Emotional Responses to Work–Family Conflict: An Examination of Gender Role Orientation Among Working Men and Women

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The present study tested the effect of work–family conflict on emotions and the moderating effects of gender role orientation. On the basis of a multilevel design, the authors found that family-interfering-with-work was positively related to guilt, and gender role orientation interacted with both types of conflict (work-interfering-with-family and family-interfering-with-work) to predict guilt. Specifically, in general, traditional individuals experienced more guilt from family-interfering-with-work, and egalitarian individuals experienced more guilt from work-interfering-with-family. Additionally, a higher level interaction indicated that traditional men tended to experience a stronger relationship between family-interfering-with-work and guilt than did egalitarian men or women of either gender role orientation.

Keywords: work–family conflict, gender role orientation, guilt

Historically, the work and family domains have been gendered, such that men have traditionally dominated the work role and women have traditionally dominated the family role (Fletcher & Bailyn, 2005; Lott, 1988). Though today women participate in the workforce to the same degree as men (Bureau of Labor Statistics, 2005b), the family domain is still dominated by women, at least in terms of hours worked (Hochschild, 1989; Sayer, England, Bittman, & Bianchi, 2004). Additionally, the increasing number of families in which both husband and wife work (Bureau of Labor Statistics, 2005a) likely creates even more prominent conflicts between work and family. However, this conflict is often assumed to affect women more than men. For instance, if one defines work to include both paid and unpaid (household activities, child-rearing, etc.) work, American women work 5–7 hours more per week than do men (Sayer et al., 2004), and men's contribution to unpaid work has not sufficiently compensated for women's increase in paid work (Coltrane, 2000).

Yet, conflicting findings concerning gender (e.g., Byron, 2005; Gutek, Searle, & Klepa, 1991) have suggested that it is, alone, a relatively poor predictor of work–family conflict (Cinamon & Rich, 2002). Thus, we investigate more "finely grained" variables in conjunction with work–family conflict (Byron, 2005). We suggest that gender role orientation, a construct often referenced in work–family conflict research (e.g., Hochschild, 1989), but rarely examined empirically, may be a better lens through which to examine work–family conflict. Furthermore, while it has been assumed that the experience of work–family conflict results in negative emotions, little research has linked this conflict to specific emotions. Accordingly, the purpose of the present study is to provide a multilevel investigation of gender, gender role orienta-

tion, emotions, and work–family attitudes. In the next section, we examine the role of emotions in the work–family conflict literature.

Emotional Outcomes of Work–Family Conflict

One of the critical gaps in the work–family conflict literature has been the lack of research on specific emotional responses to conflict. Indeed, Kossek and Ozeki (1998) reflected that not being able to do two things at once may be different than feeling bad about it, suggesting that negative emotions do not universally flow from conflict. Notably, Greenhaus, Allen, and Spector (2006) have presented a model in which negative emotions (more so than negative health consequences) were presented as more proximal outcomes of work–family conflict; however, their propositions have yet to be empirically corroborated.

Specific emotions have rarely been assessed in the work–family literature (MacDermid, Seery, & Weiss, 2002). The existing research has been most often confined to mood and emotional distress in reaction to conflict. With regard to mood, Williams and Alliger (1994) found that unpleasant moods spilled over from one role to another (e.g., from work to family), and juggling multiple roles tended to negatively affect mood. Likewise, Rothbard (2001) analyzed general emotional responses to work–family depletion and absorption (negative and positive work–family interaction). Concerning emotional distress, Parasuraman, Purohit, Godshalk, and Beutell (1996) found that work-interfering-with-family and family-interfering-with-work predicted life stress. Similarly, work–family conflict is associated with higher levels of anxiety, depression, psychosomatic symptoms, and hostility (Frone, Russell, & Cooper, 1992; Mauno & Kinnunen, 1999; Vinokur, Pierce, & Buck, 1999).

The focus on general mood factors in work–family conflict research is well suited to between-individuals designs. However, stress-related outcomes are assumed to emerge from emotional responses to conflict. Emotions are more ephemeral than are general mood states (Watson, 2000) and are likely to influence changes in daily functioning at work and at home (e.g., Judge,

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Ilies, & Scott, 2006). Thus, it is important to explore the link between work–family conflict and intraindividual changes in particular emotional states.

Many researchers seem to have supported the assertion that guilt is a prevalent reaction to work–family conflict (e.g., Gilbert, Holahan, & Manning, 1981; C. L. Johnson & Johnson, 1977; F. A. Johnson & Johnson, 1976), but this proposition has yet to be examined in much detail (see Judge, Ilies, & Scott, 2006, for a recent exception). Guilt is a self-conscious emotion that is evoked by self-reflection and self-evaluation (Tangney, 2003). It is the unpleasant and remorseful feeling associated with the recognition that one has violated a moral or social standard (Jones & Kugler, 1993). Here, we consider the relationship of work–family conflict with guilt. Specifically, we propose that the experience of work–family conflict may produce guilty feelings in those who feel that this conflict violates a social standard. For example, Piotrkowski and Repetti (1984) suggested that internal conflict and moral guilt may be ongoing psychological tasks for working women, and recent interviews from Guendouzi (2006) suggested this as well.

We believe that both family-interfering-with-work and work-interfering-with-family may result in increased feelings of guilt for violating a social standard of role fulfillment. Specifically, work–family conflict prevents one from fully satisfying the demands of either the work or the family role, such that one is unable to completely perform in one, or both, of one's key social roles. Even the metaphor of "work–family balance" suggests that those who can satisfactorily fulfill both work and family demands must find equilibrium between the two, however tenuous, to be "successful" working adults (Halpern & Murphy, 2005). For instance, women may subscribe to the "mommy myth" that they should be able to do it all (and if they cannot, it must be their fault; Douglas & Michaels, 2004). Thus, individuals for whom family interferes with work may feel guilt for violating a "good worker" standard, and those for whom work interferes with family may feel guilt for violating a "good husband/wife/mother/father/child" standard.

Hypothesis 1: Family-interfering-with-work will be positively related to guilt.

Hypothesis 2: Work-interfering-with-family will be positively related to guilt.

The Moderating Roles of Gender and Gender Role Orientation

Kahn, Wolfe, Quinn, Snoek, and Rosenthal's (1964) original conceptualization of role conflict suggested that conflict would arise if a person had a strong sense of obligation to comply with the expectations in a role. Gender role orientation is defined as a form of compliance with these expectations, or the degree to which one identifies with the traditional conceptions (i.e., expectations) of his or her gender role. In work–family research, gender refers to biological sex, but gender role orientation addresses an attitudinal identification with a role and is distinct from gender itself (Hochschild, 1989; Larsen & Long, 1988). While a person's belief in traditional gender role stereotypes may be related to gender, they are not the same (Willetts-Bloom & Nock, 1994).

The effects of gender role orientation and gender can be explained through gender role theory, which states that there exist polarized gender roles, such that women are more identified with family role and men are more identified with the work role (Lott, 1988). The continued espousal of this ideal is the definition of traditional gender role orientation, in that ideal workers exist for each role (Kanter, 1977; Welter, 1966). The ideal family worker is a woman who remains in the family role, and only in the family role, and vice versa for men. In a traditional gender role orientation, women are perceived as being "best" at responsibilities related to the family role, and men are perceived as being "best" at responsibilities in the work role. An egalitarian gender role orientation relaxes the separation of gendered roles.

Gender role orientation is much like a gendered version of the concepts of work and family centrality. For instance, work role centrality addresses the beliefs that individuals have regarding the degree of importance that work plays in their lives (Paullay, Alliger, & Stone-Romero, 1994), which is often assumed to be partly the result of socialization (Kanungo, 1982). By extension, a traditional gender role orientation suggests that men will report more work centrality and women more family centrality, and an egalitarian gender role orientation suggests that gender is unrelated to role centrality, such that men and women value both roles equally.

According to Hochschild (1989), egalitarian individuals believe that men and women should identify equally with their contributions to both work and home, whereas traditional individuals prefer men to identify with the work sphere and women with the home sphere. Egalitarian individuals are distinctly defined as those who believe that both men and women should devote equal time to both the work and home spheres (Hochschild, 1989). Thus, consistent with other researchers (e.g., Gerson, 2004; Maume, 2006), in this study we adopt Hochschild's conceptualization of egalitarianism, realizing others may define it differently.[1]

Traditionally, workers were able to leave work at work, maintaining relatively separate spheres (Lott, 1988; Parsons & Bales, 1955). Thus, before the postindustrial revolution, family "work" (being the realm of the woman) did not often interfere with paid work, and paid work (being the man's responsibility) did not interfere with family (as a man could not work from home). However, due to the increased importance of the work role, and economical and technological changes in the nature of work, Americans are more often using traditional leisure and family time to fulfill work obligations (Stroller, 2006). Indeed, some scholars have argued that postindustrial work is becoming indistinguishable from leisure (Lewis, 2003). Those who endorse a separate spheres ideal tend to experience increased tension from conflict between the spheres (e.g., Roehling, Moen, & Batt, 2003). Thus, the merging of the work and the home spheres may make those who support the separate spheres conception increasingly uncomfortable.

However, because the work role is the economic role and is necessary for the well-being of the family, it is often perceived as relatively more critical to function in this role without interruption (Gutek, Searle, & Klepa, 1991). We expect this to especially ring

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[1] Egalitarianism and traditionalism can be viewed as opposite ends of a continuum (Larsen & Long, 1988) such that most individuals lie somewhere between pure egalitarianism and pure traditionalism. However, to simplify expression, we use categorical descriptors (e.g., "traditional women," "egalitarian men").

true for traditionalists, both men and women. For instance, even traditionalist women who may not see their work role as their central role may perceive the economic benefits of the work role as essential to family functioning and thus feel that, if they must work, they should try to act like those who primarily value work (e.g., traditionalist men). Even though we do expect gender differences to exist, it is plausible to posit that traditionalists, in general, will experience increased guilt whenever they allow family to interfere with their work lives.

However, egalitarian men and women, who are more likely to seek a balance between the roles of work and family because they do not perceive the roles as being separated into gendered domains, may experience more guilt when work interferes with their family lives. We expect that egalitarian individuals may perceive the family role as increasingly important (Cinamon & Rich, 2002) and thus may react more negatively to work-interfering-with-family. While traditionalists in general may perceive work as the more important role due to its economic impact, egalitarian individuals may feel that, because they are not bound by traditional conceptions of role importance, they are breaking a moral standard by neglecting the family. For instance, Generation Xers (those born between 1964 and 1975) tend to put more value on family and family flexibility than do their baby boomer predecessors (Catalyst, 2001). Thus, we expect that there will be a moderating effect of gender role orientation on the conflict–guilt relationship.

> *Hypothesis 3:* Gender role orientation moderates the family-interfering-with-work/guilt relationship, such that it is more strongly positive for those high in traditionalism (low in egalitarianism).

> *Hypothesis 4:* Gender role orientation moderates the work-interfering-with-family/guilt relationship, such that it is more strongly positive for those low in traditionalism (high in egalitarianism).

Although we expect to find that gender role orientation moderates the relationship between conflict and guilt, we also expect that this effect will be conditioned by gender, such that gender role orientation will differentially moderate the conflict–guilt relationship for men and for women. Cinamon and Rich (2002) found in their study of work and family role importance that women tended to be more likely to put importance on family roles. However, one third of both genders put importance on both roles, replicating research by Mencken and Winfield (2000). Thus, there is variation in the importance that men and women place on work and family roles, which may be plausibly explained by gender role orientation.

Women who hold traditional gender role orientations tend to perceive the family role as being more important and the work role as secondary, and vice versa for men. Since roles conflict with each other when they require simultaneous attention (Lobel, 1991), those espousing traditional gender role orientations may be more likely to feel increased guilt when both work and family demand attention, and they are unable to fulfill the expectations of their more valued role (the family role for traditional women and the work role for traditional men). For instance, traditionalist husbands tend to be less involved in family roles than are egalitarian men (Manning, 1988). We expect traditionalists in general to feel more

guilt from family-interfering-with-work; however, as follows, we propose that women who espouse a traditional gender orientation will experience a stronger work-interfering-with-family/guilt relationship than will women who espouse an egalitarian gender orientation, and men who espouse a traditional gender role orientation will experience a more strongly positive family-interfering-with-work/guilt relationship than will men who espouse an egalitarian gender role orientation.

Alternatively, women and men who espouse a more egalitarian gender role orientation perceive the work and family roles as equally important for both genders. For instance, if egalitarian women value the work role to a greater degree than traditionalist women do, then they are likely to feel more guilt when the family role interferes with their work. This effect is amplified by the fact that American culture tends to applaud those who allow work to consume their lives (Lewis, 2003). We expect egalitarian women to be more affected by this cultural work ideal than are traditional women, as they are less confined by the perception that the family role is the appropriate role for women, suggesting that egalitarian women would experience more guilt than would traditional women when family interferes with work.

> *Hypothesis 5:* A three-way interaction exists among gender and gender role orientation to predict the family-interfering-with-work/guilt relationship, such that it is more strongly positive for traditional men (vs. egalitarian men) and egalitarian women (vs. traditional women).

> *Hypothesis 6:* A three-way interaction exists among gender and gender role orientation to predict the work-interfering-with-family/guilt relationship, such that it is more strongly positive for traditional women (vs. egalitarian women) and egalitarian men (vs. traditional men).

Method

Sample and Procedure

We recruited participants from a small organization in central Florida (13% of participants) as well as from online management classes that consist primarily of nontraditional students who work full-time (87% of participants). Participants from the organization were compensated with $20, and participants from the online course were compensated with extra credit points. Participants voluntarily chose to participate from an invitation posted to a message board, either sent to the entire small organization or to the entire online class. Independent sample t tests on the study variables resulted in no significant group differences among the samples; however, we included dummy variables to account for the samples in all analyses.

Participants ($n = 196$, of which 124, or 63%, were women and 72, or 37%, were men) hailed from a wide variety of jobs. The plurality of respondents, roughly 13%, was in retail/sales, with 8% in healthcare, 8% in marketing, 7.4% in finance or financial services, 7.4% in construction, and 6.6% in media/entertainment. On average, participants had spent 5.16 years at their current jobs. The average age of the participants was 39.68 years, and hours worked per week ranged from 25 to 80, with an average of 41.45 hours. Thirty-six percent of the sample identified as married or cohabitating. Participants' number of children under age 10 ranged

from zero to four, with 75% reporting no children under 10, 11.4% reporting one, and 12.3% reporting that they had two under age 10. Of those with children under 10, 25% reported that they were solely responsible for their children's care, and 51% reported that they shared childcare responsibilities.

We collected two types of data: one-time surveys and daily surveys (to account for the transitory nature of emotions). Below, we describe the timeline of the study.

Phase 1. We administered the one-time survey when the participants agreed to participate. The one-time survey assessed gender role orientation and demographic variables.

Phase 2. Participants were then instructed to complete the daily survey for 5 consecutive workdays. Participants logged onto a Web page at the end of each day on which they worked, assessed their level of work-interfering-with-family and family-interfering-with-work that day, and then assessed their level of felt guilt. Though participants began the daily surveys on different calendar days, participants were instructed to begin the first daily survey on the first day of their work week, no matter what day that was, and to complete one survey per day for 5 consecutive work days. Controlling for the starting day allowed us to analyze the data with an unrestricted multilevel model approach (described subsequently), which assumes that responses can vary over time.

Of the 196 men and women who completed the one-time survey, there were 980 possible daily responses ($5 \times 196 = 980$). Of these, 857 were recorded for a calculated daily response rate of $857/980 = 87\%$. Women accounted for 559 (65%) of these 857 responses, with men accounting for the remainder of 298 (35%). In general, 71% of all participants completed all five daily responses, and no participant completed less than two daily responses.

Measures

Gender role orientation. Gender role orientation was assessed with the 20-item Traditional–Egalitarian Sex Roles scale by Larsen and Long (1988). Example items include "The man should be more responsible for the economic support of the family than the woman," and "Having a challenging job or career is as important as being a wife and mother." Items were assessed on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), which created a scale score on a continuum from 1 (*egalitarian gender roles*) to 5 (*traditional gender roles*). Men ($M = 2.38$, $SD = .90$) reported more traditional attitudes than did women ($M = 1.74$, $SD = .72$), a difference that was significant ($d = .79$, $F (1, 193) = 29.91$, $p < .05$).[2] Reliability for the scale was $\alpha = .85$.

Demographic controls. All demographic controls were assessed by using the one-time survey. One-item questions asked "How many children under age ten do you have?" and "Are you married, or in a cohabitating, long-term relationship?" to assess number of children and marital status, respectively. A question assessed how many hours participants estimated that they spent weekly on household maintenance, excluding childcare, and another asked how many hours, on average, participants worked per week. An item also assessed their gender as male or female.

Work–family conflict. Daily work–family conflict was assessed with two 6-item subscales (Work-Interfering-With-Family [WIF] and Family-Interfering-With-Work [FIW]) from Netemeyer, Boles, and McMurrian (1996). Sample items include "the

demands of my work interfere with my home and family life" (WIF) and "the demands of my family or spouse/partner interfere with my work-related activities" (FIW). Responses were rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Daily instructions specified that respondents should answer the questions "concerning conflicts that have arisen over the course of the day today." Averaging across the 5 days, the average reliabilities of the WIF and FIW subscales were $\alpha = .95$ and $\alpha = .88$, respectively.

Guilt. Daily guilt was measured with Izard's (1977) Differential Emotions Scale I. Izard's Differential Emotions Scale is one of the more widely used self-report measures of emotions (Youngstrom & Green, 2003). The validity of the Izard scales has been established over multiple versions (Izard, 1971, 1972, 1977; Izard, Dougherty, Bloxom, & Kotsch, 1974), and the scale discriminates among experimentally elicited emotions better than many other emotion scales do (Philippot, 1993). The three items of the Guilt subscale were "repentant," "guilty," and "blameworthy," all rated on a 5-point Likert-type scale ranging from 1 (*very slightly*) to 5 (*very strongly*). Principal components analysis extracted one component that explained 76% of the variance in the items.[3] Averaging over the 5 days, the reliability of the guilt scale was $\alpha = .84$.

Analyses

We used hierarchical linear modeling (HLM) to test the hypotheses (Bryk & Raudenbush, 1992), allowing us to model both within-individual and cross-level interaction effects (i.e., within-individual variables moderated by variables measured at the individual level). For multilevel analyses, we used the data provided by 196 people who provided repeated-measures responses as well as one-time self-report data to investigate cross-level effects. Thus, for Level 1, $n = 857$, and for Level 2, $n = 196$.

In HLM, to estimate the effect of WIF and FIW on guilt at Level 1 (daily), guilt was regressed on WIF and FIW for every day, for every individual. Adding Level-2 variables (e.g., gender role orientation) allowed for investigation of cross-level interactions, for example, the Level-1 slope of guilt on WIF was moderated by Level-2 gender role orientation.

Unrestricted modeling. We used hierarchical multivariate linear modeling (HMLM) in HLM 6 (Raudenbush, Bryk, Cheong, & Congdon, 2004), or the unrestricted method, which allows us to make more appropriate assumptions about the data. Specifically, if one is examining measures nested within persons that are structured by time, one needs to model both the fixed effects (the dependent variable means as the function of the Level-1 and

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[2] It is important to note that this sample was relatively more egalitarian on average than it was traditional ($M = 1.96$), with men reporting more traditional attitudes than women. Our sample thus mirrors what has been observed in the literature concerning social attitudes—that such attitudes are continuing to become more liberal over time (Rice & Coates, 1995; Rogers & Amato, 2000; Twenge, 1997). Thus, we can reasonably expect that the findings of this sample would generalize to the larger population.

[3] The absolute mean value of guilt is 1.21, but it is not unusual to observe low levels of guilt within healthy populations (e.g., Fedewa, Burns & Gomez, 2005). Additionally, because we are interested in relative levels of within-individual guilt, subsequent multilevel tests revealed sufficient variability in the dependent variable to study the hypotheses presented.

Table 1

Descriptive Statistics and Intercorrelations Among Variables

Variable	M	SD	1	2	3	4	5	6	7
				Level 1					
1. Guilt	1.21	.52	*.84*						
2. Work-interfering-with-family	2.47	1.09	.15**	*.95*					
3. Family-interfering-with-work	1.92	.75	.25**	.42**	*.88*				
				Level 2					
1. Hours worked	41.58	9.74	—						
2. Marital status[a]	0.34	0.47	−.15*	—					
3. Children under 10	0.40	0.78	.11	−.26**	—				
4. Home maintenance hours	7.72	5.92	−.07	−.18**	.36**	—			
5. Gender[b]	0.63	0.49	−.01	−.16**	−.04	.24**	—		
6. Gender role orientation (GRO)[c]	1.96	0.82	−.11	.11	.08	−.10	−.38**	*.85*	
7. GRO × Gender	1.09	1.01	−.07	−.13	−.02	.20**	.84**	.06	—

Notes. For Level 1, $N = 857$ after listwise deletion. Internal consistency reliabilities are presented on the diagonal. For Level 2, $N = 196$ after listwise deletion. Internal consistency reliabilities are presented in italics on the diagonal.
[a] Marital status (1 = married, 0 = unmarried).
[b] Gender (1 = female, 0 = male).
[c] GRO (5 = traditional, 1 = egalitarian).
* $p < .05$. ** $p < .01$.

Level-2 predictors) and the random effects (the variance and covariances of the repeated measures over time). In typical HLM modeling, a restricted covariance matrix for the repeated measures is specified in which the elements of the matrix are functions of the variance and covariance parameters of the multilevel model. However, in an unrestricted covariance matrix, variances and covariances are free parameters of the model. Additionally, the HMLM model allows all data points to be used, regardless of whether individuals provided the same number of daily data points.

Akaike's information criterion. Though one should always choose the simplest model to analyze results, using overly restrictive assumptions can result in invalid inferences when the assumptions do not hold (Verbeke & Molenberghs, 2000). Thus, the typical HLM method is a simpler structure but may be misspecified. To support our contention that the HMLM method is more appropriate than the typical HLM method in this situation, we compared with Akaike's information criterion (Akaike, 1974). Akaike's information criterion supports the use of the unstructured method, as the criterion for the HMLM model is 748 and the criterion for the typical HLM model is 1194, suggesting that using HMLM is well justified (748 < 1194).

Variance analyses. Before proceeding with the hypotheses tests, we investigated whether systematic within-individual and between-individuals variances existed in the dependent variable of felt guilt. Thus, we estimated a null model (random analysis of variance model; Raudenbush & Bryk, 2002) to calculate the within-individual and between- individuals variances (see the Appendix for these equations).

Model tests. We estimated an HMLM model including control variables, WIF, and FIW to test Hypotheses 1–2, and we estimated a cross-level interaction model to test Hypotheses 3–6 (to assess the interactions among Level-1 daily variables and Level-2 one-time variables). The equations used in both models are available in the Appendix. To estimate the WIF and FIW parameters by using only within-individual variance, we centered both FIW and WIF at the individuals' means, which removes all between-individuals variance in the predictor scores.

Results

Descriptive statistics, correlations, and reliability statistics for the Level-1 (within-individual) and the Level-2 (between-individuals) data can be found in Table 1. The Level-1 results are in the top half and the Level-2 results are in the bottom half of Table 1. As shown in Table 2, the preliminary variance analysis illustrated that the Level-2 variance was significant for the Level-1 dependent variable of guilt. The significant coefficient estimates indicated that it is appropriate to examine the multilevel model posited.

The results of testing Hypotheses 1–2 are provided in Table 3. Hypothesis 1 was supported, as the coefficient for FIW was significant ($B_{20} = .07$, $p < .01$) such that FIW was positively associated with higher levels of guilt. Hypothesis 2 was not supported ($B_{10} = .01$, $p > .05$), however, such that WIF was not related to guilt.

The results testing Hypotheses 3–6 appear in Table 4. Hypothesis 3 assessed the cross-level interaction between gender role orientation and FIW.[4] As shown in Table 3, this hypothesis was supported ($B_{21} = .26$, $p < .01$). This relationship is graphed in the top half of Figure 1 (data points represent the 25th and 75th percentiles of gender role orientation). FIW interacted with gender role orientation to predict guilt, such that the relationship was more strongly positive for those who are traditional. Hypothesis 4 assessed the cross-level interaction term between gender role orientation and WIF. This hypothesis was also supported ($B_{11} = -.11$, $p < .01$). This relationship is graphed in the bottom half of Figure 1. WIF interacted with gender role orientation, such that the relationship between WIF and guilt was more strongly positive for egalitarian individuals.

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[4] As demonstrated in Figure 1, though the coefficient for FIW changed with the addition of the two- and three-way interaction coefficients, the main effect that emerges ($B = -.45$) seems to be overwhelmed by the interaction effects. This suggests that the coefficient is likely due to multicollinearity.

Table 2
Variance Analysis for Hypothesis Tests

Variance components	Guilt
Level 1 σ^2	.12
Level 2 τ_{00}	.14**
Intraclass correlation (proportion variance between persons)	.54

Note. Intraclass correlation is calculated as $\tau_{00}/(\sigma^2 + \tau_{00})$.
** $p < .01$.

Hypothesis 5 assessed the cross-level three-way interaction term between gender, gender role orientation, and FIW. This hypothesis was supported ($B_{23} = -.28$, $p < .01$). Graphical depiction of this relationship is presented in Figure 2 (data points represent the 25th and 75th percentiles of gender role orientation for both men and women). The relationship between FIW and guilt is strongly positive for traditional men and strongly negative for egalitarian men. Additionally, the line illustrating the relationship between FIW and guilt for egalitarian women appears more strongly positive than does the line for traditional women. Hypothesis 6, the cross-level three-way interaction term among gender, gender role orientation, and WIF, was not supported ($B_{13} = .04$, $p > .05$), though it was in the posited direction.

Discussion

In this study, we sought to investigate the linkage between two overlooked factors in the literature on effects of work–family conflict: gender role orientation and emotions. Overall, we supported, but certainly not all, of our hypotheses. Though previous work–family conflict research has not investigated gender role orientation specifically, the current study suggests that it helps predict responses to work–family conflict. Additionally, we find that guilt is a specific emotion (and a more proximal outcome,

Table 3
Results for Hypotheses 1–2 Predicting Guilt

Variable	Symbol	Coefficient
Intercept	B_{00}	.76**
Controls		
Hours worked	B_{01}	.01*
Marital status	B_{02}	.10
Kids under 10	B_{03}	.01
Home maintenance hours	B_{04}	.01**
Key analyses		
WIF	B_{10}	.01
FIW	B_{20}	.07**

Note. Results based on $n = 196$. WIF = work-interfering-with-family; FIW = family-interfering-with-work; B_{00} = intercept: average guilt controlling for number of kids under age 10, hours worked, marital status, home maintenance hours, WIF, and FIW (also controlling for sample, not shown due to insignificance); B_{01} = slope relating hours worked to average guilt; B_{02} = slope relating marital status to average guilt; B_{03} = slope relating kids under age 10 to average guilt; B_{04} = slope relating home maintenance to average guilt; B_{10} = slope relating average WIF to average guilt (person-mean centered); B_{20} = slope relating average FIW to average guilt (person-mean centered).
* $p < .05$.   ** $p < .01$.

Table 4
Results for Hypotheses 3–6 Predicting Guilt

Variable	Symbol	Coefficient
Intercept	B_{00}	.90**
Controls		
Hours worked	B_{01}	.00
Marital status	B_{02}	.08
Kids under 10	B_{03}	−.01
Home maintenance hours	B_{04}	.02**
GRO	B_{05}	.02
Gender	B_{06}	−.23
GRO × Gender	B_{07}	.03
Key analyses		
WIF	B_{10}	.14
GRO × WIF	B_{11}	−.11**
Gender × WIF	B_{12}	.00
GRO × Gender × WIF	B_{13}	.04
FIW	B_{20}	−.45**
GRO × FIW	B_{21}	.26**
Gender × FIW	B_{22}	.54**
GRO × Gender × FIW	B_{23}	−.28**

Note. Results based on $n = 196$. GRO = gender role orientation; WIF = work-interfering-with-family; FIW = family-interfering-with-work; B_{00} = intercept: average guilt controlling for number of kids under age 10, hours worked, marital status, home maintenance hours, gender, GRO, Gender × GRO, WIF, and FIW (also controlling for sample, not shown due to insignificance); B_{01} = slope relating hours worked to average guilt; B_{02} = slope relating marital status to average guilt; B_{03} = slope relating kids under age 10 to average guilt; B_{04} = slope relating home maintenance to average guilt; B_{05} = slope relating GRO to average guilt; B_{06} = slope relating gender to average guilt; B_{07} = slope relating GRO × Gender interaction to average guilt; B_{10} = slope relating average WIF to average guilt (person-mean centered); B_{11} = cross-level interaction term for WIF and GRO; B_{12} = cross-level interaction term for WIF and gender; B_{13} = cross-level interaction term for WIF, GRO, and gender; B_{20} = slope relating average FIW to average guilt (person-mean centered); B_{21} = cross-level interaction term for FIW and GRO; B_{22} = cross-level interaction term for FIW and gender; B_{23} = cross-level interaction term for FIW, GRO, and gender.
* $p < .05$.   ** $p < .01$.

Wharton & Erikson, 1993) that has explanatory value in the literature.

The hypothesis that work–family conflict is significantly related to guilt is a connection often assumed in the literature (Gilbert et al., 1981; C. L. Johnson & Johnson, 1977) but rarely investigated (Judge et al., 2006). Our results suggest that FIW conflict is directly positively related to guilt and WIF conflict is indirectly related to guilt, through interactions. Specifically, the cross-level interaction between gender role orientation and FIW was significant such that individuals who espoused more traditional gender roles experienced a stronger relationship between FIW and average daily guilt. Additionally, individuals who espoused more egalitarian gender roles experienced a stronger relationship between WIF and average daily guilt. Thus, individuals who adhere to traditionally accepted norms of gender are more likely to feel guilty when their family responsibilities interfere with their work responsibilities but are less likely to feel guilty when their work responsibilities interfere with their family responsibilities. Thus, as suggested by Greenhaus, Allen, and Spector (2006), we find that guilt (a specific negative emotion) is a proximal outcome of work–family conflict, when moderated by a sort of role salience assessment (gender role orientation).
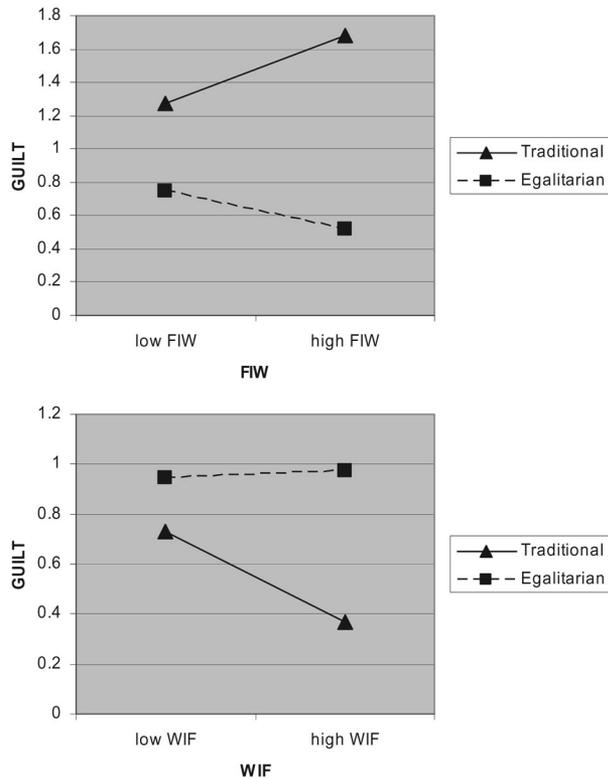
Figure 1. A: *Hypothesis 3:* Family-interfering-with-work (FIW), gender role orientation, and their interaction as predictors of guilt. Data points represent the 25th and 75th percentiles of gender role orientation, such that the 25th percentile is *egalitarian* and the 75th percentile is *traditional*. B: *Hypothesis 4:* Work-interfering-with-family (WIF), gender role orientation, and their interaction as predictors of guilt. Data points represent the 25th and 75th percentiles of gender role orientation, such that the 25th percentile is *egalitarian* and the 75th percentile is *traditional.*

Lack of support for an effect of WIF on guilt or a three-way interaction among gender, gender role orientation, and WIF suggests that working Americans may be generally desensitized to the inevitable interference with their family life. Because our participants work full-time, they may be used to their work interfering with their families and thus less likely to feel guilty about the conflict. However, this does not necessarily mean that individuals will not experience WIF as stressful. Indeed, previous research has copiously documented the relationship between WIF and stress (e.g., Higgins & Duxbury, 1992; Thomas & Ganster, 1995). It is plausible to assume that other specific emotions may more accurately encompass the experiences of working Americans.

Additionally, a relatively small proportion of the participants were partnered; an even smaller proportion had young children at home. Though we statistically controlled for marital status and children, these attributes may have impacted the findings. The failure to observe a relationship between WIF and guilt may be related to the relationship of guilt with childcare as part of the family role. For instance, if work interferes with family mainly in areas concerning "nonchildcare" aspects of one's home and personal life, individuals may not experience guilt.

Strengths and Limitations

One contribution of this study is the introduction of gender role orientation to the work–family literature. Gender, as it affects the importance of life roles and work–family conflict, is not a strong predictor of conflict (Byron, 2005; Cinamon & Rich, 2002), thus the addition of gender role orientation is a step toward better explaining the effects of work–family conflict. Though we are aware that other measures of gender roles exist in the literature (e.g., Bem's Sex Role Inventory, 1974; Spence & Helmreich's Personal Attributes Questionnaire, 1978), because these measures assess qualitatively different aspects of gender roles, we expect them to have different effects on guilt and conflict beyond the scope of the current study.

This study also utilizes a multilevel methodology, a more appropriate technique for modeling change over time (HMLM). We are thus able to investigate how a person's daily felt conflict affects his or her daily guilt, capturing the state-based nature of emotion. Williams and Alliger (1994) noted that feelings about work can occur at different levels, and utilizing a multilevel design allowed us to observe the nuances that exist in the relationship between work–family conflict and emotions. Williams and Alliger also noted that there exists an even lower level of analysis in which emotions are assessed momentarily (i.e., an experience-sampling methodology). Though we do not assess emotions on a momentary basis, we do account for the transitory nature of emotions by using a multilevel approach.

Implications and Future Research

Many of the practical discussions on work–family conflict focus mostly on women and their reactions to conflict (e.g., Gilbert et al., 1981). However, the findings in this article suggest that gender role orientation also may be important when predicting reactions to conflict, for both men and women. This has implications for policy changes in organizations, as traditional men, possibly including many upper level managers, seem to be most negatively affected by family-interfering-with-work. Thus, providing options to re-
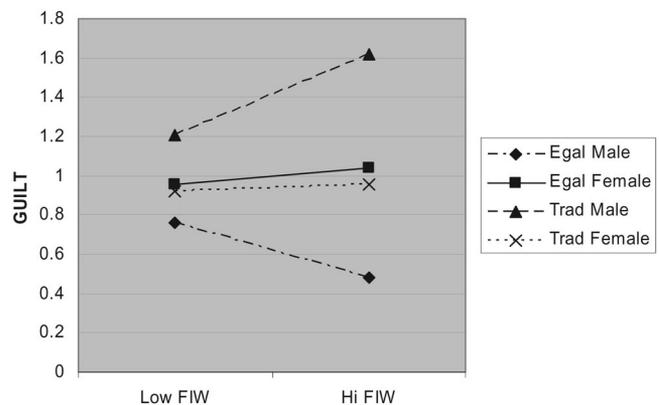

Figure 2. *Hypothesis 5:* Family-interfering-with-work (FIW), gender, gender role orientation, and their interaction as predictors of guilt. Data points represent the 25th and 75th percentiles of gender role orientation for both men and women, such that the 25th percentile is *egalitarian* and the 75th percentile is *traditional.* Egal = egalitarian; trad = traditional.

lieve the pressures of family-interfering-with-work, such as flexible work options or increased vacation time, may reduce the occurrence of guilt among employees. Additionally, providing policies and flexible work options for employees may reduce the experience of conflict and thus the subsequent guilty emotions. These recommendations are, of course, contingent on further research into the effects of policy changes on the reduction of work–family conflict.

Future research should investigate the effects of gender role orientation among spouses, or cohabiting partners, in dual-career households. Hochschild (1989) originally posited the possible interactive effects of spousal gender role orientation, such that the emotions and work–family conflict of egalitarian wives may be affected contingently on the gender role orientation of their husbands. Though our research begins to establish the predictive ability of gender role orientation, this hypothesis has yet to be empirically examined.

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(*Appendix follows*)

Appendix

Model Specifications

Random Analysis of Variance Model

Y_{it} = guilt of individual i at instance t

> Level 1
>
> $Y_{it} = \pi_{0i} + e_{it}$
>
> $e_{it} \sim N(0, \sigma^2)$
>
> Level 2
>
> $\pi_{0i} = B_{00} + r_{0i}$
>
> $r_{0i} \sim N(0, \tau_{00})$

HMLM Model (for Hypotheses 1–2, Not Including Control Variables)

Y_{it} = guilt of individual i at instance t
W_{it} = Work-Interfering-With-Family of individual i at instance t
F_{it} = Family-Interfering-With-Work of individual i at instance t

> Level 1
>
> $Y_{it} = \pi_{0i} + \pi_{1i} W_{it} + \pi_{2i} F_{it} + e_{it}$

> Level 2
>
> $\pi_{0i} = B_{00} + r_{0i}$
>
> $\pi_{1i} = B_{10} + r_{1i}$
>
> $\pi_{2i} = B_{20} + r_{2i}$

HMLM Cross-Level Interaction Model (for Hypotheses 3–6, Not Including Control Variables)

Y_{it} = guilt of individual i at instance t
W_{it} = Work-Interfering-With-Family of individual i at instance t
F_{it} = Family-Interfering-With-Work of individual i at instance t
X_i = Traditional–Egalitarian sex role score of individual i
Q_i = gender of individual i

> Level 1
>
> $Y_{it} = \pi_{0i} + \pi_{1i} W_{it} + \pi_{2i} F_{it} + e_{it}$

> Level 2
>
> $\pi_{0i} = B_{00} + B_{01} X_i + B_{02} Q_i + B_{03} X_i Q_i + r_{0i}$
>
> $\pi_{1i} = B_{10} + B_{11} X_i + B_{12} Q_i + B_{13} X_i Q_i + r_{1i}$
>
> $\pi_{2i} = B_{20} + B_{21} X_i + B_{22} Q_i + B_{23} X_i Q_i + r_{2i}$

Note. For definitions of beta terms, see Table 4.