g., Voydanoff, 2005b), family satisfaction (e.g., Cardenas, Major, & Bernas, 2004), and family-related strain (e.g., Swanson & Power, 1999). Finally, the third category—domain-unspecific outcomes—also has been found to be related to both directions of work–family conflict; these outcomes include life satisfaction (e.g., Greenhaus, Collins, & Shaw, 2003), psychological strain (e.g., Kelloway et al., 1999), somatic complaints (e.g., Peeters, de Jonge, Janssen, & van der Linden, 2004), depression (e.g., Vinokur, Pierce, & Buck, 1999), and substance use or abuse (e.g., Grzywacz & Bass, 2003).

Given that potential outcomes of work–family conflict may be found in the work domain, the family domain, or in domain-unspecific indicators, the ques-

tion arises whether the domain of origin of a conflict is related to the outcome domain in a specific way. Put differently, is there a match in that WIF affects work-related outcomes more strongly than family-related outcomes, and vice versa, or are cross-domain associations more dominant in that FIW affects work-related outcomes more strongly than family-related outcomes, and vice versa? Competing models exist with regard to this issue, but no meta-analytic evidence is available so far.

The Relationship Between WIF/FIW and Outcomes: Cross-Domain Versus Matching Hypothesis

Frone, Russell, and Cooper (1992a) assumed a cross-domain relationship, implying that WIF predominantly affects the family domain, whereas FIW mainly affects the work domain. The rationale behind this assumption is that the conflict, although originating in one domain, is causing problems in the other domain. As a consequence, well-being related to this other life domain suffers. For example, individuals experiencing WIF cannot spend as much time with their family as they would like because of their job responsibilities. As a consequence, the quality of family life suffers, inducing family-related outcomes (e.g., family satisfaction) to decrease.

However, a “matching-hypothesis”, which assumes that the primary effect of work–family conflict lies in the domain where the conflict originates, seems at least as plausible. According to this hypothesis, WIF should have stronger effects on work-related outcomes and FIW should have stronger effects on family-related outcomes. The rationale for this assumption refers to appraisal, most notably attributional, processes. By definition, the cause of WIF (FIW) is seen in one’s work (family). People are likely to dwell on the causes of work–family conflict, their characteristics, their consequences, ways of dealing with them, and so forth. To the extent that this occurs, people’s thoughts are likely to be centered around the work (family) situation. Unless the situation can be adequately resolved (which would

¹ Because most of the studies are based on cross-sectional data, it would be more appropriate to talk of potential antecedents and outcomes, or of assumed antecedents and outcomes, referring to the causal structure implied by theoretical models about work–family conflict. For the sake of readability, however, we use terms such as *outcome* and *consequence* with the understanding that what is meant are potential outcomes.

eliminate the work-family conflict), these thoughts are likely to be ruminative in character, implying a negative affective tone, which, if experienced frequently, may lead to strain. Furthermore, specific attributions regarding the causes for the work (family) situation being so stressful may elicit further emotional reactions. Thus, if one's work overload is considered to be responsible for having too little time with one's family, one might feel anger and resentment against one's organization, or one's supervisor, for being assigned too much work for the time and resources available (Moore, 2000; see also Weiner, 1985). That primary reactions are connected to the perceived source of one's problem is corroborated by results showing that counterproductive work behavior (CWB) tends to be specifically targeted at the source of conflicts (i.e., conflicts with supervisors are associated more strongly with CWB toward the organization, and conflicts with coworkers are associated more strongly with interpersonal CWB; Bruk-Lee & Spector, 2006).

In sum, negative affective reactions (and their possible behavioral consequences, such as quitting) are likely to center around the domain that is seen as causing the problem, implying that strain reactions should be dominant with regard to this domain. This is not to say that effects on outcomes referring to the other domain will not occur, but they are seen as indirect rather than direct.

Both types of outcomes, however, are likely to generalize: Life satisfaction is known to be associated with both job satisfaction (Spector, 1997) and family satisfaction (Diener & Diener, 1995). This assumption corresponds to Warr's (2007) argument postulating direct effects of work stress on work-related well-being/strain and indirect effects on more general indicators of well-being/strain, which are mediated by work-related strain. Warr's assumption is supported by empirical evidence (e.g., Kelloway & Barling, 1991; cf. Warr, 2007).

Empirical support for a cross-domain effect has been found in several studies (for a meta-analysis, see Ford et al., 2007). However, these studies did not test the cross-domain effect against the competing matching hypothesis, which assumes that the effect is stronger for dependent variables that are in the same domain as the stressors (Kelloway & Barling, 1991). Therefore, support for the cross-domain hypothesis remains ambiguous. Evidence supporting the matching hypothesis has been provided by Kossek and Ozeki (1998). Their meta-analysis showed a consistent negative relationship of both WIF and FIW with job satisfaction as well as life satisfaction. However,

the relationship was slightly stronger for job satisfaction and WIF, as compared with job satisfaction and FIW, yielding more support for the matching hypothesis than for the cross-domain hypothesis. We feel that there are stronger arguments for the matching than for the cross-domain hypothesis.

Meta-Analytic Findings

Four meta-analyses with regard to the relationship between work-family conflict and different outcomes so far have been reported (Allen et al., 2000; Ford et al., 2007; Kossek & Ozeki, 1998, 1999). Two further meta-analyses concerned with the work-family interface dealt with other questions, such as antecedents of WIF and FIW (Byron, 2005) and the convergence of WIF and FIW measures (Mesmer-Magnus & Viswesvaran, 2005). A brief summary of the four meta-analyses that dealt with similar questions as ours clarifies why our meta-analysis can add valuable information.

Kossek and Ozeki (1998) investigated the relationship of WIF/FIW with life and job satisfaction, but not with family or marital satisfaction. As mentioned above, they found that WIF/FIW was related to life satisfaction slightly more than to job satisfaction. Kossek and Ozeki (1999) found only a few studies that assessed work-related outcomes other than job satisfaction ($k = 0-7$). Ford et al. (2007) meta-analytically tested the cross-domain relations among work/family antecedents, WIF/FIW, and work/family satisfaction. WIF (FIW) seemed to mediate the relationship between work (family) stressors and family (job) satisfaction. It remains unclear, however, whether that holds in general, that is, for several outcomes, or whether it is confined to satisfaction. Finally, Allen et al. (2000) found a consistent negative relationship between WIF and three types of outcomes: work-related, non-work-related, and stress-related. However, their analysis was confined to one direction only, which was WIF.

Given these gaps in existing meta-analyses, we wanted to provide a more comprehensive picture by analyzing the relationship between both directions of work-family conflict and several domain-specific as well as domain-unspecific outcomes. Furthermore, we tested the cross-domain hypothesis as well as the matching hypothesis. Figure 1 shows all relationships we tested. In addition, we tested some possible moderators that may influence the relationship between WIF/FIW and its consequences; these are presented next.

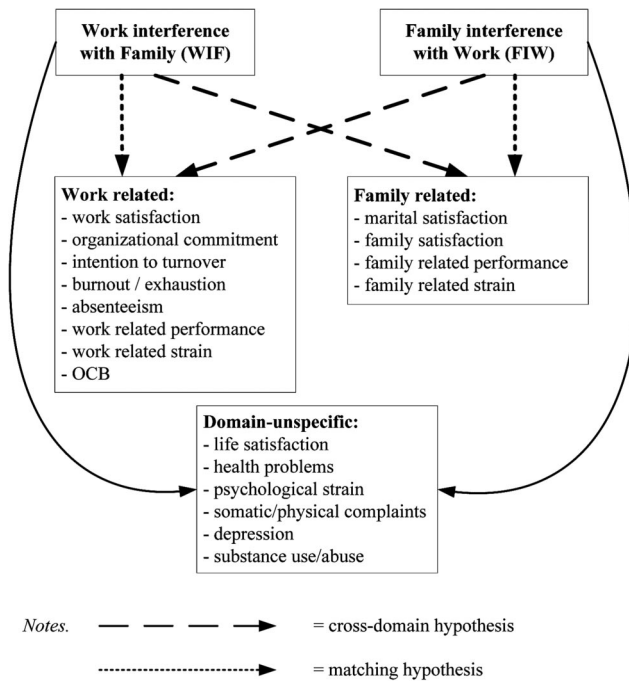


Figure 1. Framework of study variables and hypotheses. OCB = organizational citizenship behavior.

Moderators

We tested two possible moderators of the associations depicted in Figure 1, which are (a) time spent at work and (b) parenthood.

Time Spent at Work

Theoretical models (e.g., Barnett, 1998; Frone et al., 1992a; Greenhaus & Beutell, 1985) and empirical evidence (Fox & Dwyer, 1999; Geurts, Rutte, & Peeters, 1999; Jacobshagen, Amstad, Semmer, & Kuster, 2005; Major, Klein, & Ehrhart, 2002) show that the amount of time spent at work has a direct effect on work–family conflict. The meta-analysis of Byron (2005) showed a corrected mean correlation of $r_{wm} = .26$ between time spent at work and WIF. For FIW, no significant mean correlation was found. Whereas these studies examined the direct effect of time spent at work on work–family conflict, we argue that time spent at work also can have an impact on the relationship between work–family conflict and its consequences. Higgins, Duxbury, and Johnson (2000) found that, compared with full-time work,

part-time work was associated with individual time management in that part time workers perceived less difficulty managing their time than did full-time workers. Working part-time leaves an individual more time for family, which can help restore resources such as family support (e.g., Luk & Shaffer, 2005). These resources might attenuate the impact of work–family conflict on one’s well-being or behavior. Therefore, we propose that working fewer hours would buffer the negative effect of WIF/FIW on different outcomes.

Parenthood

Several studies have found that parents experience more WIF and FIW than individuals without children (for a meta-analysis, see Byron, 2005). Besides this direct effect, we suggest that child-care responsibilities affect the relationship between WIF/FIW and different outcomes. Coping with conflicts between life domains often involves trade-offs between these domains. For example, individuals experiencing FIW are likely to show work-related withdrawal behavior,

like being late or doing family calls at work (Behson, 2002a; Hammer, Bauer, & Grandey, 2003). Conversely, when experiencing WIF, individuals may work at home or come home late. Parents have more family-related demands, particularly when they have young children (Higgins et al., 2000). These additional family-related demands are likely to make such trade-offs more difficult. For example, it is more difficult to come home late when there are children waiting for dinner at home. As a result, such coping strategies can be expected to fail more often than when there are no child-care responsibilities. Unsuccessful coping is likely to affect well-being. Therefore, we propose that child-care responsibility enhances the relationship between WIF/FIW and different outcomes.

The Present Study

Summarizing these considerations, we analyzed three groups of hypotheses. They relate (a) to associations between work-family conflict and different types of outcomes, (b) to differential relationship of WIF/FIW with work- versus family-related outcomes, and (c) to potential moderators. Concerning the relationship between WIF/FIW and different outcomes, we updated the Allen et al. (2000) study concerning WIF.² But we expand these results by studying the relationship between different outcomes with FIW as well.

Work-Family Conflict and Different Types of Outcomes (H1)

Hypothesis 1a: WIF is associated with work-related outcomes, family-related outcomes, and domain-unspecific outcomes.

Hypothesis 1b: FIW is associated with work-related outcomes, family-related outcomes, and domain-unspecific outcomes.

Differential Associations (H2)

Concerning differences between the relationships of domain-specific outcomes with WIF and FIW, we propose that the results correspond to the matching rather than the cross-domain hypothesis.

Hypothesis 2a: WIF is more strongly related to work-related than to family-related outcomes.

Hypothesis 2b: FIW is more strongly related to family-related than to work-related outcomes.

Moderating Effects (H3)

The last group of hypotheses concerns two potential moderators of the relationships between work-family conflict and our different outcomes. We predicted long working hours to enhance the negative association between work-family conflict and outcomes, whereas parenthood is supposed to enhance the negative relationship between work-family conflict and outcomes.

Hypothesis 3a: Working hours have a moderating effect on the relationship among WIF/FIW and work-related, family-related, and domain-unspecific outcomes, with relationships being stronger for longer hours.

Hypothesis 3b: Parenthood has a moderating effect on the relationship between WIF/FIW and work-related, family-related, and domain-unspecific outcomes, with relationships being stronger for parents.

Method

Literature Search

Using a threefold search strategy for identifying relevant articles, we first conducted a computer search using the PsycINFO database. The key words *work and family conflict* yielded 356 studies published in industrial and organizational psychology and organizational behavior (IO/OB) and non-IO/OB journals. Other key words, like *interrole conflict* or *multiple role stress* did not yield additional studies. Second, we conducted a manual search in the following journals: *Journal of Applied Psychology*, *Journal of Organizational Behavior*, *Journal of Marriage and Family*, *Journal of Vocational Behavior*, *Organizational Behavior and Human Decision Processes*, *Academy of Management Journal*, *Sex Roles*, and *Community, Work & Family*. More than 74% of all

² Following Allen et al. (2000), we categorize all outcomes into three categories: work-related outcomes, family-related outcomes, and domain-unspecific outcomes. We chose slightly different categories than Allen et al. because their last category of stress-related outcomes was partly confounded with domain-specific variables (e.g., work-related stress was in the stress-related outcome category).

articles on the work–family domain between 1980 and 2003 were published in these journals (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007). We also included the two leading European journals in the field of work and organizational psychology, the *Journal of Occupational and Organizational Psychology* and the *European Journal of Work and Organizational Psychology*. Finally, we inspected the reference list of all articles and recent reviews (e.g., Eby et al., 2005) to identify more articles relevant to our study.

Inclusion Criteria

We included only published (or in press) studies, thus ensuring peer review (Kossek & Ozeki, 1998). The language had to be English. In addition, we set a timeframe from January 1999 to September 2006. Furthermore, studies had to assess work–family conflict in a direction-specific way, which is WIF or FIW; if the direction was not clear or if the measure referred to a mixture of both directions, the study was not considered. This criterion led to the exclusion of 41 effect sizes. Studies also had to include quantitative outcome measures. Because concepts such as work-to-personal life conflict, work-to-nonwork conflict, and work-to-life conflict are used interchangeably with WIF in the literature (Geurts & Demerouti, 2003), they were treated as equivalent with WIF provided that a careful inspection of the items confirmed that they were, indeed, measuring the same kind of conflict. Only studies that measured a current conflict were included, whereas studies that focused on a probable conflict in the future were excluded. In addition, because the positive side of the interface of work and family, namely work–family balance, work–family enhancement, or work–family facilitation, cannot be regarded as the opposite of a work–family conflict (for an overview, see Frone, 2003), studies analyzing only the positive side of the interface were excluded. If studies reported no correlations (e.g., only regression coefficients), we contacted the authors; if they did not provide correlation coefficients, the study was not considered. Twelve studies were excluded for these reasons. In total, 427 correlations from 98 articles were included, 261 for WIF and 166 for FIW.

Coding

Effect sizes were coded for WIF and FIW with respect to a specific outcome. We did not code work–family conflict according to its time-based, strain-

based, and behavior-based nature, which was suggested by Greenhaus and Beutell (1985), because this distinction is very rarely used (Carlson, Kacmar, & Williams, 2000). If a study did distinguish different forms of WIF or FIW, we pooled the results to obtain an overall measure of WIF or FIW.

All variables coded in this meta-analysis are shown in Table 1, as well as the central tendency (median and mean) of these variables across all studies and the interrater reliability. An overview of all studies used in this meta-analysis, including information about author(s), publication year, sample characteristics, sample size, bivariate correlations, measurement of the conflict, and measurement of the outcome, can be obtained from the first author. The following categories of variables were coded:

Source. All studies were published in peer-reviewed journals. The majority of the studies were published in 2004. Some studies used subsamples from larger surveys to analyze the relationship between WIF/FIW and different outcomes. If different studies of the same survey reported the same relationships (this means the same type of interrole conflict and the same outcome), we included only the study with the larger subsample in the meta-analysis to prevent an overrepresentation of a single survey (Lipsey & Wilson, 2001; Rosenthal, 1995).

Design. Most of the studies were cross-sectional (355 of 427 correlations were based on cross-sectional studies). For longitudinal studies, we coded cross-sectional results from the baseline. If information about WIF/FIW or an outcome variable was not assessed for the baseline, information was taken from the follow-ups. The aim was to stay as far as possible with the cross-sectional results to make studies as comparable as possible. Furthermore, this strategy was used to avoid biases from sample attrition.

Sample information. Most of the coded variables are concerned with sample information. The central tendency of the variables that refer to sample characteristics is shown in Table 1. Most of the studies were conducted in North America, with mostly Caucasian participants. On average, half of the sample was female. Most of the participants were married, lived in dual-earner relationships, had children, and worked full time.

Analysis

We followed the meta-analytical procedure of Hunter and Schmidt (1990; Hunter, Schmidt, & Jackson, 1982), using Schwarzer's (1989) META program. We calculated effect size summary statistics

Table 1
Variables Included in the Meta-Analysis Including Central Tendency and Reliability

Variable	Central tendency		Interrater reliability (%)
	Mean	Median	
Source			
Bibliographic reference	—	—	100
Publication year	2003.06	2004	100
Type of publication	—	Journal	100
Subsample	—	—	100
Design			
Cross-sectional vs. longitudinal	—	Cross-sectional	100
Sample			
Sample size (<i>n</i>)	527.97	267	94.1
Country	—	North America	100
Participation rate	55.61	53.50	91.1
Women (%)	52.80	50.00	91.1
Mean age (years)	38.54	38.95	100
Married/long relationship (%)	80.77	80.50	97.1
Dual-earner couples (%)	86.68	100.00	100
With children (%)	76.78	79.00	97.1
Single parents (%)	4.20	4.20	100
Full-time workers (%)	83.68	92.00	94.1
Mean housework time (hours per week)	25.00	27.50	100
Mean work time (hours per week)	42.46	43.00	97.1
Type of job	—	>50% White-collar	100
Organizational tenure (years)	8.00	8.14	91.1
Ethnicity/race	—	>50% Caucasian	100
WIF/FIW			
Type of conflict (WIF/FIW)	2.71/2.12	2.82/2.09	100
Direction of conflict measured (only WIF, only FIW, both directions)	—	Both directions	100
Instrument used	—	—	100
Reliability	—	—	100
Outcomes			
Type of outcome	—	—	100
Instrument used	—	—	100
Reliability	—	—	100
Effect size			
Type of effect size	—	Correlation	100
Effect size	—	—	100

Note. WIF = work interference with family; FIW = family interference with work.

for random effect models, correcting scores of each study for reliability (Hunter & Schmidt, 2000). For each outcome variable, we calculated an effect size weighted for sample size in addition to the unweighted effect size. The effect size models for each direction of the conflict were calculated separately. The weighted effect size models are presented in Tables 2 and 3. Furthermore, correlations for the relationship between WIF/FIW and the different outcomes (work-related outcomes, family-related outcomes, and domain-unspecific outcomes) were estimated separately. Correlations that were derived from the same sample and were, therefore, dependent (Hunter et al., 1982) were pooled using

Fisher's *Z* transformation (Bortz, 1993). A significant relationship between work-family conflict and an outcome variable is assumed when the 95% confidence interval of the weighted correlation does not include zero.

Population effect sizes are only interpretable in a reliable way if the underlying data set can be seen as homogeneous. If the homogeneity is not sufficient, the effect size should be tested for potential moderators (Hunter et al., 1982). Homogeneity was tested with two criteria: First, the residual standard deviation should be smaller than one quarter of the population effect size (Schwarzer, 1989; Stoffelmayr, Dillavou, & Hunter, 1983). This criterion is based on the

Table 2
Results of the Meta-Analysis for Work Interference With Family (WIF)

Outcome	<i>k</i>	<i>N</i>	Weighted mean correlation (95% CI)	<i>N</i> _{FS}	<i>SD</i> _{Res}	Homogeneity	
						$\sigma_e^2/\sigma_\Delta^2$ (%)	95% CrI
Work-related outcome							
Work satisfaction	54	25,114	-.26 [-.273, -.250]*	228.25	.087	19.57	[-0.513, -0.109] ^d
Organizational commitment	14	7,400	-.17 [-.187, -.142]*	32.07	.128	9.82	[-0.505, 0.105]
Intention to turnover	24	10,961	.21 [.191, .227]*	76.30	.092	19.06	[0.035, 0.457] ^d
Burnout/exhaustion	15	9,177	.38 [.361, .396]*	98.60 ^a	.097	10.95	[0.226, 0.680] ^d
Absenteeism	5	6,351	.03 [.007, .056]*	<1	.000 ^b	100.00 ^c	[0.034, 0.034] ^d
Work-related performance	10	2,343	-.11 [-.149, -.068]*	11.76	.150	15.59	[-0.484, 0.223]
Work-related stress	16	8,497	.49 [.477, .510]*	141.97 ^a	.114 ^b	6.75	[0.316, 0.834] ^d
Career satisfaction	4	1,383	-.09 [-.141, -.036]*	3.08	.045	58.66	[-0.220, -0.001] ^d
OCB	3	550	-.63 [-.679, -.578]*	34.86 ^a	.252	1.70	[-1.000, -0.135] ^d
Family-related outcome							
Marital satisfaction	12	6,851	-.17 [-.192, -.146]*	28.61	.022 ^b	78.04 ^c	[-0.248, -0.160] ^d
Family satisfaction	13	6,820	-.18 [-.199, -.153]*	32.83	.041 ^b	51.81	[-0.301, -0.117] ^d
Family-related performance	3	803	-.18 [-.246, -.111]*	7.76	.000 ^b	100.00 ^c	[-0.218, -0.218] ^d
Family-related stress	7	1,548	.23 [.184, .279]*	25.44	.053 ^b	58.71	[0.155, 0.405] ^d
Domain-unspecific outcome							
Life satisfaction	12	3,143	-.31 [-.338, -.275]*	61.65	.094	25.84	[-0.580, -0.144] ^d
Health problems	4	5,076	.28 [.253, .304]*	18.31	.185	1.90	[-0.103, 0.766]
Psychological strain	18	8,039	.35 [.326, .365]*	106.37 ^a	.093	16.42	[0.203, 0.626] ^d
Somatic/physical symptoms	18	8,665	.29 [.268, .306]*	85.34	.067 ^b	27.75	[0.196, 0.513] ^d
Depression	14	9,869	.23 [.209, .247]*	49.78	.103	10.77	[0.033, 0.512] ^d
Substance use/abuse	3	4,900	.08 [.048, .104]*	1.56	.022	56.12	[0.071, 0.175] ^d
Stress	6	5,347	.54 [.515, .553]*	58.14 ^a	.115 ^b	3.43	[0.360, 0.884] ^d
Anxiety	3	4,804	.14 [.111, .167]*	5.34	.055	16.74	[0.040, 0.300] ^d
Work-related outcome	89	41,879	-.29 [-.303, -.285]*	433.91	.153	6.95	[-0.711, 0.010]
Family-related outcome	31	14,945	-.18 [-.194, -.163]*	79.90	.035 ^b	60.85	[-0.294, -0.136] ^d
Domain-unspecific outcome	56	32,411	-.32 [-.328, -.308]*	300.11 ^a	.153	5.52	[-0.747, -0.019] ^d

Note. *k* = number of effect sizes; *N* = total sample size; 95% CI = 95% confidence interval; *N*_{FS} = number of fail-safe; *SD*_{Res} = residual standard deviation; $\sigma_e^2/\sigma_\Delta^2$ (in %) = percentage of variance explained with the sample error; 95% CrI = 95% credibility interval; OCB = organizational citizenship behavior.

^a Criterion for plausibility accomplished: Fail-safe $N > 5 * k + 10$. ^b Criterion for homogeneity by Stoffelmayr et al. (1983) accomplished: $SD_{Res} < 1/4$ of population effect size. ^c Criterion for homogeneity by Hunter et al. (1982) accomplished: $\sigma_e^2/\sigma_\Delta^2 \geq 75$. ^d Criterion for homogeneity by Whitener (1990) accomplished: Zero not included in the 95% credibility interval.

* Significant; zero not included in the 95% confidence interval.

idea that not only the percentage of variance of the sampling error should be taken into account, but also the actual amount of variance (McDaniel, Hirsh, Schmidt, Raju, & Hunter, 1986). Nevertheless, the percentage of variance of the sampling error is also described in Tables 2 and 3 as additional information. Second, a correlation is often assumed to be homogeneous if the 95% credibility interval does not include zero (Whitener, 1990). However, this latter criterion is a matter of considerable controversy (Koslowsky & Sagic, 1993). Furthermore, different indicators of homogeneity often lead to different conclusions. Given this situation, we decided to assume heterogeneity if any of the two criteria indicated heterogeneity.

Moderator Analysis

Two possible moderators were analyzed: working hours and parenthood. Parenthood was coded as the percentage of individuals in the sample with children. Working hours per week were coded in terms of the sample mean. The moderator variables were sample based (vs. effect size based). Because several effect sizes were derived from the same sample, implying dependent data, we calculated the moderator analyses using multilevel modeling, which takes the dependent data structure into account. We used HLM6.06 (Raudenbush, Bryk, Cheong, & Congdon, 2004). On Level 1, we had a

Table 3
Results of the Meta-Analysis for Family Interference With Work (FIW)

Outcome	k	N	Weighted mean correlation (95% CI)	N _{FS}	Homogeneity		
					SD _{Res}	σ _e ² /σ _Δ ² (in %)	95% CrI
Work-related outcome							
Work satisfaction	35	19,180	-.13 [-.148, -.120]*	58.92	.062	31.73	[-0.312, -0.018] ^d
Organizational commitment	10	5,178	-.15 [-.177, -.124]*	20.14	.055	37.67	[-0.329, -0.057] ^d
Intention to turnover	16	8,636	.17 [.147, .188]*	37.50	.054	37.50	[0.077, 0.329] ^d
Burnout/exhaustion	6	5,885	.27 [.244, .292]*	26.18	.039 ^b	37.06	[0.239, 0.420] ^d
Absenteeism	5	6,351	.09 [.064, .113]*	3.82	.057	19.46	[-0.025, 0.218]
Work-related performance	8	2,042	-.20 [-.245, -.161]*	24.50	.093	29.20	[-0.476, -0.028] ^d
Work-related stress	13	5,562	.28 [.250, .299]*	58.38	.122	11.81	[0.043, 0.629] ^d
Career satisfaction ^c	—	—	—	—	—	—	—
OCB	2	452	-.54 [-.606, -.476]*	19.78	.064 ^b	29.90	[-0.744, -0.461] ^d
Family-related outcome							
Marital satisfaction	5	3,027	-.29 [-.323, -.257]*	24.02	.029 ^b	61.44	[-0.396, -0.279] ^d
Family satisfaction	12	6,737	-.21 [-.237, -.191]*	39.42	.063	29.19	[-0.408, -0.117] ^d
Family-related performance	3	803	-.02 [-.087, .052]	<1	.070	43.11	[-0.192, 0.149]
Family-related stress	5	1,123	.21 [.154, .266]*	16.06	.271	5.22	[-0.406, 0.931]
Domain-unspecific outcome							
Life satisfaction	9	2,666	-.22 [-.252, -.179]*	29.79	.047 ^b	57.74	[-0.373, -0.160] ^d
Health problems	4	5,076	.24 [.214, .266]*	15.18	.083	9.27	[0.094, 0.477] ^d
Psychological strain	8	3,840	.21 [.180, .240]*	25.60	.028 ^b	71.13	[0.191, 0.312] ^d
Somatic/physical symptoms	4	2,054	.14 [.099, .184]*	7.35	.021 ^b	81.09 ^c	[0.127, 0.227] ^d
Depression	10	6,712	.22 [.193, .239]*	33.26	.029 ^b	62.38	[0.204, 0.327] ^d
Substance use/abuse	2	4,686	.10 [.073, .130]*	2.05	.014 ^b	68.46	[0.104, 0.173] ^d
Stress	4	3,037	.39 [.359, .419]*	27.15	.043 ^b	32.71	[0.451, 0.530] ^d
Anxiety	3	4,804	.19 [.159, .214]*	8.19	.016 ^b	69.55	[0.203, 0.259] ^d
Work-related outcome	57	27,219	-.16 [-.174, -.150]*	127.66	.093	18.53	[-0.423, 0.026]
Family-related outcome	23	11,038	-.22 [-.236, -.200]*	77.39	.120	11.55	[-0.554, 0.021]
Domain-unspecific outcome	33	21,560	-.23 [-.245, -.220]*	120.43	.083	16.63	[-0.484, -0.088] ^d

Note. k = number of effect sizes; N = total sample size; 95% CI = 95% confidence interval; N_{FS} = number of fail-safe; SD_{Res} = residual standard deviation; σ_e²/σ_Δ² (in %) = percentage of variance explained with the sample error; 95% CrI = 95% credibility interval; OCB = organizational citizenship behavior.

^a Criterion for plausibility accomplished: Fail-safe N > 5 * k + 10. ^b Criterion for homogeneity by Stoffelmayr et al. (1983) accomplished: SD_{Res} < 1/4 of population effect size. ^c Criterion for homogeneity by Hunter et al. (1982) accomplished: σ_e²/σ_Δ² ≥ 75. ^d Criterion for homogeneity by Whitener (1990) accomplished: Zero not included in the 95% credibility interval. ^e Only one study (k = 1); therefore, we do not report the results.

* Significant; zero not included in the 95% confidence interval.

total of 427 effect sizes, whereas on Level 2 we had 112 samples.

Results

Work-Family Conflict (WIF/FIW) and Different Outcomes

WIF. Results concerning WIF and all outcome variables are shown in Table 2. All weighted mean correlations were in the expected direction. In all cases, WIF was negatively associated with well-being and performance, no matter whether the indicators were domain-specific or domain-unspecific. Furthermore, all correlations were significant, which means that zero was not included in the 95% confi-

dence interval. Overall, the strongest relationship was found between WIF and domain-unspecific outcomes ($r_{wm} = -.32$), followed by work-related outcomes ($r_{wm} = -.29$) and family-related outcomes ($r_{wm} = -.18$). Within the three categories of outcomes, the strongest relationship among domain-unspecific outcomes was between WIF and general stress ($r_{wm} = .54$), but only six studies analyzed this relationship. Among work-related outcomes, OCB showed the strongest relationship with WIF ($r_{wm} = -.63$). However, this result is based on only three studies, with a total sample size of 550. Concerning family-related outcomes, the strongest relationship was between WIF and family-related stress ($r_{wm} = .23$), based on seven studies. Altogether, WIF was associated with

all outcomes from all three domains. Hypothesis 1a therefore is supported.

FIW. Table 3 describes the results for FIW and all outcomes. Again, all relationships were in the expected direction: FIW was negatively associated with well-being and performance. Furthermore, all relationships except one differed significantly from zero. The exception was family-related performance ($r_{wm} = -.02$, *ns*), which was based on only three studies, however (with a total sample size of 803). Similar to the findings for WIF, the strongest relationship overall involved domain-unspecific outcomes ($r_{wm} = -.23$), followed by family-related outcomes ($r_{wm} = -.22$) and work-related outcomes ($r_{wm} = -.16$). FIW has been investigated less frequently than WIF. Therefore, most results concerning single indicators are based on few studies. The strongest relationships were shown for OCB ($r_{wm} = -.54$; three studies), general stress ($r_{wm} = .39$; four studies), work-related stress ($r_{wm} = .28$; 13 studies), marital satisfaction ($r_{wm} = -.29$; five studies), burn-out/exhaustion ($r_{wm} = .27$; six studies), and health problems ($r_{wm} = .24$; four studies). Except for work-related stress, these results cannot be considered to be very robust; thus, the strength of the association between single outcome indicators and FIW has to be treated with caution. Nevertheless, the overall outcome categories (family-related outcomes, work-related outcomes, and domain-unspecific outcomes) can be interpreted, and we conclude that Hypothesis 1b is supported.

Cross-Domain Relations Versus Matching Hypothesis

For both WIF and FIW, the strongest relationship was found with domain-unspecific outcomes. Contrary to the cross-relationship hypothesis (Ford et al., 2007; Frone et al., 1992a), WIF was more strongly related to work-related outcomes than to family-related outcomes, and FIW was more strongly related to family-related outcomes than to work-related outcomes. In both cases, this difference was significant, as indicated by the nonoverlapping confidence intervals. These results confirm the matching hypothesis both for WIF (Hypothesis 2a) and for FIW (Hypothesis 2b).

Moderator Analyses

Because many values for single variables were based on few studies, we decided to conduct a mod-

erator analyses only for the three general categories, thereby ensuring enough power for the moderator analyses. As shown in Tables 2 and 3, homogeneity was given for only one of the six associations, that is, for the association between WIF and family-related outcomes. Nevertheless, moderator analyses were conducted for all associations between WIF/FIW and outcomes. We tested for the moderating effect of hours at work and parenthood on the relationship between work-family conflict and different outcomes. Results are displayed in Table 4.

No moderating effects were found for parenthood. Hours at work significantly moderated two associations (WIF with family-related outcomes, FIW with domain-unspecific outcomes), indicating that the relationships were stronger in samples in which participants had above-average working hours. Furthermore, with the exception of one association (which was zero), all other associations between the effect sizes and hours at work point in the same positive direction.

Thus, Hypothesis 3b (parenthood) was not confirmed. There was some support for Hypothesis 3a (hours at work); however, further research is needed.

Discussion

The present meta-analysis not only confirms a number of results of previous studies, but it also fills

Table 4
Standardized Regression Coefficients Between Effect Sizes and Moderator Variables for Work Interference With Family (WIF) and Family Interference With Work (FIW)

Relationship	% Parenthood	Mean hours at work/week
WIF: Domain-unspecific outcome	.20 (62/34)	.00 (30/18)
WIF: Work-related outcome	-.15 (108/53)	.15 (66/24)
WIF: Family-related outcome	-.17 (31/24)	.44** (19/13)
FIW: Domain-unspecific outcome	-.15 (37/25)	.66*** (16/11)
FIW: Work-related outcome	.02 (83/42)	.09 (48/18)
FIW: Family-related outcome	.14 (22/19)	.04 (11/9)

Note. The first number in parentheses is the number of effect sizes on Level 1; the second number in parentheses is the number of studies, which provided the moderator information on Level 2 (= k/N).

* $p < .05$ (two-tailed). ** $p < .01$ (two-tailed).

existing gaps by investigating both directions of the conflict and their association with a large number of outcomes. These data, therefore, allow us to disentangle specific effects of WIF and FIW, and specifically help decide between two competing hypotheses, the cross-domain and matching hypotheses.

Work-Family Conflict and Different Outcomes

The results of the present meta-analysis mostly confirmed our assumptions about the relationship between work-family conflict and different outcomes. Both directions of work-family conflict were related to work-related outcomes, family-related outcomes, and domain-unspecific outcomes. The only nonsignificant relationship was found between FIW and family performance. Overall, most of the effect sizes were small to modest (Cohen, 1988).

Considering the number of studies about work-family conflict, work-related outcomes were the variables most often studied, and this applies to both directions of the conflict. A reason for this dominance of work-related outcomes may be seen in the fact that work-family conflict is mainly studied in the field of work and organizational psychology. Therefore, work-related aspects are in the foreground of interest.

Among these work-related outcomes, work satisfaction was the most popular indicator studied. Work satisfaction is related to many indicators of mental health as well as to physical health (Faragher, Cass, & Cooper, 2005); it can be regarded as a central aspect of an individual's well-being (Warr, 2007). Family satisfaction may be seen as the counterpart of work satisfaction; it was the most frequently studied variable among the family-related outcomes, with regard to WIF as well as FIW. It therefore is not surprising that two of the few previous meta-analyses focused solely on the relationship between WIF/FIW and job, family, or life satisfaction (Ford et al., 2007; Kossek & Ozeki, 1998).

For both WIF and FIW, we found the strongest association with domain-unspecific outcomes. Allen et al. (2000) also found the strongest relationship between WIF and stress-related well-being. Of the domain-unspecific outcomes other than measures of satisfaction, psychological strain and somatic/physical symptoms were most frequently analyzed in relation to WIF, and depression in relation with FIW.

In sum, the majority of studies assessed work-related outcomes, both in relationship with WIF and FIW. However, the strongest relationships between

WIF and FIW were shown with domain-unspecific outcomes. This allows us to conclude that future research on work-family conflict should include not only domain-specific outcomes but also domain-unspecific outcomes (e.g., general well-being indicators).

Cross-Domain Versus Matching Hypothesis

Differentiating between both directions of work-family conflict is important if different correlation patterns exist for WIF and FIW. Our results showed this to be the case. WIF was more strongly associated with work-related than with family-related outcomes, and FIW was more strongly associated with family-related than with work-related outcomes, which confirms the matching hypothesis.

It seems that WIF not only is created mainly by work, rather than family, stressors (Byron, 2005; Ford et al., 2007), but also has its consequences primarily in the work, rather than the family, environment. Similarly, FIW not only is created mainly by family, rather than work, stressors, but also seems to have its consequences mainly in the family, rather than the work, domain. This does not mean that the cross-domain relationship can be neglected. WIF/FIW is associated with both work- and family-related outcomes, but the relationships are stronger with outcomes in the matching, as compared with cross-domain, outcomes. An effect of the cross-domain relationship is shown in our results as well as in the results from other meta-analyses (Ford et al., 2007). However, because no causality can be inferred from these mostly cross-sectional results, different explanations may be considered for this phenomenon. We focus our discussion on the relationship between WIF and work-related outcomes; analogous explanations can be given for the relationship between FIW and family-related outcomes.

The first explanation is that work-related outcomes may be seen as an antecedent for WIF rather than as a consequence of WIF. This would explain the results as follows: Work stressors influence one's work-related well-being. A negative work-related well-being in turn creates WIF, which influences one's family-related well-being. Following this explanation, our results would show that WIF is more strongly related to its antecedents than to its consequences. This consideration follows a model based on Frone et al. (1992a) and further developed by Frone, Yardley, and Markel (1997). In this model, two feedback loops have been integrated, so that domain-specific outcomes (e.g., family-related well-

being) are related to same-domain antecedents (e.g., family-related antecedents). Therefore, according to our considerations and to the model of Frone et al. (1997), a given variable might be a direct outcome of FIW but also a direct antecedent of WFC. The investigation of such feedback loops would create a greater understanding of work–family processes. However, only longitudinal studies can answer the question of causality. Therefore, it would be important for further research to investigate such work–family processes with longitudinal designs.

Second, a stressful work environment may have an impact on an individual's well-being by affecting one's work-related well-being directly and simultaneously creating WIF. WIF, in turn, influences both one's family-related well-being and one's work-related well-being. The idea behind this explanation is that the influence of the work and the family domain is reciprocal and should be seen as a spiral rather than a unidirectional process (Demerouti, Bakker, & Bulters, 2004). This would also explain the relationship between WIF and FIW (Mesmer-Magnus & Viswesvaran, 2005) because an impaired family-related well-being may additionally promote FIW conflicts. Nevertheless, it is important to differentiate between WIF and FIW, which does not mean that one direction of interrole conflict cannot create or influence the other direction.

The strongest relationship with both directions of the interrole conflict was found for domain-unspecific outcomes, which was also shown by Kossek and Ozeki (1998) with regard to life satisfaction. We explain this effect by supposing that both domain-specific outcomes have an influence on domain-unspecific outcomes (e.g., Aryee et al., 1999; Bedeian, Burke, & Moffett, 1988; Frone et al., 1992a). Kelloway and Barling (1991) tested this assumption and found that job characteristics had an indirect influence on context-free mental health, which was mediated through job-related well-being (cf. Warr, 2007). According to additive models of well-being, the perceived overall quality of life may be seen as a "distal variable" that is associated with the (more proximal) quality of life in each life domain (Frone et al., 1992a). Therefore, the domain-specific well-being indicators additively influence general well-being indicators.

It is possible, however, that the strong association between (domain-unspecific) stress and WIF may be explained by work stress being confounded with the general measures of stress. This interpretation is very plausible, given that unspecific stress and work-related stress are correlated (Warr, 2007). Further-

more, Kelloway and Barling (1991) demonstrated that the association of work-related variables with general well-being was fully mediated by work-related well-being. On the other hand, the correlations between work-related and domain-unspecific, or "context-free," indicators reviewed by Warr (2007) were substantial but not so large as to suggest the two are substitutable for one another. Furthermore, Grebner, Semmer, and Elfering (2005) found that work-related stress symptoms and domain-unspecific stress symptoms were in part predicted by different variables, suggesting that each also contains specific variance. Taken together, such findings indicate that a confound with work-related stress does exist; with the exception of Kelloway and Barling (1991), however, they do not suggest that the relationship between WIF and (general) stress is due *exclusively* to this confound. Whatever the interpretation, our results clearly show that it is important to distinguish between WIF and FIW as different correlation patterns emerged for the two directions.

Moderators

As argued in the introduction, there are theoretical reasons to hypothesize moderator effects. indeed, the need for analyzing moderator effects is indicated by the heterogeneity of our results, which is in line with the results of other meta-analyses (e.g., Allen et al., 2000). We tested for two moderators that plausibly could influence the relationship between work–family conflict and its consequences: time spent at work and parenthood.

Time spent at work. Our work-related moderator was time spent at work. We hypothesized that the number of hours spent at work should enhance the negative effect of work–family conflict on different outcomes. A high number of hours at work should reduce the possibility of restoring one's resources, for example, by investing less time in one's social network (Viswesvaran, Sanchez, & Fisher, 1999). Moreover, Sonnentag and Bayer's (2005) study indicated that long hours at work have a negative effect on psychological detachment from work, which is an important resource for recovery, which, in turn, is important for well-being. Therefore, long hours at work should enhance the negative effect of work–family conflict on well-being.

We found two moderating effects of time spent at work, and both were in the expected direction. Furthermore, except for one zero effect, all signs were in the expected direction. Therefore, it seems that the role of hours worked is not restricted to a main effect

on WIF (which has been shown in a number of studies; e.g., Jacobshagen et al., 2005; Major et al., 2002; van Rijswijk, Bekker, Rutte, & Croon, 2004). Note, however, that hours worked is a very crude measure with regard to the processes involved. A number of factors may qualify this relationship, such as the number of hours spent at work versus the quality of work (Greenhaus & Parasuraman, 1999) or the question of whether overtime is self-chosen or demanded (cf. Tucker & Rutherford, 2005). Typically, measures of overload are better predictors of WIF than are the mere number of hours (Byron, 2005; Greenhaus & Parasuraman, 1999; Jacobshagen et al., 2005). This might explain why only two of six moderations became significant.

Parenthood. We hypothesized that parenthood would enhance the relationship between work-family conflict and different outcomes because parenthood-related activities, such as child-care responsibilities, are a demanding aspect of family life. But results showed no effect. Having children or not is a very crude measure of care responsibilities. Other factors might be better indicators of the demanding aspect of child care, for instance, the number and age of the children or single parenthood. Unfortunately, most of the studies did not provide this information. Those that provided it did so in a way that could not be used meta-analytically. Thus, some articles reported the percentage of participants with children below 3 years of age, others the percentage of participants with children living at home and going to school, or just the percentage of participants with children but without further description.

Limitation of moderator analyses. First, given the heterogeneity of effect sizes, and the fact that only one moderator (hours at work) yielded significant effects, it seems likely that other moderators may play a role. Possible candidates are the economic background of the sample, as better economic resources may help ward off some of the consequences of WIF/FIW (cf. Hobfoll, 1989). Unfortunately, studies often do not report sufficient information with regard to the economic background of their sample. Similarly, information about other possible moderators, such as support, control, or centrality of life domains, often was not sufficient. With almost all studies coming from the United States, we could not analyze the origin of the sample as a moderator variable.

Second, the limited amount of significant moderator effects may be due to our rather generic categories of work-related and family-related outcomes. Unfortunately, the specific outcome categories could

not be tested for moderator effects in a reliable way. Given the small number of effect sizes per category and moderator, power was not sufficient.

However, the hypothesized mechanisms behind a moderator effect are at an individual level, but moderation tests in meta-analyses are on a study level. Therefore, moderating effects or, as in our case, the lack thereof, should be interpreted with caution because a moderating effect that holds for one level does not necessarily hold for the other, implying the danger of an ecological fallacy.

Practical Implications

The results of this meta-analysis have a number of practical implications. Our results confirm the association of work-family conflict with a large number of indicators of well-being. Organizations and supervisors who are interested in healthy employees should therefore include attempts to minimize conflicts between work and family life in their considerations. Moreover, a conflict originating in the work environment (i.e., WIF) is related particularly strongly to work-related outcomes, and these include not only well-being but also work performance and withdrawal tendencies. Thus, organizations should be motivated to create a family-friendly work environment.

Overall, the results show that the importance of avoiding work-family conflict goes beyond individual well-being but includes other variables that are of direct importance for organizational effectiveness. Strategies that foster a family-friendly work environment are, therefore, likely to benefit both the organization and the employee. At the same time, such benefits are not automatically implied by official family-friendly policies unless these are perceived by employees as signaling a family-friendly climate at work (Allen, 2001). The behavior of supervisors is especially important in this respect, so they should be encouraged and supported in their attempts to convey a family-friendly climate (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009).

Outlook and Conclusion

The interface between work and family has received broad attention during the past 20 years. Research interest in this topic is associated with changes in societal structure, especially the rising number of dual-earner couples with children. This interest in the challenge of combining work and family is not likely to fade in light of foreseeable changes in the family

as well as the work environment for a number of reasons.

Regarding families, the number of dual-earner couples with children is not likely to decline. Therefore, more and more individuals have to combine work and family responsibilities. Second, child care is no longer exclusively a women's topic because fathers' involvement with children is growing (Halpern, 2005). Third, the number of single parents is rather high, which might have an impact on combining work and family duties (Duxbury, Higgins, & Lee, 1994). Fourth, external child care will likely become more common and even perhaps be taken for granted, which allows parents more control over their family duties and possibly facilitates combining work and family responsibilities (Voydanoff, 2005c).

The work environment is also likely to change. Therefore, a number of reasons for the interest in the topic of work–family come from the working environment. First, a European survey shows that part-time work has increased drastically in Europe in the past 15 years (European Foundation for the Improvement of Living and Work Conditions, 2007), and working part time may be a strategy to prevent work–family conflict (Higgins et al., 2000). We expect this trend to continue in the next years. A second point of interest is the phenomenon of the working poor because poverty has especially strong effects on families with small children. On the one hand, these families cannot afford to pay for external child care, which may reduce family-related resources (Voydanoff, 2005c). On the other hand, economic hardship seems to decrease social support and increase social undermining among couples, which is related to depression and relationship satisfaction (Vinokur, Price, & Caplan, 1996). A third possible change concerns commuting from work to home. The duration of commuting is rising because more regional flexibility is required from working individuals. This may make external child care more difficult, especially because grandparents no longer live nearby.

All these reasons (and certainly many more) suggest that combining work and family will continue to constitute a challenge in the coming decades. Therefore, it will be important to further analyze work–family conflict and its antecedents as well as its consequences.

To conclude, the present meta-analysis demonstrates that work–family conflict affects well-being and behavior not only in general, but also with respect to family and working life. However, it is important to stress that combining these two life domains can have a positive effect as well. It has

repeatedly been demonstrated that living multiple life domains has a positive effect on individuals' well-being and health (Barnett & Hyde, 2001; Kotler & Wingard, 1989; Ross & Mirowsky, 1995). Furthermore, positive reciprocal influences of work and family (work–family enrichment or facilitation) have been demonstrated in a number of studies (see Greenhaus & Powell, 2006). Thus, it is important to gain a better understanding of the dynamics of this process, both in terms of negative and positive aspects. This should aid the development of better measures of prevention and intervention.

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