Disentangling the Relationship Between Gender and Work–Family Conflict: An Integration of Theoretical Perspectives Using Meta-Analytic Methods

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Implicit in many discussions of work–family issues is the idea that managing the work–family interface is more challenging for women than men. We address whether this intuition is supported by the empirical data via a meta-analysis of gender differences in work–family conflict (WFC) based on more than 350 independent samples (N > 250,000 workers). Challenging lay perceptions, our results demonstrate that men and women generally do not differ on their reports of WFC, though there were some modest moderating effects of dual-earner status, parental status, type of WFC (i.e., time-, strain-, vs. behavior-based), and when limiting samples to men and women who held the same job. To better understand the relationship between gender and WFC, we engaged in theory-testing of mediating mechanisms based on commonly invoked theoretical perspectives. We found evidence in support of the rational view, no support for the sensitization and male segmentation perspectives, and partial support for the asymmetrical domain permeability model. Finally, we build theory by seeking to identify omitted mediators that explain the relationship between gender and work-interference-with-family, given evidence that existing theoretically specified mechanisms are insufficient to explain this relationship. Overall, we find more evidence for similarity rather than difference in the degree of WFC experienced by men and women.

Keywords: gender differences, measurement invariance, meta-analysis, work–family conflict

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In their 2005 monograph reviewing the state of work–family research, Eby, Casper, Lockwood, Bordeaux, and Brinley concluded that “gender is deeply engrained in [work–family] rela-

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In the popular press, the idea that women have more difficulty than men juggling work and family is portrayed as a gendered issue. For example, Anne Marie Slaughter’s (2012) “Why Women Still Can’t Have It All” encapsulates this idea in the title itself; the article focuses on the difficulties of managing both a highly demanding career and a family for women. In Lean In, Sheryl Sandberg (2013) observes that unlike her male counterparts, she is “inevitably” asked how she balances work and family when serving as a panelist. These accounts provide additional evidence that many people perceive work–family management as a gendered issue.

Although the popular press paints a simple picture that women have more difficulty than men juggling work and family, little consensus regarding the nature of this relationship has been reached in the academic literature because of both inconsistent empirical results and competing theoretical perspectives that have operated largely independently in the research literature. Thus, the overarching purpose of the present investigation is to clarify the relationship between gender and the most commonly researched
work–family construct—work–family conflict (WFC). We conduct a meta-analysis based on 354 and 220 effect sizes of the relationship between gender and work-interference-with-family (WIF) and family-interference-with-work (FIW), respectively. Next, we examine study-level moderators to determine contextual conditions that may impact the size of gender differences in WFC. Finally, we use meta-analytic path analysis to evaluate the merit of multiple mediating mechanisms based on different theoretical perspectives that have been invoked in the literature to understand gender differences in WFC to integrate and refine theory.

Our study makes several key contributions to the work–family literature. First, it offers a meta-analytic estimate based on a very large sample of the “true” association between gender and bidirectional WFC. This provides an estimate that can guide future researchers, rather than having them attempt to posit hypotheses based on an unclear, yet very large extant literature. Second, by empirically testing theoretical assertions regarding the mechanisms that underlie the relationship between gender and WFC, we aim to integrate and shed light on the relative merit of these perspectives, a finding that will help to further future theorizing. Third, from a practical standpoint, current beliefs about gender and WFC affect employees. As examples, men are penalized more than women for incidents of FIW (Butler & Skattebo, 2004) and feel more stigmatized for using work–family management policies, such as flexibility (Vandello, Hettinger, Bosson, & Siddiqi, 2013), while women face career penalties based on assumptions that they, by virtue of being female, experience high levels of WFC and are highly family oriented (e.g., Hoobler, Wayne, & Lemmon, 2009; Lyness & Judiesch, 2014; Tichenor, 2005; Williams, 2001). If the association between gender and WFC is small or null, providing evidence-based information of this is a critical first step in changing harmful stereotypes and allowing people to structure work and family in ways they desire without fear of repercussions. On the other hand, if a gender gap is found, understanding in what contexts it varies (e.g., in certain cultures or for certain workers) can shed light on policies and practices that could be promoted to foster gender equity.

Overview of Existing Research on Gender Differences in WFC

Gender has indeed been the focus or a variable of interest in numerous work–family studies (Bianchi & Milkie, 2010; Eby et al., 2005), but how it relates to work–family constructs is both theoretically and empirically debated. The most commonly researched work–family construct is work–family conflict, which is considered to be bidirectional; WIF (FIW) occurs when “participation in the family (work) role is made more difficult by virtue of participation in the work (family) role” (Greenhaus & Beutell, 1985, p. 77). In hypothesizing about gender differences in WFC, researchers often invoke little to no theory. In cases where theoretical explanations are offered, the theories invoked vary considerably across studies, and, subsequently, the nature of predictions regarding gender differences in WFC also vary (and are reviewed in detail below). Further, these theoretical perspectives on gender differences in WFC have generally not been integrated or pitted empirically against each other—leading to the proliferation of contradictory predictions about the relationship between gender and WFC and a fragmented literature.

Empirical results on whether there are gender differences in WFC are equally equivocal. Qualitative reviews of the work–family literature (e.g., Eby et al., 2005; Korabik, McElwain, & Chappell, 2008) indicate that findings are inconsistent, and some reviews (e.g., Prone, 2003) have claimed that there is not clear evidence to suggest any reliable gender differences in WIF or FIW. A meta-analysis by Byron (2005) revealed very small gender differences, such that men experience slightly greater WIF ($r = -.03, k = 27$) and women experience slightly greater FIW ($r = .06, k = 24$). In both cases, the $SD_p$ for the relationship is sizable, suggesting significant heterogeneity in true effect sizes and the likely presence of moderators. However, Byron’s study was not comprehensive, as it included only a modest number of studies relative to the large number of studies now available on the topic and only explored a limited number of potential moderators. Thus, prior research may not provide the best estimate of the true relationship between gender and WFC.

Overall, given inconsistent empirical evidence to date and contradictory theoretical predictions, we address the overall relationship between gender and WFC as a research question:

Research Question 1: What is the association between gender and (a) WIF and (b) FIW?

Moderators of the Relationship Between Gender and WFC

Inconsistent evidence for gender differences in WFC may be attributable, in part, to the presence of moderators that obscure the nature of these relationships. Given prior empirical research that suggests the relationship between gender and WFC appears to vary meaningfully across contexts (e.g., Byron, 2005), we explore and examine potential moderators of this relationship.

Work and Family Characteristics

One criticism of research on gender differences in WFC is the failure of most studies to equate men and women on meaningful work and family variables (Korabik et al., 2008; Kinnunen, Feldt, Geurts, & Pulkkinen, 2006; Powell & Greenhaus, 2010). This makes it difficult to discern whether observed gender differences (or lack thereof) are attributable to gender or other variables that vary systematically by gender. To address this concern, we examine whether samples based on only certain work and family characteristics produce a different estimate of the gender–WFC relationship from the overall estimate.

We consider four characteristics. First, we focus on the part-time versus full-time status of workers. Given that disproportionately more women work part-time than men (Ryan, 2015; U.S. Bureau of Labor Statistics, 2015), and work hours are linked to WFC (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011), this is an important consideration. Second, in an effort to equate job characteristics of men and women, we examined a subgroup of samples consisting of men and women employed in the same job. Many occupations are disproportionately occupied by men or women, and this gender segregation varies systematically with factors such as demands, autonomy, and pay (Hegewisch & Hartmann, 2014; Reskin & Bielby, 2005), which in turn are often related to WFC (e.g., Michel et al., 2011). On the family side, we
believe parental status may play an important moderating role. The transition to parenthood marks a point when family demands increase considerably and the division of labor within couples tends to skew more toward traditional gender roles (Neilson & Stanfors, 2014). Thus, gender differences in WFC may be more marked in samples of parents compared with those that are more heterogeneous in family status. Lastly, partner work status also likely alters family demands, and varies considerably by gender, as there are far fewer stay-at-home men versus women (Livingston, 2014). To this end, we focus on samples of dual-earner couples where both members of the couple report on their own WFC in the same study. This not only equates work status but also better equates family demands, as these couples share the same family situation.

Research Question 2: Does the relationship between gender and (a) WIF and (b) FIW vary when considering subgroups of full-time workers, those in the same job, parents, and dual-earner couples?

Gender Egalitarianism of the Cultural Context

Work and family interactions are embedded in the broader cultural, institutional, and economic context in which individuals reside (Ollier-Malaterre & Foucreault, 2017). Of particular relevance to gender differences in WFC are cultural differences in gender egalitarianism, or beliefs and attitudes about the equality of the sexes within the culture (House & Javidan, 2004). Roles of men and women are likely to be more similar (i.e., men and women participate in both work and family domains) in countries or cultures where gender egalitarianism is high. Many of the theories predicting gender differences in WFC are grounded in the different roles and identities of men and women. In places where these differences are minimized, men’s and women’s experiences with work and family may be more similar, leading to smaller gender differences in WFC (Casper, Harris, Taylor-Bianco, & Wayne, 2011; Fahlén, 2014; Powell, Francesco, & Ling, 2009).

Hypothesis 1: Cultural gender egalitarianism moderates the relationship between gender and (a) WIF and (b) FIW, such that gender differences are smaller in samples from more gender egalitarian cultures.

Date of Publication

In most societies, gender and work roles have shifted considerably over the past several decades (Barnett & Hyde, 2001). In the United States, the proportion of women in the workforce has generally increased over time (although it has slightly decreased in recent years), and this trend is particularly marked for women with children under age 18 (The World Bank, 2016). Additionally, men’s time spent in family labor has increased over time and the percentage of both men and women who endorse statements advocating for traditional gender roles, such as “men should earn the money and women should take care of the children and family” continues to decrease (Galinsky, Aumann, & Bond, 2009). Taken together, these statistics suggest that studies conducted more recently should, on average, be based on men and women who share more similar roles and hold more egalitarian values. As such, we expect gender differences in WFC to be smaller in more recent studies.

Hypothesis 2: Publication date of the study moderates the relationship between gender and (a) WIF and (b) FIW, such that gender differences are smaller in samples from studies published more recently.

Theories Predicting Gender Differences in WFC

Researchers have invoked several theoretical perspectives when predicting gender differences in WFC. Below, we review the most common theories and describe their predictions and theorized mediating processes regarding relationships between gender and WIF/FIW.

Rational View

According to the “rational view” (Gutek, Searle, & Klepa, 1991), the level of WFC a person experiences is mostly derived from the amount of time he or she spends in the work and family domains. A person who works long hours should experience greater WIF resulting from a greater likelihood of work intruding on other life spheres, and those with many family time demands should report greater FIW, as this increases the opportunity that family obligations bleed over to work. From this pattern, gender differences in WIF and FIW should occur as a result of gender differences in work and family hours and responsibilities. Although men and women’s roles have become more alike over time (Galinsky et al., 2009), American mothers still spend nearly twice as much time as fathers in household activities (2.2 vs. 1.3 daily hours) and caring for household members (0.6 vs. 0.3 hours; U.S. Bureau of Labor Statistics, 2014a). Comparisons of employed men and women show that men work 0.88 hours more each day than women. This difference is reduced (0.6 hours), though still present, when comparing men and women who are employed full-time (U.S. Bureau of Labor Statistics, 2014b). Thus, based on the predictions of the rational view, women, who on average spend more time in family labor, should experience greater FIW than men, and men, who on average spend more hours in paid employment, should report greater WIF than women.

Sensitization Perspective

The “sensitization perspective” (Duxbury & Higgins, 1991; Duxbury, Higgins, & Lee, 1994; Gutek et al., 1991, also sometimes labeled the “gender role view” or “gender role-expectations theory”) relies on assumptions about differential values men and women place around work and family roles due to traditional divisions of labor and gender socialization (Pleck, 1977). Specifically, proponents of this viewpoint argue that traditional gender roles dictate that men place more value in and have a self-concept that is more closely tied to their work roles. Consequently, compared with women, men are more sensitive to intrusions into the work role; thus, they will be more likely to perceive, recall, and report more instances of FIW than women, who are not as likely to translate objective intrusions into their (less valued) work domain as perceived conflict. On the other hand, women will be more disturbed by interruptions to the valued family role than will men and therefore perceive higher WIF. These assumptions are related
to identity theory (Stryker, 1968), which argues that individuals are more likely to defend a role that is more relevant and associated with their self-concept (Baumeister, Smart, & Boden, 1996). To summarize, the sensitization perspective does not directly speak to whether there are gender differences in objective WFC events. Rather, it argues that men and women differentially perceive and label these events based on valued roles, resulting in men subjectively experiencing and reporting greater FIW and women subjectively experiencing and reporting greater WIF.

Boundary Management

Boundary theory asserts that humans create boundaries to cope with and understand their environments (Nippert-Eng, 1996). This concept has been specifically applied to work and family, with considerable research devoted to understanding the way that people construct, maintain, and negotiate social and mental boundaries around various life roles (Allen, Cho, & Meier, 2014; Ashforth, Kreiner, & Fugate, 2000; Clark, 2000). In early theorizing in work–family research, Pleck (1977) too invoked the concept of boundaries around roles, with a specific focus on gender differences. He argued that men and women form asymmetrical boundaries around their work and family roles. Because of socialization and typical traditional divisions of labor among couples, women construct stronger, less permeable boundaries around the family domain, whereas men do the same around the work domain. As a result, women are less likely to allow intrusions into family and experience less WIF than men, whereas men engage in the opposite actions and experience less FIW compared with women.

Other researchers have also considered gender differences in boundary management, but focus on how the permeability (i.e., the ability to enact one role while being physically present in another) and flexibility (i.e., spatial and temporal limits) of boundaries relate to segmentation strategies (Ashforth et al., 2000; Rau & Hyland, 2002). Boundaries that are highly impermeable and inflexible will lead to greater segmentation of roles, whereas those that are highly permeable and flexible will contribute to less segmentation (i.e., more integration) of roles. Rather than asymmetrical permeability for men and women, these researchers (Crosby, 1991; Innstrand et al., 2009; Rothbard, 2001) argue that women tend to have more permeable role boundaries in general, perceive the boundary between work and family as more fluid, and engage in fewer segmentation practices than men. Rothbard (2001) further argues that this pattern stems from gender differences in mental models about boundary management between work and family (Andrews & Bailyn, 1993), which are influenced by gender role socialization. Because men can more easily keep roles mentally separated, they are less at risk for role-blurring and potential for conflict in either direction. Thus, boundary management ideas have also been used to predict that women experience greater WIF and FIW than do men. We label this second boundary management perspective as “male segmentation” to differentiate it from the first boundary management perspective on asymmetrical permeability.

The Need for Theory Testing

As reviewed above, researchers have invoked a number of theories to predict gender differences in WIF and FIW, which are summarized in Table 1. There is substantial inconsistency in predictions across these theoretical perspectives, with some theories predicting that women experience more WFC and some that predict that the nature of gender differences in WFC depends upon the directionality of conflict (i.e., WIF vs. FIW). Furthermore, the theorized mediating mechanisms also vary substantially across theories. Thus, to bring greater clarity to the literature, we engage in theory-testing by simultaneously examining the veracity of the posited mechanisms, drawn from the theories above, that have been proposed to link gender and WFC. Specifically, we operationalize the tenants of these theories via work and family hours (rational view), work and family role salience (sensitization perspective), and work and family boundary strength (boundary management and asymmetrical domain permeability). Note that the two boundary management theories propose competing ideas regarding the relationship between gender and boundaries around work. Thus, we have proposed this as a competing hypothesis that can be tested within a single model.

Hypothesis 3: In line with the rational view, (a) work hours mediates the relationship between gender and WIF, such that men work more hours and report greater WIF than do women, and (b) family hours mediates the relationship between gender and FIW, such that women spend more time in family labor and report greater FIW than do men.

Hypothesis 4: In line with the sensitization perspective, (a) work salience mediates the relationship between gender and FIW, such that men report greater work salience and report greater FIW than do women, and (b) family salience mediates the relationship between gender and WIF, such that women report greater family salience and report greater WIF than do men.

Competing Hypothesis 5a: In line with the asymmetrical boundary perspective, boundary strength around family mediates the relationship between gender and WIF, such that men report weaker boundaries around family and report greater WIF than do women.

Competing Hypothesis 5b: In line with the male segmentation perspective, boundary strength around family mediates the relationship between gender and WIF, such that women report weaker boundaries around family and report greater WIF than do men.

Hypothesis 5c: In line with both the asymmetrical and male segmentation perspectives, boundary strength around work mediates the relationship between gender and FIW, such that women report weaker boundaries around work and report greater FIW than do men.

Method

Literature Search

We first searched the literature using the Web of Science database with the following search terms (in quotations): work–family conflict, family work conflict, work-to-family conflict, family-to-work conflict, work–life conflict, work–nonwork conflict, work
**Table 1**

**Summary of Theoretical Perspectives on Gender and WFC**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Proposition</th>
<th>Gender application</th>
<th>Prediction</th>
<th>Meta-analytic support?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational View</td>
<td>Time spent in a domain relates to greater intrusion of that domain into the other.</td>
<td>Men spend more time in work and women spend more time in family</td>
<td>Men work more hours in paid employment, which in turn relates to greater WIF. Women work more hours in the home or in caretaking, which in turn relates to greater FIW.</td>
<td>Support for WIF and FIW</td>
</tr>
<tr>
<td>Sensitization Perspective</td>
<td>People are more perceptible to and therefore report more conflict in the direction of their more valued domain.</td>
<td>Men value work more and women value family more.</td>
<td>Men have higher work salience, which in turn relates to greater FIW. Women have higher family salience, which in turn relates to greater FIW.</td>
<td>Not supported for WIF or FIW</td>
</tr>
<tr>
<td>Boundary Management—</td>
<td>Men and women create asymmetrical boundaries around work and family domains, which impacts the permeability and intrusions they allow in each domain.</td>
<td>Men have stronger boundaries around work and women have stronger boundaries around family.</td>
<td>Men form stronger boundaries around work, which in turn relates to less FIW. Women form stronger boundaries around family, which in turn relates to less WIF.</td>
<td>Partial support; WIF supported and FIW not supported. Note that for FIW, although the path between gender and work boundary strength is significant, the path is in the opposite direction of prediction.</td>
</tr>
<tr>
<td>Asymmetrical Permeability</td>
<td>People differ in the way that they manage multiple roles—by keeping them segmented, with strong boundaries, or integrated, with weaker boundaries around roles. Stronger boundaries relates to less WFC in both directions.</td>
<td>Men are better able to segment and form stronger boundaries around both roles than are women.</td>
<td>Men form stronger boundaries around work, which in turn relates to less FIW. Men also form stronger boundaries around family, which in turn relates to less WIF.</td>
<td>Not supported for WIF or FIW. The paths between gender and boundary strength are both opposite of prediction (women form stronger boundaries around family and work).</td>
</tr>
<tr>
<td>Boundary management—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Segmentation</td>
<td></td>
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</tbody>
</table>

*Note.* Gender coded such that positive correlations indicate greater WIF/FIW for men.

interefering with family, family intererefering with work, work–family spillover, and family–work spillover. We also included work–family balance because sometimes authors use the balance label but actually measure conflict. This search is current through December 2015. We also reviewed available online conference programs of the Academy of Management (2001–2014), Society for Industrial and Organizational Psychology (2003–2014), and Work and Family Researchers Network (2012, 2014) for relevant papers. After ascertaining that a published version of the conference paper had not already been included in our database of
studies, we contacted authors directly via email requesting a copy of their paper.

Decisions about relevance was made by one of the authors. If the abstract mentioned one of our key variables (i.e., WIF or FIW) and appeared to describe an empirical primary study, the paper was more closely examined to see whether it included a relationship of interest to the present study. Cases that were unclear or ambiguous were referred to the first and second authors who both read the paper and reached a decision via consensus.

Although WIF and FIW are at the center of the relationships we test, some of our analyses required estimates of additional effects that may not be comprehensively captured using the WFC-focused search strategy described above. Specifically, estimates of relationships between gender and each of the variables used in our meta-analytic mediation analyses required additional search terms (in parentheses): work salience (career salience, work salience, career identity, career importance), family salience (family salience, family identity), boundaries around work or family (segmentation, integration, role blurring, boundary management, border theory) combined with an AND with the work–family search terms above, as we were interested specifically in work and family related boundaries. We also explored the references of a work–family boundary management review article (Allen et al., 2014). We did not undertake separate searches for work and family hours, given that they are typically not the focal variable of study in the literature, but rather included as descriptive demographic or control variables and are therefore difficult to locate from a keyword search.

Inclusion Criteria

To be included in our database of studies, a study needed to include participants that were all employed (no restriction on minimum hours) and report information about the correlation (or a statistic that could be converted to a correlation, e.g., $d$, $t$, $F$, OR). We also coded for intercorrelations between all variables presented in the correlation matrices in Table 3. We did not include studies that only reported these relationships via regression coefficients or partial correlations, as studies in this literature do not consistently control for the same variables.

We screened studies for use of the same data. This was particularly necessary given that several large-scale national or multinational data sets have been frequently used in this literature (e.g., European Social Survey; Midlife in the United States; National Study of the Changing Workforce). When the same dataset was used in multiple studies, information from the study with the larger sample size was retained. If the same dataset was used, but relationships with different variables were reported (e.g., one study reported gender and WIF and another study reported work salience and FIW), we included both, but count that as only one independent sample. In total, our database across all our analyses consisted of 582 published papers, dissertations, and conference papers. A list of included papers, flowchart of the search process, and our coding for each sample included can be found in supplemental materials.

Coding of Studies

Main effect coding. Gender. We used self-reports of gender. In our database, positive gender correlations indicate that men, on average, score higher on that construct than women and negative gender correlations indicate that women, on average, score higher on that construct than men.

WFC. We distinguished between the directionality of conflict, WIF versus FIW, using Greenhaus and Beutell’s (1985) definition provided in the introduction. Therefore, studies that combined across the two directions to assess overall WFC or assessed perceptions of general incompatibility between the two domains that did not reference directionality were excluded.

We also coded for type of WFC, as some researchers have distinguished between time-based (when demands in one role restrict amount of time available for the other role), strain-based (when stress from one role carries over to the other role), and behavior-based conflict (when behavior that is effective in one role is inappropriately applied to the other role) (Greenhaus, Allen, & Spector, 2006). Research suggests that the different types of WFC can be considered indicators of an underlying WFC construct (Matthews, Kath, & Barnes-Farrell, 2010), but because others have argued that each type of conflict has some unique antecedents (e.g., Carlson, 1999; Greenhaus & Beutell, 1985), we also explored gender differences for each type of WFC separately. To determine whether a scale was focused on one of these types of WFC, we reviewed the measures that authors used. If not all items were listed or the scale was not publicly available in referenced work, we did not designate it as a specific subtype of WFC. For example, of the two most commonly used measures, Carlson, Kacmar, and Williams’ (2000) scale is designed to measure the three types of WIF/FIW described above, whereas Netemeyer, Boles, and McMurrian’s (1996) measure does not differentiate between the types.

Moderator coding. Dual-earner couples. We coded when studies employed a matched dual-earner couple design (i.e., the men and women in the sample are each other’s spouses). We placed no restrictions on the amount of hours worked from each member of the dual-earner couple.

Parental status. We coded whether study eligibility required participants to be parents. Note that we did not distinguish between requirements regarding the number, age, or percentage of time the child resided with a parent due to lack of consistent reporting of this information.

Full-time workers. Since countries vary in the number of work hours required to be considered a full-time employee, we conservatively only included studies that explicitly stated that they required full-time workers as part of their eligibility criteria as “full-time” or if they listed a study requirement of a minimum of 40 hours/week in employment.

Same job types. We coded whether participants in a sample all held the same or very similar jobs (e.g., clerical workers, professors, doctors, hotel managers, business owners).

Cultural gender egalitarianism. We employed four indices of cultural gender egalitarianism: the GLOBE project (House, Hanges, Javidan, Dorfman, & Gupta, 2004) gender egalitarianism (a) practices (“as is”) and (b) values (“should be”) scores, (c) World Economic Forum’s (2013) Global Gender GAP Index, which measures gaps in men and women’s resources and opportunities in terms of economics, education, health, and politics, and (d) the United Nations’ Development Programme’s Gender Inequality Index from 2012 (United Nations Development Program,
2012), which assesses inequality in human development, empowerment, and economic status. We imputed culture-level scores based on the country of participants in the study. When participants were drawn from several countries or the country was unclear, a gender egalitarianism score was not imputed.

**Date of publication.** Although we recognize that date of publication is a proxy for when data were collected, we believe that the two are likely correlated and coded for publication date as date of data collection was rarely reported.

**Mediator coding.**

**Work and family hours.** Work and family hours refers to time spent in each domain. Work hours typically referred to average time spent on work activities. Common operationalizations of family hours include total time spent in family tasks and time spent on household chores, childcare, and/or eldercare. We excluded measures that did not explicitly refer to the amount of time spent in the domain (e.g., perceptions of workload and family demands).

**Work and family salience.** Work and family salience refer to the value or importance placed on the work and family role, respectively. Operationalizations of work salience include measures of work or job involvement, career identity, work salience, and work centrality. Operationalizations of family salience include measures of family involvement, family salience, parental salience, family identity, and family centrality. Work and family involvement operationalizations were only included if they were psychological in nature rather than time-based (e.g., “Most of my life goals are job-oriented” vs. “I spend most of my time at work”).

**Boundary strength around work and family.** Boundaries around work (family) refer to mental boundaries that individuals place around their work (family) role. For boundaries around work, we included measures of work boundary permeability (reversed for analyses), family to-work boundary transitions (reversed for analyses), home-to-work segmentation, boundary strength at work, nonwork-to-work permeability (reversed for analyses). Operationalizations of family boundary strength included measures of personal life permeability, work-to-home segmentation, boundary strength at home, work-to-family transitions (reversed for analyses), and work-to-nonwork permeability (reversed for analyses). Measures that did not differentiate between specific types of boundaries (e.g., general tendency to segment roles) were not included.

**Coder training and process.** Coders went through an extensive training process. First, the first two authors, who both have prior experience conducting meta-analyses, created a comprehensive codebook and instructional manual that was reviewed by all coders. Second, all coders (i.e., each of the five authors) coded three articles together to ensure understanding of the coding manual. Third, a random set of 10 articles was selected and coded to ensure that inclusion criteria and coding rules were clear to all coders. Discrepancies were discussed and ambiguities were clarified. Fourth, a second set of 10 articles were coded and discussed. Fifth, 50 additional articles were selected, coded, and reviewed for agreement by all authors. Interrater reliability was high; ICCs (3,1) ranged from .98 to .99. ICC calculations do not take into account missing data (e.g., when a coder failed to report a correlation within a study). Among all the possible data points, data was missing in 1.2% to 4.6% of cases. Given this high level of reliability, remaining articles were coded independently by a single coder. However, a second coder did verify the coding of the gender and WFC relationship in each study to maximize accuracy. Discrepancies were resolved via discussion and reexamination of the study.

For each relationship of interest, the effect size and its corresponding sample size were recorded. If a study only reported relationships between a single type of WFC (i.e., time-, strain, or behavior-based WIF) and correlates, it was still included in our overall gender and WFC analyses. When multiple effect sizes for the same relationship were reported in a given study (e.g., separate correlations between time-, strain-, and behavior-based WIF and gender), we created a composite correlation, which takes into account the intercorrelations between the component variables (Hunter & Schmidt, 1990) to maintain independence in the overall analysis. When intercorrelations were not available, we took the average correlation. If a study assessed the same variable at multiple time points (e.g., WIF at T1, T2, and T3), we took the effect size estimate from the first available measurement.

**Data Analyses**

**Meta-analyses.**

**Correction for unequal dichotomies.** In estimating the correlation between a dichotomous and continuous variable (i.e., point-biserial correlation), the distribution of the dichotomous variable (i.e., gender) influences the magnitude of the observed correlation (Laczo, Sackett, Bobko, & Cortina, 2005). Unequal distributions of the dichotomous variable (i.e., deviations from a 50–50 split) serve to artificially attenuate the size of the observed correlation. In line with prior meta-analyses (e.g., Berry, Ones, & Sackett, 2007; Berry, Carpenter, & Barratt, 2012), we therefore corrected each gender-WIF/FIW correlation for uneven dichotomies based on the gender breakdown reported for that particular study using the formula provided by Hunter and Schmidt (1990, p. 274) prior to conducting our meta-analytic procedures. We also repeated our meta-analysis without this correction, and in no case did this affect the pattern of results or conclusions drawn.

**Estimation procedures.** The current study employed Hunter and Schmidt’s (2004) psychometric meta-analytic approach, which weights each effect size by its corresponding sample size. This approach follows a random-effects model, which does not assume that there is only one underlying or fixed population value among studies and has been shown to be more accurate in its estimates of confidence intervals and detection of moderating effects than fixed-effect models (Hunter & Schmidt, 2000; Schmidt, Oh, & Hayes, 2009). Additionally, Hunter and Schmidt’s approach allows researchers to correct for the impact of statistical artifacts (e.g., measurement error), which attenuate observed correlations and introduce artificial variability in observed effects across studies. We carried out the present meta-analysis using an excel macro based on formulas reported in Schmidt and Hunter (2014).

We constructed artifact distributions (i.e., reliabilities) for WIF and FIW, separately, to model the mean and variance in statistical artifacts across studies (see supplemental materials). In line with prior meta-analytic research (e.g., Connelly & Ones, 2010), we used artifact distributions rather than correcting each study correlation for measurement error because some studies did not report reliability information. Note that we assumed that gender, work hours, and family hours were reported with perfect reliability. Thus, we report both mean $r$ and $SD_r$, which reflect the mean...
observed correlation and the standard deviation of observed correlations corrected for sampling error, respectively, as well as \( \rho \) and \( SD_p \), which reflect the mean correlation corrected for sampling and measurement error in WFC and the standard deviation of correlations corrected for sampling and measurement error in WFC, respectively. We also computed the 95% confidence interval around \( \rho \), which represents variability in the estimated corrected mean correlation using the formula from Hunter and Schmidt (2004). As tests of heterogeneity, we reported the 90% credibility interval around \( \rho \), which reflects true heterogeneity in effects in the population, using the formula from Hunter and Schmidt (2004), and \( F^2 \), which indicates the proportion of total variation in the estimates of treatment effects that is due to heterogeneity rather than chance using the formula from Higgins and Thompson (2002).

**Outlier analyses.** We checked for outliers by examining whether there were effect sizes three or more standard deviations from the mean construct correlation. In all cases where outlier(s) were present, we reestimated effect sizes without the outlier(s). In no case did removal of the outlier result in a change in the effect size of greater than .01. Thus, we only report results that include the outliers (Hunter & Schmidt, 2004).

**Moderator analyses.** We tested for continuous moderator effects via random-effects model metaregression using Comprehensive Meta-Analysis Version 3 (Borenstein, Hedges, Higgins, & Rothstein, 2014) based on primary study correlations that were corrected for unreliability at the individual study level before inputting the data into the program, as this software does not allow for corrections for measurement error based on artifact distributions. The average reliability from the reliability distributions for WIF and FIW were imputed in cases where studies did not provide reliability information.

**Path and Mediation Analyses**

We tested all theoretical perspectives in a single model (see Figure 1). Doing so allowed us to take into account correlations between mediators (e.g., higher family salience may be related to lower work hours or higher family salience may be related to enacting stronger boundaries around the family domain) to isolate the unique or nonshared effect of each mechanism. To examine multiple mediators simultaneously, we computed a meta-analytic correlation matrix that included all variables in the model for FIW and WIF separately.

In forming the matrix, two cells were estimated by only one or two samples (i.e., work boundary strength and family hours; family boundary strength and work hours, respectively). Following standards for a minimum of at least three studies or samples to estimate a meta-analytic relationship (e.g., Cohen-Charash & Spector, 2001), we conducted additional primary studies for more robust estimates. Specifically, we collected data from two independent samples of workers (employed at least 20 hours/week) with family responsibilities (i.e., married and/or parental responsibilities): a sample recruited from Amazon’s Mechanical Turk (\( N = 201, 48.3\% \) male) and a snowball, convenience sample of personal contacts (\( N = 128, 15.6\% \) male). This primary data collection was approved by the University of Georgia Institutional Review Board (# 00004578). We used Matthews and Barnes-Farrell’s (2010) and Methot and LePine’s (2016) measures of work and family permeability (reverse coded) to measure work (\( \alpha = .82 \) and .72, MTurk; .69 and .70, snowball) and family boundary strength (\( \alpha = .90 \) and .82, MTurk; .88 and .83, snowball) and work and family hours were measured with single items referencing average time spent per week in each domain. We used composite correlations of the two boundary strength scales to generate effect sizes to ensure that our estimates would represent how the construct is assessed generally.

**Results**

**Preliminary Results: Measurement Invariance Analyses**

Any investigation of group differences implicitly assumes that the measures of the construct of interest have equivalent measurement properties across the groups. If the scales do not have equivalent psychometric properties, it is unknown whether observed mean differences reflect true differences or are a function of different interpretations of the measured construct. Thus, before testing for gender differences, we felt it was imperative to test whether common WFC measures demonstrated measurement invariance across gender.

We contacted the first authors of studies included in our meta-analysis published prior to 2014 that used one of the two most common WFC measures (Carlson et al., 2000; Netemeyer et al., 1996). We requested de-identified raw data that included participant gender and responses to each WFC item, and any additional
WFC data sets in their possession they were willing to share. Eighty-three authors were contacted in reference to 101 samples. Data were received for 26 samples for the Carlson et al. measure; however, three samples used 6- or 7-point Likert scales rather than the typical 5-point agreement scale and were not included in our analyses, resulting in a total of 23 samples for this analysis. Data was received for 17 samples for the Netemeyer et al. measure, 13 of which included WFC responses set on 5-point agreement scale. Details regarding included studies and samples are available in supplementary materials.

To test for measurement invariance, we used confirmatory factor analysis (CFA; Vandenberg & Lance, 2000) with Mplus Version 7 (Muthén & Muthén, 1998–2012). This approach involves comparing a baseline CFA model against a series of nested models with various parameter constraints imposed or released in each subsequent test. We tested for configural and metric invariance based on a six factor model for the Carlson et al. (2000) measure (i.e., time-, strain-, and behavior-based WIF and FIW) and a two factor model for the Netemeyer et al. (1996) measure (i.e., WIF and FIW). The Carlson et al. (2000) measure ($N_{total} = 13,276; N_{male} = 6,175; N_{female} = 7,101$) and the Netemeyer et al. (1996) measure ($N_{total} = 4,072; N_{male} = 1,718; N_{female} = 2,354$) both demonstrated configural and metric invariance across gender, indicating that WFC was similarly conceptualized and measures were similarly responded to by men and women. Detailed results of these analyses are available in the supplementary materials. These findings support subsequent tests and meaningful interpretations of gender differences in WFC.

Meta-Analyses

Main effects. The association between gender and WIF and FIW is presented in Table 2 (Research Question 1). In both cases, the effect size was significant and in the direction of women experiencing greater conflict (WIF: $\rho = -0.012$, 95% CI [−.023, -.001]; FIW: $\rho = -0.017$, 95% CI [−.032, −.002]). However, given that $\rho$ is very small in magnitude and power is very high, the practical significance of these effects is small. In both cases, the 90% credibility intervals were sizable and the $I^2$ was large (WIF: 85.91%, FIW: 88.86%), suggesting the presence of moderators. We also examined whether there were gender differences in specific types of WFC. Men reported slightly more time-based WIF than women ($\rho = 0.045$, 95% CI [−.012, .079]), and women reported slightly more strain-based WIF ($\rho = -0.06$, 95% CI [−.089, -.031]) and FIW ($\rho = -0.063$, 95% CI [−.109, −.017]) than men, although effects were all small in magnitude. There were no gender differences in time-based FIW ($\rho = -0.001$, 95% CI [−.051, .049]) and behavior-based FIW ($\rho = 0.037$, 95% CI [−.026, .101]) or FIW ($\rho = 0.022$, 95% CI [−.041, .085]).

Moderator analyses. Research Question 2 focused on differences in the gender-WFC effect sizes in various subgroups. As illustrated in Table 2, some differences emerged, although significant effects were generally small. No gender differences were found in only samples of full-time employees (WIF, $\rho = -0.024$, 95% CI [−.056, .008]; FIW, $\rho = -0.025$, 95% CI [−.058, .007]). With regard to samples where men and women were employed in the same job, women experienced slightly greater WIF compared with men ($\rho = -0.039$, 95% CI [−.064, −.013]), but there were no differences in FIW ($\rho = -0.035$, 95% CI [−.074, .004]). Analyses based on only parents show no gender differences in WIF ($\rho = -0.012$, 95% CI [−.048, .023]), but mothers reported greater FIW than fathers ($\rho = -0.089$, 95% CI [−.121, −.057]). On samples restricted to dual-earner couples, men report slightly greater WIF than women ($\rho = 0.053$, 95% CI [0.02, .103]) but women report greater FIW than men ($\rho = -0.133$, 95% CI [−.263, −.002]).

A lack of support was found for the moderator hypotheses involving the continuous moderators (i.e., cultural values and publication date), as illustrated in Table 4. Hypothesis 1 was not supported; none of the indicators of cultural gender egalitarianism moderated the relationships between gender and WIF or FIW.

Table 2

**Gender and WFC Meta-Analytic Correlations**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$k$</th>
<th>$N$</th>
<th>$r$</th>
<th>$SD_r$</th>
<th>$p$</th>
<th>$SD_p$</th>
<th>95% CI</th>
<th>90% Cred Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WIF overall</td>
<td>354</td>
<td>252,031</td>
<td>−.011</td>
<td>.099</td>
<td>−.012</td>
<td>.099</td>
<td>−.023</td>
<td>−.001</td>
</tr>
<tr>
<td>Time</td>
<td>42</td>
<td>25,405</td>
<td>.041*</td>
<td>.100</td>
<td>.045*</td>
<td>.099</td>
<td>−.012</td>
<td>−.079</td>
</tr>
<tr>
<td>Strain</td>
<td>40</td>
<td>23,325</td>
<td>−.055*</td>
<td>.085</td>
<td>−.060*</td>
<td>.081</td>
<td>−.089</td>
<td>−.031</td>
</tr>
<tr>
<td>Behavior</td>
<td>14</td>
<td>7,732</td>
<td>.034</td>
<td>.109</td>
<td>.037</td>
<td>.110</td>
<td>−.026</td>
<td>−.101</td>
</tr>
<tr>
<td>Dual-earners</td>
<td>24</td>
<td>10,072</td>
<td>.048*</td>
<td>.115</td>
<td>.053*</td>
<td>.113</td>
<td>−.002</td>
<td>.103</td>
</tr>
<tr>
<td>Parents</td>
<td>47</td>
<td>35,793</td>
<td>−.011</td>
<td>.113</td>
<td>−.012</td>
<td>.116</td>
<td>−.048</td>
<td>−.023</td>
</tr>
<tr>
<td>Full-time</td>
<td>60</td>
<td>33,509</td>
<td>−.022</td>
<td>.116</td>
<td>−.024</td>
<td>.117</td>
<td>−.056</td>
<td>.008</td>
</tr>
<tr>
<td>Same job</td>
<td>71</td>
<td>38,685</td>
<td>−.035*</td>
<td>.099</td>
<td>−.039*</td>
<td>.097</td>
<td>−.064</td>
<td>−.013</td>
</tr>
<tr>
<td>FIW overall</td>
<td>220</td>
<td>138,787</td>
<td>−.015*</td>
<td>.102</td>
<td>−.017*</td>
<td>.104</td>
<td>−.032</td>
<td>−.002</td>
</tr>
<tr>
<td>Time</td>
<td>22</td>
<td>12,724</td>
<td>−.001</td>
<td>.107</td>
<td>−.001</td>
<td>.110</td>
<td>−.051</td>
<td>.049</td>
</tr>
<tr>
<td>Strain</td>
<td>19</td>
<td>9,539</td>
<td>−.057*</td>
<td>.093</td>
<td>−.063*</td>
<td>.089</td>
<td>−.109</td>
<td>−.017</td>
</tr>
<tr>
<td>Behavior</td>
<td>8</td>
<td>2,440</td>
<td>.020</td>
<td>.085</td>
<td>.022</td>
<td>.066</td>
<td>−.041</td>
<td>.085</td>
</tr>
<tr>
<td>Dual-earners</td>
<td>12</td>
<td>5,890</td>
<td>−.118*</td>
<td>.206</td>
<td>−.133*</td>
<td>.223</td>
<td>−.263</td>
<td>−.002</td>
</tr>
<tr>
<td>Parents</td>
<td>33</td>
<td>26,463</td>
<td>−.079*</td>
<td>.085</td>
<td>−.089*</td>
<td>.085</td>
<td>−.121</td>
<td>−.057</td>
</tr>
<tr>
<td>Full-time</td>
<td>45</td>
<td>24,126</td>
<td>−.023</td>
<td>.100</td>
<td>−.025</td>
<td>.099</td>
<td>−.058</td>
<td>.007</td>
</tr>
<tr>
<td>Same job</td>
<td>30</td>
<td>9,601</td>
<td>−.031</td>
<td>.098</td>
<td>−.035</td>
<td>.089</td>
<td>−.074</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note. Gender coded such that positive correlations indicate greater WIF/ FIW for men. CI = confidence interval; Cred Int. = Credibility interval. * 95% confidence interval does not contain zero.
There was a sizable path coefficient between gender and work hours \((b = .25, p < .001)\), such that men worked longer hours. Further, work hours positively relate to WIF \((b = .20, p < .001)\). The indirect effect of gender to WIF via work hours was significant \((b = .05, p < .001)\). The pattern with family hours was similar. There was a sizable path coefficient between gender and family hours \((b = -.32, p < .001)\), such that women put in more family hours, and a modest association between family hours and greater FIW \((b = .09, p < .001)\). The indirect effect of gender on FIW via family hours was significant \((b = -.03, p < .001)\). Overall, there was consistent support for the rational view perspective and Hypotheses 3a and 3b.

Sensitization perspective. For WIF, gender was not significantly related to family salience \((b = -.02, p = .33)\), and family salience was weakly and positively related to WIF \((b = .04, p < .001)\). The indirect effect of gender on WIF via family salience was not significant \((b = -.001, p = .35)\). For FIW, gender was weakly related to work salience \((b = .08, p < .001)\), such that men reported slightly higher work salience, but work salience was not significantly related to FIW \((b = -.02, p = .49)\). Thus, the indirect effect of gender on FIW via work salience was not significant \((b = -.002, p = .17)\). Overall, there was not support for Hypothesis 4a and 4b and the sensitization perspective in explaining gender differences in WFC.

Boundary management. Hypotheses 5a, 5b, and 5c all focused on boundary management ideas and were tested using the same path models to address the competing hypotheses. For WIF, the asymmetrical permeability perspective argues that women create stronger boundaries around family whereas the male segmentation perspective suggests that men create stronger boundaries around family. The asymmetrical permeability perspective, which predicted that women created stronger boundaries around family, was supported, though the magnitude of the path between gender and strength of family boundary was small \((b = -.07, p < .001)\). The path between strength of family boundary and WIF was

\[b = -.30, p < .001\]
substantial and in the predicted direction \( (b = -0.48, p < .001) \); stronger boundaries around family was associated with less WIF. The indirect effect of gender on WIF via family boundary was also significant \( (b = 0.32, p < .001) \).

On the other hand, neither perspective (i.e., asymmetrical permeability nor male segmentation) was supported for FIW. Both perspectives argued that men create a stronger boundary around work, which then leads to less FIW. Instead, the path model indicates that women form a stronger boundary around work \( (b = -0.14, p < .001) \) and that this boundary relates negatively to FIW \( (b = -0.30, p < .001) \), and there was a significant indirect effect of gender on FIW via work boundary \( (b = 0.04, p < .001) \). Thus, there is partial support for the asymmetrical permeability model (for WIF only; Hypothesis 5b), and no support for the male segmentation perspective (Hypothesis 5c).

**Summary.** Results indicate that work hours and family boundary strength mediate the relationship between gender and WIF. In both cases the pattern of effects indicate that men should experience greater WIF than women (i.e., men work more hours and form weaker, protective family boundaries). However, given that there are only negligible gender differences in WIF overall, this suggests that our model is incomplete and that other mechanisms that increase women’s likelihood of experiencing WIF exist, as can be seen via the significant residual negative relationship between gender and WIF that remains to be explained. In other words, this reflects a situation of competitive mediation; although the mediator (or mediators in the present case) is consistent with the hypothesized theory, the theoretical framework is incomplete and there are other omitted mediator(s) opposite in sign at play (Zhao, Lynch, & Chen, 2010). Thus, it appears that none of the existing models to date, either singly or together, fully captures or explains the relationship between gender and WIF. For the FIW model, family hours and work boundary strength are the significant mediators of the gender-FIW relationship. Women tend to engage in more family hours, which increases women’s likelihood of reporting FIW. However, women also tend to form stronger work boundaries, which decreases their likelihood of experiencing FIW. As can be seen by the nonsignificant residual relationship between gender and FIW in the model, it appears that the two mediators that are opposite in their effects (and thereby largely cancel out the impact of the other) appear to sufficiently explain the relationship between gender and FIW and suggest that omitted variables or mediators are unlikely.

### Post Hoc Theory-Building Analyses

**Omitted mediator variables.** Given that our results suggest that there are likely omitted mediators that further explain the relationship between gender and WIF despite our incorporation of the multiple, dominant theoretical perspectives for this question in our model, we set out to extend and build theory by seeking to uncover these mechanisms. To identify specific potential omitted mediators, we examined Michel et al.’s (2011) meta-analysis of antecedents of WIF. For each variable included in their analysis that was significantly correlated with WIF, we reviewed the associated literature to determine whether gender differences were theoretically likely in the necessary direction (i.e., men report more of the variable and it negatively relates to WIF). We identified job autonomy as one such variable, as more men than women occupy white-collar managerial and professional jobs, in which autonomy is most likely to be afforded (e.g., Fagan & Burchell, 2002), and job autonomy is negatively related to WIF (Michel et al., 2011).

This required us to add job autonomy to the correlation matrix (see Table 3) for WIF. Doing so necessitated additional estimates; we recoded all studies in the meta-analysis for the needed correlations and conducted an additional search in Web of Science based on the work–family search terms noted in the Method along with the terms *job autonomy*. We then tested the full model in Figure 2 based on a harmonic mean sample size of 3656.

**Figure 2.** Path models testing theoretical perspectives for gender and WIF with autonomy added. Gender is coded so that positive correlations indicate that males are higher on the associated variable. Path between gender and WIF is the residual path when modeling the various mediators. \( ^* p < .05 \).
The addition of autonomy to the WIF model did not significantly alter any of the existing paths or indirect effects. However, the association between gender and job autonomy was significant ($b = .04, p < .05$) such that men reported slightly greater autonomy, and autonomy was associated with less WIF ($b = -.17, p < .001$). Furthermore, the indirect effect of gender on WIF via job autonomy was also significant ($b = -.01, p < .05$). Nonetheless, there remains a significant and negative residual relationship between gender and WIF in this model. Thus, despite uncovering a mediator whose effect is opposite from work hours and family boundary strength, it appears that there are still other omitted mediators at play that we have not uncovered that reduce men’s likelihood of experiencing WIF—a point we return to in the discussion.

**Moderating effects of gender.** In the analysis above, we sought to uncover potential omitted mechanisms in the relationship between gender and WIF. However, another possibility exists that could also potentially explain the observed pattern of effects that does not necessitate additional mediators. Specifically, rather than omitted mediator(s), perhaps the pattern is attributable to differential relationships between proposed mediators and WIF for men and women. As an example, perhaps the reason why men do not experience greater WIF than women despite working more hours is because work hours is more weakly related to WIF for men relative to women.

Theoretically, the idea that men and women may experience conflict differently as a function of antecedents is referenced in the sensitization perspective. However, the sensitization perspective more narrowly argues that men and women react differently to the same objective WIF or FIW intrusions, rather than work and family antecedents to WFC generally. Empirically, a number of prior research studies have examined whether gender moderates the relationship between proposed antecedents and WIF, typically arguing that this may occur because of the differential identities held by men and women as the result of socialization (e.g., Michel et al., 2011). Thus, to further explore the pattern of effects with WIF, we tested whether gender moderated the relationship between each proposed mediator and WIF.

We tested for moderation via two methods. First, we used meta-analytic regression to test whether percentage of females in the sample significantly moderated the mediator–WIF relationship. However, percentage female in the sample could potentially reflect other factors beyond simply gender (e.g., female-dominated industry or occupation effects). Thus, whenever possible (i.e., $k \geq 3$ per subgroup), we also conducted subgroup analyses as a second method, comparing mediator–WIF relationships in samples of 100% men and 100% women; nonoverlapping confidence intervals indicate significant subgroup differences. There was no significant moderating effect of gender for work hours ($b = -.03, p = .33$; males only: $\rho = .22$ [95% CI: .15 to .29], $k = 19$; females only: $\rho = .20$ [95% CI: .17 to .26], $k = 35$), family salience ($b = .03, p = .62$; males only: $\rho = -.04$ [95% CI: -.25 to .19], $k = 4$; females only: $\rho = -.01$ [95% CI: -.07 to .04], $k = 9$), family boundary strength ($b = -.05, p = .82$), or autonomy ($b = -.13, p = .09$; males only: $\rho = .09$ [95% CI: -.04 to .13], $k = 5$; females only: $\rho = -.18$ [95% CI: -.30 to -.15], $k = 9$). Thus, differential relationships between proposed mediators and WIF for men and women does not appear to account for the pattern of effects observed above.

**Discussion**

The overall aim of the present investigation was to provide empirical evidence for a relationship that presents a popular press–science paradox. The association of WFC with women is ubiquitous in the media and in the minds of many people. However, work–family researchers have struggled to find clear support for this association, both theoretically and empirically. We bring clarity to the literature by demonstrating via our meta-analytic synthesis that there is little evidence for substantial gender differences in WFC. Although the association between gender and WIF and FIW was statistically significant in the direction of women experiencing more conflict overall, the correlations were very small in magnitude and may be considered negligible for practical purposes. Interestingly, results differed somewhat by type of conflict; for example, men actually reported more time-based WIF than women, though the effect was still small.

Some researchers have suggested that lack of gender differences may be due to qualitatively different work and family roles that men and women typically hold. To empirically address this idea, we examined gender differences in WFC in samples consisting of only parents, full-time workers, people in the same job, and dual-earner couple dyads. Although significant differences were found in four relationships (i.e., mothers reported greater FIW than fathers, women in dual-earner couples reported greater FIW, men in dual-earner couples reported greater WIF, and women in the same job as men reported more WIF), the latter two relationships were quite small. The former two relationships were the largest gender effects observed across our meta-analyses (albeit they are still rather small) and thus we elaborate more on those below.

With regard to parental status, the fact that mothers reported greater FIW than fathers mimics the predictions of the rational view. Specifically, the presence of children significantly increases family time demands, and research suggests these demands tend to fall disproportionately upon women (Neilson & Stanfors, 2014), resulting in increased FIW. Furthermore, these results are consistent with those found by Byron (2005) who found that percentage of parents in a sample moderated the relationship between gender and FIW, such that in samples with greater numbers of parents, women tended to report more FIW than men.

For dual-earner couples and FIW, the finding that wives report greater FIW than their husbands when the effect was basically null in the overall analyses is somewhat counterintuitive; men in these couples likely have greater family responsibilities than men in the overall analyses (given that they necessarily do not have a full-time homemaker partner to assist with family demands), which creates more opportunity for FIW. We speculate that this pattern may be explained by social comparison processes (Festinger, 1954). When not a member of a dual-earner couple, men may be more likely to compare themselves with other men whereas when a member of a dual-earner couple, men may be more likely to view their working wife as the more salient referent. As such, they may see themselves as allowing less family interference with work compared with their wives, but not when compared with other men. We encourage future research to explore the process by WFC judgments are made to advance gender-WFC theory.

Although substantial true variability in gender-WFC relationships was observed, it was not explained by societal gender egalitarianism or study publication date. We acknowledge that our
approach to assessing cultural values is imperfect in that we imputed these values based on the country where the data were collected, but there may be meaningful variance within a country in cultural values across regions (e.g., Harrington & Gelfand, 2014) as well as over time (e.g., Taras, Steel, & Kirkman, 2012). Alternatively, perhaps the lack of significant variation based on gender egalitarianism may be due to opposing forces; some prior research has found that more gender egalitarian cultures may actually promote greater differentiation between the sexes on certain characteristics (e.g., personality; Costa, Terracciano, & McCrae, 2001). There is speculation that in high gender egalitarian contexts, people (both self and others) may be more apt to interpret behaviors or experiences as a result of personal choice and preference, exacerbating perceptions of gender differences, while in low gender egalitarian contexts, people may be more apt to attribute behaviors or experiences to the situation, minimizing perceptions of gender differences. Finally, the lack of observed moderator effects due to publication date could be due to the limited range of publication dates represented; the distribution of studies included in our meta-analysis is skewed toward more recent publication (approximately half were published 2010 or later). Given that these more macrolevel factors do not appear to explain variation across studies, it may be more fruitful for future research to explore more micro situational factors (e.g., organizational work–family policies and culture/climate).

In summary, to bring clarity to the current fragmented and inconsistent literature, we provide an estimate of the gender and WFC relationship based on the large, extant work–family literature. Contrary to popular perception and media representation, our results indicate that men and women appear to be more similar than different in their WFC experiences. Additionally, gender differences in WFC appear to generally be small, regardless of which specific subgroups are examined. Finally, there is meaningful variation in the magnitude of gender differences in WFC, but the key factors that determine this variation is currently not well understood.

Theoretical Findings and Implications

A main focus of our investigation was to test the veracity of various, often inconsistent, theories that have been proposed by work–family researchers. In examining the results of our investigation superficially, one could argue that the lack of observed gender differences in WFC implies that there is simply no meaningful relationship present and the need for theory is then removed (i.e., why aim to predict a relationship that is very small or does not exist?). We caution against this interpretation. In fact, we would argue that the proliferation of theory in this domain highlights the many complexities and intricacies involved that necessitate careful study.

For the gender–WIF relationship, work hours and family boundaries serve as mediators, providing some support for the rational view and asymmetrical permeability perspective. However, there is also a significant residual path between gender and WIF, in the direction of women experiencing greater WIF, despite most of the observed mediation paths within the model predicting the opposite pattern (i.e., that men should experience greater WIF). To uncover what omitted mediator(s) may explain this residual relationship, we build theory by examining job autonomy as a potential mediator. Although we find evidence that job autonomy serves as another mediator of the gender-WIF relationship, it appears that other yet uncovered factor(s) are needed to explain why there are only negligible gender differences in WIF overall despite men’s greater vulnerability resulting from greater work hours and weaker family boundaries.

This begs the question: which variables and processes do underlie this cancelling out effect? We speculate that one relevant mechanism missing in extant theorizing is the role of gender-specific expectations and socialization. Men have traditionally fulfilled their family role by providing financially. By working outside of the home, a man can fulfill both his work role and traditional family role—work and family demands are mutually supportive in this sense. On the other hand, the traditional mother or spouse role for women involves tending to family matters. When a woman works outside of the home, it takes away from her time available to fulfill her family caretaking role, meaning the roles are not mutually supportive in the way they are for men (Barnett & Baruch, 1987; Hodges & Park, 2013; Simon, 1995). Applying this to WFC, occupying dual roles may create internal conflict, guilt, and feelings of inadequacy for women (and not men), which increases stress, depletion, and perceptions that roles are in conflict, particularly when work interferes with family. Indeed, some research supports the idea that women experience greater guilt related to the work role impinging on family (Aycan & Eskin, 2005; Borelli, Nelson, River, Birken, & Moss-Racusin, 2017), although other studies find no gender differences (Offer & Schneider, 2011; Hochwarter, Perrewé, Meurs, & Kacmar, 2007).

Given the limited research to date on the relationships between gender, guilt, and WFC, we were unable to test guilt as a mediator, but encourage future work to examine this possibility.

Turning to the gender–FIW relationship, we found support for the rational view, as women work more family hours which, in turn, relates to FIW. Although strength of family boundary was also a significant mediator, its pattern of relationships did not match the pattern predicted by both the asymmetrical permeability and male segmentation views. Rather, women actually formed stronger boundaries around family, which serves to reduce FIW. Together, these two mechanisms seem to have a cancelling out effect, as the residual path between gender and FIW was nonsignificant in the integrative model.

Theoretically, these results suggest that extant theories regarding boundary management are inaccurate and may be based on incorrect assumptions. More attention should be paid to why women form stronger boundaries around family (and work) given reason to expect otherwise. For example, it may be that this is a proactive strategy, one that women use knowing that they are likely to have high family demands, or a reactive coping strategy that is learned after dealing with initial difficulties managing work and family. Alternatively, the stronger boundaries could indicate that women are more psychologically present in the domain where they physically are located, regardless of which domain it is. It is important to note that as theorists expand on these findings, we suggest that additional empirical data is also collected. The literature on boundary management is rather nascent, resulting in the paths with boundary strength variables being tested based on the fewest number of primary studies; more studies would make these estimates more robust and help ensure an accurate inductive-deductive process of theory building.
Lastly, our study offers contributions that extend beyond the study of gender and WFC. In testing various theories, we estimated several relationships that have not previously been tested in the gender and work–family literatures. For example, both within and outside gender and WFC research (e.g., Bakker, Demerouti, & Dollard, 2008; Bolino & Turnley, 2005; McElwain, Korabik, & Rosin, 2005), researchers often assume that men and women exhibit domain salience differences along traditional lines. The present study represents the first meta-analytic test of this idea, to our knowledge, and suggests that this may be a false assumption for family salience, at least when focusing on samples of employed people. Additionally, gender differences in work salience, although significant, are also quite small. Similarly, we provide the first known meta-analytic estimate of the relationship between job autonomy and gender, boundary management and gender, as well as boundary management and WIF/FTW. In other words, in our efforts to clarify and better understand the relationship between gender and WFC, we also enhance our understanding of several other important relationships.

Future Research

In addition to the ideas mentioned previously, we advocate that future researchers adopt novel methodologies to investigate gender differences in WFC and examine whether results based on these alternative methods converge with the results of our meta-analysis, which is based mostly on cross-sectional, retrospective survey data. One method is to examine WFC on a within-person, episodic basis rather than via the traditional between-persons, levels-based measures (Maertz & Boyar, 2011). The levels-based approach involves asking participants to judge the extent that they agree or estimate general frequency of items that represent WFC experiences over a nondescript time period. This is in contrast to the episodic approach, which asks participants to report discrete experiences of WFC when or shortly after they occur. Measures used in previous research of this nature (Shockley & Allen, 2013; Shockley & Allen, 2015) are also broader and open-ended (e.g., “Did you experience WFC today? If yes, please describe the WFC situation.”). Using an episodic daily diary methodology, researchers could address numerous novel questions, such as (a) how many discrete episodes of WFC do men and women report across some set time period? (b) is the content of what men and women view as WFC similar? (c) how do these discrete episodes translate into reports of levels-based WFC (measured on a daily basis or chronically) and does this differ by WIF or FIW? If gender differences do emerge in this more microlevel of analysis, it implies that the lack of gender differences observed in levels-based research may be attributable to factors such as recall bias or differential interpretation of similar events. On the other hand, finding no gender differences would allow us to place greater faith in findings based on the traditional, levels-based research.

Future researchers should also consider extending the level-of-analysis to the couple-level. Although we acknowledge that WFC is not solely an issue for coupled individuals (Casper, Markwardt, Roberto, & Buss, 2016), many employees are embedded in this larger family unit. Couples are likely to adopt strategies together to manage work and family rather than operating in isolation (e.g., Hall & MacDermid, 2009; Masterson & Hoobler, 2015), and the behaviors of one partner may have direct implications on the WFC of the other partner (Westman, 2006). It would be interesting to explore gender differences in WFC within couples taking into account their particular WFC management strategy. For example, some couples may decide to prioritize one person’s career and actively shield that partner from family intrusions, resulting in lower FIW for him/her (and perhaps higher levels of conflict for the other partner), but other couples may manage WFC by trading off the person’s whose career is prioritized over time (Hall, 1972), in which case gender differences in WFC are likely dynamic and not easily accurately captured without longitudinal methods. Yet, in other couples both partners may be equally invested in each domain and thus experience similar levels of both types of WFC. Overall, understanding the level of WFC of men or women would be enriched by greater theory and research that considers the broader family context. We took a first step in addressing this through our analyses of studies of dual-earner couples, but more nuanced approaches that account for the precise strategies, roles, and division of labor within a household would be informative.

Practical Implications

There are many culturally embedded and communicated stereotypes within society that influence assumptions about WFC as a feminine issue. Based on the findings of the present study, this seems to be a largely inaccurate assumption, at least in terms of WFC as typically measured in scholarly work. Widespread understanding that most men report similar levels of WFC as women could open dialogues and facilitate better work–family management for everyone. That is, research suggests that men often do not feel comfortable discussing work–family concerns because of fears of being stigmatized, threats to masculinity, and negative career repercussions (Butler & Skattebo, 2004; Vandello et al., 2013; Williams, Blair-Loy, & Berdahl, 2013). Challenging inaccurate stereotypes would not only better facilitate men’s use of available work–family resources and eventually achieve better work–family outcomes, but it could also shift norms for all employees. Specifically, if the use of work–family benefits became standard practice among working men and women alike, “punishment” as a result of these actions might be greatly reduced. This has the additional potential benefit of promoting greater gender parity overall in the workplace (Goldin, 2015; Sanders, Zeng, Hillicar, & Fagg, 2015).

Both organizational and national policy implications stem from our findings. As alluded to above, the finding that men and women experience the same or similar levels of WFC speaks to the need to provide access to and market work–family policies, such as flexible work arrangements or dependent care supports, to men and women equally. The work–family policy where there is the largest gender discrepancy in access and use is paid parental leave. In the United States, only 9% of workplaces offer paid maternity leave compared with 21.6% for maternity leave (Klerman, Daley, & Pozniak, 2013). In terms of use, research suggests that the average father takes only one day of leave time (paid or unpaid) for every month the mother takes, and the vast majority of fathers (96%) take a leave of two weeks or less (Harrington, Van Deusen, & Humberd, 2011). Although we acknowledge biological sex differences in childbirth, the lack of support for men is unjust, particularly in light of the fact that WFC is prevalent for men too. Research suggests that the more time a father spends with a new
child has long-term implications for a more equal division of labor (Huerta et al., 2013; Nepomnyaschy & Waldfogel, 2007), better father–infant bonding (Huerta et al., 2013), and increases in mother’s well-being (Redshaw & Henderson, 2013) and wages (Johansen, 2010). Our finding that mothers report slightly higher FIW than fathers may be attributable in part to these discrepancies. As constituents continue to advocate for paid maternity leave in the United States, we advocate for this effort to also include paternity leave given its widespread benefits, particularly “use-it-or-lose-it policies” that seem to be especially effective in promoting equitable division of labor between spouses (Brighouse & Wright, 2008).

**Limitations**

Despite its contributions, the present investigation has certain limitations. We underwent extensive efforts to include all relevant published studies, but given the large scope of the project we did not include unpublished studies (except for select conference presentations, theses, and dissertations) in our meta-analyses. This could result in publication bias, though recent research suggests that the file drawer problem appears to be uncommon in the organizational sciences literature (Dalton, Aguinis, Dalton, Bosco, & Pierce, 2012), which we drew heavily upon in these studies. Moreover, the large N and the fact that gender was not a main focus of many of the studies and thus not as prone to “significance bias” also alleviates this concern to a large extent.

Many of our hypothesis tests were based on meta-analytic correlation matrices. The cells of these matrices likely vary in the stability of estimated population parameters, as the number of studies varied across relationships. Generally, the ks (i.e., number of independent samples) in our matrices were quite large, but in a few cases estimated relationships in the matrix were based on a small number of studies (and included two primary studies that we conducted to obtain more robust and stable estimates). We urge researchers to interpret our results with this in mind. We also recognize that issues can arise when correlations within a meta-analytic matrix are based on samples that may come from different populations (Cheung & Chan, 2005), but this was the only feasible approach to generate the meta-analytic correlation matrix necessary for path modeling when studies in the literature do not include all variables of interest.

**Conclusion**

In conclusion, despite apparent widespread lay beliefs and media depictions of substantial gender differences in WFC, our meta-analysis, which cumulates more than 30 years of research and more than 350 studies on this topic, compellingly demonstrates that men and women across a wide range of family and work circumstances are more alike than different in their reports of WIF and FIW—challenging conventional wisdom. Existing theories predicting gender differences in WFC are complex and often contradictory, and our path analysis results suggest that only some of these theories (i.e., rational view for WIF and FIW and asymmetrical permeability for WIF) are supported by data. Furthermore, a more complete picture regarding why there are (or are not) gender differences in WFC emerges when multiple theoretical perspectives are integrated. However, it also appears that unknown processes and mechanisms are likely given the pattern of results. Thus, we echo Eby et al.’s statement that “gender is deeply engrained in [work–family] relations” (p. 181) and challenge and encourage scholars to continue to develop more sophisticated theories and understanding of this fascinating and complex relationship.

**References**

References marked with an asterisk indicate studies included in the meta-analysis.


GENDER AND WORK–FAMILY CONFLICT


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