

# Gender and work–family conflict: Testing the rational model and the gender role expectations model in the Spanish cultural context

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Gutek, Searle, and Klepa (1991) proposed two models to explain the gender differences in work–family conflict: the rational model and the gender role expectations model. Both models have mostly been tested on American and Canadian samples, and have obtained partial support. Given the cultural differences between North American countries and Spain, we should question whether the two models are equally applicable to Spanish society or whether one of them captures Spanish men and women’s experience of work–family conflict better than the other. So, the aim of this study is to test which of the models better explains the gender differences in work–family conflict in the Spanish cultural context (or if, indeed, the two models apply equally well). Given the typical cultural dimensions of Spanish society, we expected to find greater support for the gender role expectations model than for the rational model. However, the results obtained in this study indicated that, while the rational model can explain the gender differences that were found, the gender role expectations model cannot capture Spanish people’s work–family conflict experiences. The results are interpreted in terms of cultural dimensions characteristic of the Spanish context.

**Keywords:** Gender; Work–family conflict; Rational model; Gender role expectations model; Spanish.

Gutek, Searle, et Klepa (1991) ont proposé deux modèles pour expliquer les différences de genre dans le conflit travail-famille : le modèle rationnel et le modèle des attentes liées au rôle de genre. Les deux modèles ont été vérifiés surtout auprès d’échantillons américains et canadiens. Les deux modèles ont été partiellement confirmés. Étant donné les différences culturelles entre les pays d’Amérique du Nord et l’Espagne, nous devons nous demander si les deux modèles sont également applicables à la société espagnole ou si l’un des deux arrive à mieux saisir l’expérience du conflit travail-famille des Espagnols et des Espagnoles. Alors, le but de cette étude est de vérifier lequel des deux modèles (ou si, en fait, les deux modèles) permet le mieux de comprendre les différences de genre dans le conflit travail-famille dans le contexte culturel espagnol. Étant donné les dimensions culturelles typiques de la société espagnole, nous nous attendions de trouver un support plus grand pour le modèle des attentes liées au rôle des genres que pour le modèle rationnel. Contrairement aux attentes, les résultats obtenus dans cette étude indiquent qu’alors que le modèle rationnel peut expliquer les différences de genre qui ont été trouvées, le modèle des attentes liées au rôle des genres ne peut rendre compte des expériences du conflit travail-famille des Espagnols. Les résultats sont interprétés en termes de dimensions culturelles qui sont caractéristiques du contexte espagnol.

Gutek, Searle, y Klepa (1991) propusieron dos modelos para explicar las diferencias de género en los conflictos laborales-familiares: el modelo racional y el modelo de las expectativas del rol de género. Ambos modelos han sido puestos a prueba mayormente en poblaciones estadounidenses y canadienses, donde se obtuvo

apoyo parcial para ambos modelos. Dadas las diferencias culturales entre los países norteamericanos y España, se cuestiona si ambos modelos son igualmente aplicables a la sociedad española o si uno de ellos logra captar mejor que el otro la experiencia de los hombres y las mujeres españolas en el conflicto laboral-familiar. En consecuencia, el propósito de esta investigación es poner a prueba cuál de los dos modelos (o si, efectivamente, ambos modelos) permiten dar una mejor explicación de las diferencias de género en el conflicto laboral-familiar en el contexto cultural español. Dada las dimensiones culturales típicas de la sociedad española, se espera encontrar mayor apoyo para el modelo de las expectativas del rol de género que para el modelo racional. Contrario a lo que se esperaba, los resultados de este estudio indicaron que el modelo racional puede explicar las diferencias de género, pero que el modelo de las expectativas del rol de género no logra captar las experiencias de los conflictos laborales-familiares de los españoles. Se interpretan los resultados sobre la base de las dimensiones culturales características del contexto español.

Most of the extensive empirical literature on work and family that can be found internationally has been conducted in predominantly “Anglo” countries such as the USA and Canada (Poelmans, 2003; Spector et al., 2004), so the prevailing models and theories in the area are mostly based on samples from North American culture (Shapiro & Hammer, 2004). Recent studies indicate that relations between work and family differ between countries and ethnic groups, as culture is affected by people’s meanings and experiences regarding work, family, gender, and work–family conflict (Blair-Loy & Frenkel, 2005; Shapiro & Hammer, 2004). As a result, the theoretical models and assumptions that are based on North American societies cannot suitably capture the experience of individuals in other cultures (Aryee, Luk, Leung, & Lo, 1999; Hill, Yang, Hawkins, & Ferris, 2004; Lu, Gilmour, Kao, & Huang, 2006).

A number of authors have pointed to the lack of empirical studies of work–family conflict in countries whose culture places the family highly as an institution, and in which women’s presence in the labor market is on the increase (Blair-Loy & Frenkel, 2005; Poelmans, 2001b). Spain is one such country, but very few studies have used Spanish subjects (Poelmans, 2001a). From this perspective, the aim of this study is to test which of the two models proposed by Gutek, Searle, & Klepa (1991)—the rational model and the gender role expectations model—enables one to better explain the gender differences in work–family conflict in the Spanish cultural context (or if, indeed, the models apply equally well). Studies using US and Canadian samples have given results that partially support the models’ assumptions (Bernas, 2003; Gutek et al., 1991; Higgins, Duxbury, & Lee, 1994; Long-Dilworth, 2004; McElwain, Korabik, & Rosin, 2005; Valtison, 1998; Wallace, 1999; Wharton & Blair-Loy, 2006).

### **THEORETICAL FRAMEWORK: WORK-FAMILY AND FAMILY-WORK CONFLICT**

Work–family conflict occurs when the demands or expectations associated with one domain are incompatible with the demands or expectations associated with the other (Greenhaus & Beutell, 1985). The more time and energy people spend on one role, the less they will have left for other roles, so one of the main factors causing work–family conflict is the lack of time available to meet the demands of work and family roles (Marks, 1977). Studies have distinguished two components of work–family conflict: when activities related to work interfere with family responsibilities (WIF) and when activities related to family interfere with work responsibilities (FIW) (Gutek et al., 1991). A significant amount of research has shown the negative consequences that result from work–family conflicts: difficulties in the development of paternal–maternal functions, depression, work stress, dissatisfaction with one’s job and family, less commitment to the organization and higher levels of absenteeism and job change, among others (Allen, Herst, Bruck, & Sutton, 2000; Frone, Russell, & Cooper, 1997; Spector et al., 2005).

The consideration of gender differences is particularly interesting for the analysis of work–family conflict, as work and the family have traditionally been gender-specific roles (McElwain et al., 2005). Studies suggest that some work–family conflict models function differently for men and for women, or that separate models may be applied. However, very few studies have focused on analyzing these models, and most studies limit their approach to verifying whether or not there are gender differences (McElwain et al., 2005; Parasuraman & Greenhaus, 2002). Furthermore, these studies have not been systematic and have obtained mixed results (Voydanoff, 2002). Obtaining support for some of the models that explain gender differences may provide a possible explanation for

the contradictory results found in work–family research.

In order to explain the gender differences in work–family conflicts, according to the amounts of time spent on work and family roles, two theoretical frameworks have been developed: the rational model and the gender role expectations model (Gutek et al., 1991). Given that the objective of this research study is to test which of the two models enables one to better explain the gender differences in work–family conflict in the Spanish cultural context (or if, indeed, the two models apply equally well), we have set out below the basic assumptions of the models and the predictions that they entail. Further, we have described the possible differences we expect to find in the degree of support that each model receives, given the cultural dimensions that characterize Spanish society.

### **Rational model**

In accordance with Gutek et al. (1991), the rational model proposes that people who spend more time on the work domain may experience a higher degree of WIF, whereas those who spend more time on the family domain may experience a higher degree of FIW. A significant number of studies have shown that the number of work hours per week is positively related to WIF (Byron, 2005; Frone, Yardley, & Marcel, 1997; Major, Klein, & Ehrhart, 2002; Nielson, Carlson, & Lankau, 2001) and that the number of hours per week spent on family-related or nonwork activities is positively related to FIW (Byron, 2005; Fu & Shaffer, 2001; Gutek et al., 1991). Therefore, taking the model's predictions as a frame of reference, the following hypotheses were set.

*Hypothesis 1:* The more time a person spends on the work domain, the greater degree of WIF he or she should experience. This should be confirmed for both genders: men and women.

*Hypothesis 2:* The more time a person spends on the family domain, the greater degree of FIW he or she should experience. This should be confirmed for both genders: men and women.

To explain gender differences in work–family conflict, the model assumes that there are gender differences in the time spent on each domain. Research has traditionally shown that men tend to spend more time on work than women (Cinamon & Rich, 2002; Duxbury, Lee, Higgins, & Mills, 1992; Martínez-Pérez & Osca, 2001; INE (Spanish National Statistical Institute), 2007). Furthermore,

women currently still spend far more hours on family activities than men, and more hours on work and family activities in total (Bianchi, Milkie, Sayer, & Robinson, 2000; Cinamon & Rich, 2002; Higgins et al., 1994; INE, 2007; Martínez-Pérez & Osca, 2001). So, in accordance with this model's assumptions, the following hypotheses were set.

*Hypothesis 3:* Men spend more time on work than women; consequently, men experience more WIF than women.

*Hypothesis 4:* Women spend more time on the family than men; consequently, women experience more FIW than men.

Despite the obvious difference between genders as regards the time spent on each domain, not all research has confirmed that the gender differences in WIF and FIW can be explained by the different amounts of time that men and women spend on their work and on their family. So, while some studies highlight that women experience more FIW than men, and that men experience more WIF than women, other studies have found quite the opposite (Byron, 2005; Cinamon & Rich, 2002; Eagle, Icenogle, Maes, & Miles, 1998; Frone et al., 1997; Gutek et al., 1991; Higgins et al., 1994; Hill, Hawkins, Martinson, & Ferris, 2003).

### **Gender role expectations model**

Gutek et al. (1991) proposed an alternative vision to the rational model to explain the contradictions found in studies on gender differences in work–family conflict. They argued that the expectations created by gender roles may influence the perceived level of conflict, either directly or as a moderator of the relationship between the time spent on each domain and the perceived degree of conflict. Given that women are more socialized to assume family responsibilities than men, they may be more sensitive to WIF. On the other hand, given that men are more socialized to assume work responsibilities, they may be more sensitive to FIW. So the hours spent on developing the role that has traditionally been assigned to the opposite gender have a greater psychological impact on the perception of work–family conflict than the hours spent on developing one's own gender role. Therefore, taking the model's assumptions as a frame of reference, the following hypotheses were set.

*Alternative Hypothesis 1:* The time spent on the work domain will influence women's WIF, but not in the case of men.

*Alternative Hypothesis 2:* The time spent on the family domain will influence men's FIW, but not in the case of women.

Likewise, according to the model, women would be expected to experience a higher degree of WIF than men, even when the number of hours spent on work was similar, and men would be expected to experience a higher degree of FIW than women, even when the number of hours spent on family activities was comparable between genders. The results obtained in various studies support the predictions for WIF in women (Gutek et al., 1991; Higgins et al., 1994; McElwain et al., 2005). So, in accordance with the model's assumptions, the following hypotheses were set.

*Alternative Hypothesis 3:* Women experience more WIF than men, even when both genders spend the same amount of time on the work domain.

*Alternative Hypothesis 4:* Men experience more FIW than women, even when both genders spend the same amount of time on the family domain.

Although the rational model has received greater support, the results from the reviewed studies also support the gender role expectations model, suggesting that the work-family conflict is more complex than the rational model predicts (Bernas, 2003; Gutek et al., 1991; Higgins et al., 1994; McElwain et al., 2005). So in spite of the fact that there appears to be a strong relationship between the amount of time spent on each domain and the work-family conflicts, women, at least, interpret the amount of time they spend and their perceptions of conflict according to their gender role expectations.

### **Cultural dimensions of Spanish society and expected differences in the degree of support that the models receive in Spanish workers**

One of the most relevant cultural dimensions of Spanish society, and one that differentiates it from other cultures (such as the North American culture), is the cultural model of family and work. Spain is characterized by a gender culture that leans toward strong family relationships and toward a low level of individualism (Duncan & Pfau-Effinger, 2000; Flaquer, 2004; Poelmans, 2001b). So, as certain studies have indicated, the family as an institution is very strong for both genders (De Luis, Martínez, Pérez, & Vela, 2004). Hofstede (1980) concludes that this importance placed on the family, as opposed to work, is typical of cultures in which collectivist values predominate

over individualist values. According to this research, Spain is effectively more collectivist than other countries such as the USA or Canada, which are more individualist. Individualist cultures generally place greater value on personal achievement through work than on the fulfillment of family obligations, as the former enables one to satisfy the needs for self-improvement and self-actualization that are so characteristic of these cultures (Lu et al., 2006; Shapiro & Hammer, 2004; Yang, Chen, Choi, & Zou, 2000). The work and family domains are perceived as completely different, separate, and independent spheres of life. More specifically, in the USA, this separation between the work and family domains has recently been outlined in the theory of Protestant relational ideology (Sánchez-Burks, 2005). Given this separation between the work and family domains, the needs of the self and of the family are seen as different, perceiving that the demands of the work and family domains compete for limited personal resources, such as time and energy. So it is perceived that the time spent on work prevents one from meeting family obligations, and that the time spent on family obligations makes it difficult to advance in the work arena (Lu et al., 2006).

However, in collectivist cultures the family is at the centre, whereby the prosperity and wellbeing of the family is the essential core that gives meaning to one's life and brings about personal happiness (Lu & Gilmour, 2004; Shapiro & Hammer, 2004). Work tends to be seen not as a means for improving oneself, but rather as a way of increasing the family's wellbeing (Lu et al., 2006; Yang et al., 2000). Given that people in these cultures are less prone to seeing work and the family as independent domains, work time is less likely to be seen as competing with family time (Lu et al., 2006). So, Yang et al. (2000) provide evidence that the relationship between work hours and work-family conflict may not be universal to all cultures, as in their study this relationship was less significant for the Chinese (more collectivist culture) than for the Americans (more individualist culture). Likewise, the study carried out by Spector et al. (2004) revealed that while there was a significant relationship between work hours and family and work stressors among the Anglo-American workers in individualist cultures (such as Canada, USA, Australia), this relationship was not significant among the Chinese workers and Latin American cultural groups that maintain collectivist values.

Given that Spain adheres more to collectivist values and to a cultural model that emphasizes family over work, whereby family is seen as the

central core of existence, we believe that it is reasonable to expect the explanatory capacity of the rational model in the Spanish context to be low. In other words, the gender differences in work–family conflict may not be explained according to the different amounts of time that men and women spend on work and on the family, as the family plays a central role for both genders and the time spent on work may mean time spent on fulfilling part of their family responsibilities. This means that, for both genders, the domains may not be competing for time. One study supporting this prediction is that carried out by De Luis et al. (2004) in the Spanish context, as when they analyzed the antecedents of work–family conflict, they found that the perception of the importance of family is a significant factor in work–family conflict for both genders, such that the more importance men and women place on the family, the less work–family conflict they will experience. From this perspective, we may assume that the characteristic meaning of family and work in Spanish culture may alter the expected effects (from the rational model’s perspective) of the time spent on both domains on the experience of the work–family conflicts.

Another major cultural dimension of Spanish society, and one that distinguishes it from other cultures, is the degree to which people participate in traditional gender roles. The traditional gender contract establishes that the central role of a woman in life is at the heart of the family, as wife, mother and homemaker, while the man mainly has the role of family breadwinner. So women tend to show a stronger identity with family roles, and men with the work role. Although the study carried out by Duncan and Pfau-Effinger (2000) suggests that Spain has started a transition from traditional gender roles toward other more egalitarian roles, the traditional gender contract is even stronger in Spain (Fernández-Cordón & Tobío, 2005). In fact, the incorporation of women in the labor market has only very recently started to be significant, and Spanish statistics indicate that these women still assume the bulk of family responsibilities (INE, 2007). The use of family-friendly policies could help to achieve greater equality between men and women, but the implementation of these policies in Spanish organizations is very low compared to other western countries (Chinchilla, Poelmans, & León, 2003; Molero, 2000).

However, in other cultures such as North American culture, due to the greater tradition of women participating in the labor market and to the greater implementation of family-friendly

policies, there are generally more egalitarian gender roles, and as a result, the family role forms part of a man’s identity, and the work role forms part of a woman’s identity, to a greater extent than in Spanish culture. So, in some studies one can find, for example, that women from cultures in which a more egalitarian gender ideology is fostered show greater attachment to work than women from cultures in which egalitarianism still has a long way to go, as is the case in Israel (Agassi, 1982; Lieblich, 1993).

In the Spanish context, the study carried out by De Luis et al. (2004) indicates that Spanish women who believe more in traditional gender roles experience a greater level of WIF, while this is not the case with men. On the other hand, married men with children perceive a greater level of FIW, while this is not the case with women. So we can see that the perception of traditional gender roles can be a significant factor in explaining work–family conflict among Spanish workers, and that this relationship appears to be in line with the assumptions made in the gender role expectations model: that is, that women experience more WIF and men experience more FIW. As a result, we believe it is reasonable to expect the gender role expectations model to explain the gender differences in WIF and in FIW in Spanish culture.

To sum up, given the typical cultural dimensions of Spanish society, we expect to find greater support for the gender role expectations model than for the rational model. For this reason, the following cultural hypothesis was set.

*Cultural Hypothesis 5:* The gender role expectations model will receive greater support than the rational model in the Spanish context.

## METHODOLOGY

### Participants

The initial study sample was made up of 336 workers (154 men and 182 women) from five jobs (teaching staff, administrative staff, librarians, janitors, and cleaning and dining hall staff) at a Spanish public university. Given the objectives of this study, those participants that met either one or both of the following criteria were selected from that initial sample: (a) that they were married or living with their partner, (b) that they had children living at home. So we selected participants who met only criterion (a); participants who met only criterion (b), and participants who met both criteria: (a) and (b). The final sample used in this

study was made up of 232 workers (114 men and 118 women).

Of the participants, 93.1% were married or living with their partner. The proportion of participants with children living at home was 70.03%. The workers' age ranged from 25 to 64 years, with an average of 38.85. The breakdown of workers according to level of education was as follows: with primary or basic education (the minimum level in the Spanish education system), 49; with secondary education, 52; with a diploma or intermediate undergraduate course, 37; and with a degree or higher undergraduate course, 94. The average amount of time spent on work within an ordinary working schedule was 37.6 hours per week both for men and women in the five levels of occupation.

### Variables and measurement instruments

Some of the variables considered in this study, such as gender, level of occupation, the presence of children living at home, the children's age and the number of children, as well as other personal details (marital status or living with a partner, age, and level of education), were obtained by means of a questionnaire that had been prepared for this study. Gender was understood as being the person's biological sex and was codified as dummy variable 0 for the men and 1 for the women.

The measuring instruments used to assess the main variables in this study—that is, the time spent on work and on the family, and work–family conflicts—were the same as those used by Gutek et al. (1991). The time spent on work and the family was operationalized as the number of hours per week dedicated to activities associated with paid employment and with the work that comes from the family. So the time spent on paid employment was assessed using two questions: one referring to the fixed hours for their ordinary working schedule, and the other referring to those activities outside the fixed hours for their ordinary working schedule. The time spent on the family was assessed using four questions referring to: (a) household chores, (b) household maintenance, (c) basic childcare, and (d) shopping.

The scale used by Gutek et al. (1991) to assess the WIF was the one developed by Kopelman, Greenhaus, and Connolly (1983); to assess the FIW, the scale that had been developed by Burley (1989) was used, with parallel items to the first. Of the eight original items on each scale, the authors selected four. A meta-analytical study of the

convergence between measures of WIF and FIW revealed that the items selected from these scales by Gutek et al. (1991) are the most widely used in studies, and are the ones that best distinguish the two dimensions of work–family conflict (Mesmer-Magnus & Viswesvaran, 2005). Moreover, in the Spanish context, the WIF scale of Kopelman et al. (1983) has been validated by Martínez-Pérez & Osca (2001). So in this study, we used the items of this validated scale, which are parallel to those used by Gutek et al. With regard to the FIW scale, a translation and adaptation of the items used by Gutek et al. was applied. The alpha coefficients obtained in our sample were 0.81 for the WIF scale and 0.77 for the FIW scale. There were seven-point response options for both scales, from very much disagree (1) to very much agree (7). An example of an item from the WIF scale is: “My work takes time away from the time I should be spending with my family and friends.” An example of an item from the FIW scale is: “The things I have to do at home often make me tired at work.”

### Procedure

The questionnaires were handed out in a range of faculties, covering different subjects and fields (such as sciences, humanities, and arts). These were administered individually to each worker. Participation was voluntary and anonymous. After their collaboration was requested, the workers were given the questionnaire and, although it had specific instructions attached, the correct way to complete the survey was explained. Of the 520 questionnaires that were handed out, 336 were returned. The number of questionnaires that was finally used in the study, after removing the participants who did not meet the two set criteria, was 232.

## RESULTS

### Preliminary analyses

The SPSS 15.0 and LISREL 8.3 statistical packages were used to analyze the data. Before testing the hypotheses, the correlations between the central variables were calculated. These correlations are given in Table 1.

In order to test whether there were significant differences in the central variables of study, a mean difference analysis was carried out (Student's *t*-test). The results are given in Table 2.

**TABLE 1**  
Intercorrelations between the variables considered in the study ( $N = 232$ )

|                             | 1       | 2       | 3       | 4       | 5       | 6      | 7      |
|-----------------------------|---------|---------|---------|---------|---------|--------|--------|
| 1. Gender <sup>a</sup>      | –       |         |         |         |         |        |        |
| 2. Age                      | –.046   | –       |         |         |         |        |        |
| 3. Education                | –.004   | –.198** | –       |         |         |        |        |
| 4. Jobs levels <sup>b</sup> | .093    | .142*   | .715**  | –       |         |        |        |
| 5. Work time                | –.182** | –.101   | .194**  | –.251** | –       |        |        |
| 6. Family time              | .362**  | –.009   | –.203** | .302**  | –.219** | –      |        |
| 7. WIF                      | .108    | –.111   | .180**  | –.176** | .297**  | .108   | –      |
| 8. FIW                      | .151*   | –.118   | .011    | .018    | .046    | .280** | .272** |

<sup>a</sup>Point biserial correlation coefficient; <sup>b</sup>Spearman correlation coefficient. \* $p < .05$ ; \*\* $p < .01$ .

**TABLE 2**  
Descriptive statistics and mean difference in the central variables

|                      | Mean   | SD     | <i>t</i> | <i>p</i> |
|----------------------|--------|--------|----------|----------|
| WIF                  | 3.792  | 1.398  | 15.549   | .001     |
| FIW                  | 2.217  | 1.131  |          |          |
| Work time            | 42.12  | 9.10   | 3.041    | .003     |
| Family time          | 36.25  | 26.03  |          |          |
| Work time of women   | 40.496 | 8.114  | 2.809    | .005     |
| Work time of men     | 43.803 | 9.766  |          |          |
| Family time of women | 45.487 | 28.455 | –5.886   | .001     |
| Family time of men   | 26.693 | 19.107 |          |          |

## Primary analyses

According to Hypotheses 1 and 2, the amount of time spent on work or on the family should produce significant differences in WIF and in FIW, respectively. According to Alternative Hypotheses 1 and 2, gender, or the interaction of gender with work time and with family time, should produce significant differences in WIF and FIW, respectively. In order to test these hypotheses, two steps hierarchical regression analyses were carried out, one for each conflict. In a first step, we included age, level of job, and level of education, to control their influences on the dependent variables. In a second step, we included the time spent on work, the time spent on the family, and gender. In a third step, we included the interactions between gender and the time spent on work, between gender and the time spent on the family, and between gender, the time spent on work and the time spent on the family. The variables were centered before introducing the interactions.

The results obtained in relation to Hypothesis 1 and Alternative Hypothesis 1 indicated that when the main effects are considered (Step 2), the time spent on work and the time spent on the family predict WIF. Neither gender nor the interaction of

gender with work time was significant. Nevertheless, although it was not predicted or hypothesized, the interaction between gender and the time spent on the family predicts WIF (see Table 3). The amount of time that women spend on the family affects their experience of WIF.

Regarding Hypothesis 2 and Alternative Hypothesis 2, the results show that there were only significant main effects, so that the time spent on the family was the only predictor of FIW (see Table 3).

Consequently, we may affirm that the results obtained support Hypotheses 1 and 2 of the rational model, while the alternative hypotheses of the gender role expectations model obtained no support.

In accordance with Hypotheses 3 and 4, we would expect the effect of gender on WIF and on FIW to be mediated by the time spent on work and by the time spent on the family, respectively. Men should experience more WIF than women, and women should experience more FIW than men. According to Alternative Hypotheses 3 and 4, we would not expect to see mediating effects of the time spent on both domains, but we would expect to see direct effects of gender on WIF and FIW. Women should experience more WIF than men, and men should experience more FIW than women.

In order to test these hypotheses, regression models were applied with one and two simultaneous equations, following the criteria proposed by Baron and Kenny (1986) to determine the presence of mediating variables. To this end, two models were established for each type of conflict, in which the effects of the age, level of job, and level of education were controlled. To do so, before applying the models, those effects were removed by calculating the partial correlations. In the first model (Model 1), only the degree of gender's relationship with WIF, on one hand, and with FIW on the other, were considered, so simple

**TABLE 3**  
Coefficients of the step-hierarchical regression to WIF and FIW ( $N = 232$ )

|  | Variable                    | WIF   |      |         | FIW   |      |         |
|--|-----------------------------|-------|------|---------|-------|------|---------|
|  |                             | B     | SE B | $\beta$ | B     | SE B | $\beta$ |
| Step 1   | Age                         | -.014 | .011 | -.078   | -.017 | .009 | -.121   |
|  | Job level                   | -.107 | .102 | -.097   | .047  | .084 | .053    |
|  | Education                   | .101  | .100 | .094    | .022  | .082 | .026    |
| Step 2   | Age                         | -.008 | .011 | -.043   | -.013 | .009 | -.095   |
|  | Job level                   | -.116 | .099 | -.106   | -.027 | .083 | -.030   |
|  | Education                   | .077  | .095 | .072    | .008  | .079 | .009    |
|  | Work time                   | .048  | .010 | .312**  | .013  | .008 | .102    |
|  | Family time                 | .010  | .004 | .184**  | .013  | .003 | .289**  |
| Step 3   | Gender                      | .294  | .185 | .105    | .145  | .155 | .064    |
|  | Age                         | -.010 | .011 | -.057   | -.014 | .009 | -.097   |
|  | Job level                   | -.098 | .094 | -.089   | -.039 | .086 | -.044   |
|  | Education                   | .138  | .099 | .129    | .010  | .081 | .011    |
|  | Work time                   | .042  | .011 | .273**  | .009  | .009 | .072    |
|  | Family time                 | .005  | .004 | .085    | .013  | .003 | .292**  |
|  | Gender                      | .401  | .182 | .144*   | .161  | .158 | .071    |
|  | Gender $\times$ work time   | -.011 | .010 | -.070   | -.004 | .009 | -.033   |
|  | Gender $\times$ family time | .015  | .004 | .258**  | .001  | .003 | .023    |
| Gender $\times$ work time $\times$ family time | .000                        | .000  | .045 | .000    | .000  | .053 |         |

WIF:  $R^2 = .043$  for Step 1;  $\Delta R^2 = .117$  for Step 2;  $p = .001$ ;  $\Delta R^2 = .063$  for Step 3;  $p = .001$ . FIW:  $R^2 = .015$  for Step 1;  $\Delta R^2 = .091$  for Step 2;  $p = .001$ ;  $\Delta R^2 = .004$  for Step 3;  $p = .817$ . \*\* $p < .01$ ; \* $p < .05$ .

regression equations were established. In the second model (Model 2), we also analyzed the degree of relationship between gender and WIF or between gender and FIW, but on this occasion we took account of the mediating effect of the time spent on work and the time spent on the family, respectively. In this way, regression models were established with two simultaneous equations.

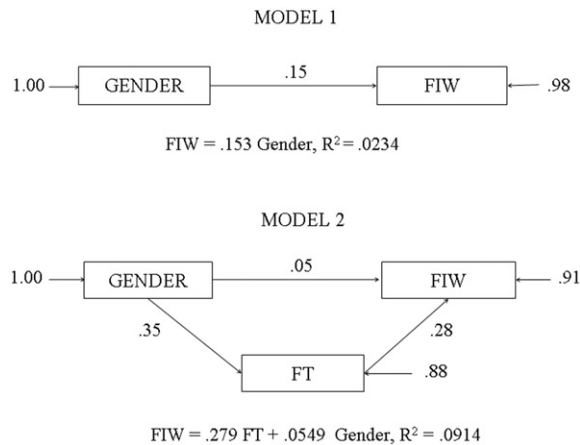
According to Hypotheses 3 and 4, in Model 1, gender should relate to both types of conflict, such that men would experience a greater level of WIF than women, and women would experience a greater level of FIW than men. However, in Model 2, when the mediating effects of the time spent on work or on the family are taken into account, the direct relationship between gender and WIF and between gender and FIW should not be significant. This should be the case as the rational model suggests that the relationship between gender and conflict is due to the effect of the different amounts of time that men and women spend on work and on the family. This means that the amounts of time spent on both domains by each gender must explain the gender differences in WIF and FIW. Thus, in Model 2, gender should relate to the amount of time spent on work and/or to the time spent on the family, such that men would spend more time on work than women, and women would spend more time on the family. Lastly, there should also be a

positive relationship between the amount of time spent on work and WIF, and between the amount of time spent on the family and FIW.

According to Alternative Hypotheses 3 and 4, gender should relate to both types of conflict, such that women would experience a greater level of WIF than men, and men would experience a greater level of FIW than women, both when only the relationship between gender and the two conflicts is analyzed (Model 1) and when the mediating effects of the time spent on work and/or the family are considered in that relationship (Model 2). This should be the case as the gender role expectations model suggests that the relationship between gender and conflict is not due to the effect of the different amounts of time that men and women spend on each domain, but rather to gender role expectations.

The results obtained for WIF indicated that there was no relationship between gender and WIF ( $\beta = 0.119$ ;  $p = .070$ ) in Model 1. However, when, in Model 2, the mediating effect of the time spent on work was considered, the relationship between gender and WIF emerges as significant ( $\beta = 0.167$ ;  $p = .009$ ), such that women experience more WIF than men. Likewise, a relationship was found between gender and the time spent on work (the men spend more time than the women) ( $\beta = -0.169$ ;  $p < .009$ ), and between the latter and WIF ( $\beta = 0.284$ ;  $p < .001$ ) (see Figure 1).





**Figure 1.** Relationship between gender and FIW (Model 1), and between gender and FIW, taking account of mediating effects of time spent on the family (FT: family time) (Model 2).

The nonexistence of gender differences in WIF obtained in Model 1 does not offer any support for either of the models. Nevertheless, when the time spent on work is considered in Model 2, the results support both models, as significant gender differences are found in WIF (support for the gender role expectations model) at the same time as significant effects of gender are found on the time spent on work and of the latter on WIF (support for the rational model). Given that the results obtained for Hypothesis 1 indicate that, apart from the time spent on work, the time spent on the family predicts women's experience of WIF (see Table 3), the gender differences obtained may be due to the fact that the time spent on the family was not considered. Given that the rational model proposes that the amount of time spent on the domains is the main factor determining the experience of work–family conflict, it becomes necessary to check whether the gender differences disappear when the time spent on both domains is considered. So Model 2 was once again put to the test, but this time taking account not only of the mediating effect of the time spent on work, but also of the mediating effect of the time spent on the family (Model 2.2; see Figure 1). This time, the results indicated that there was no relationship between gender and WIF ( $\beta = 0.105$ ;  $p = .118$ ). However, gender had a negative and significant relationship with the time spent on work (such that men spend more time on this domain) ( $\beta = -0.169$ ;  $p = .009$ ) and the time spent on work had a positive relationship with WIF ( $\beta = 0.302$ ;  $p < .01$ ). Similarly, gender had a positive and significant relationship with the time spent on the family (such that women spend more time on this domain) ( $\beta = 0.352$ ;  $p < .01$ ) and the

time spent on the family had a positive relationship with WIF ( $\beta = 0.185$ ;  $p = .005$ ).

In short, although the results are not strictly in line with Hypothesis 3, they do suggest that, in keeping with the fundamental assumption of the rational model, the time spent on the work and family domains determines the experience of WIF. In this way, we may conclude that the gender role expectations model does not obtain any support for Alternative Hypothesis 3, as in that case, the results of this analysis should have indicated gender differences, despite having considered the time spent on both domains.

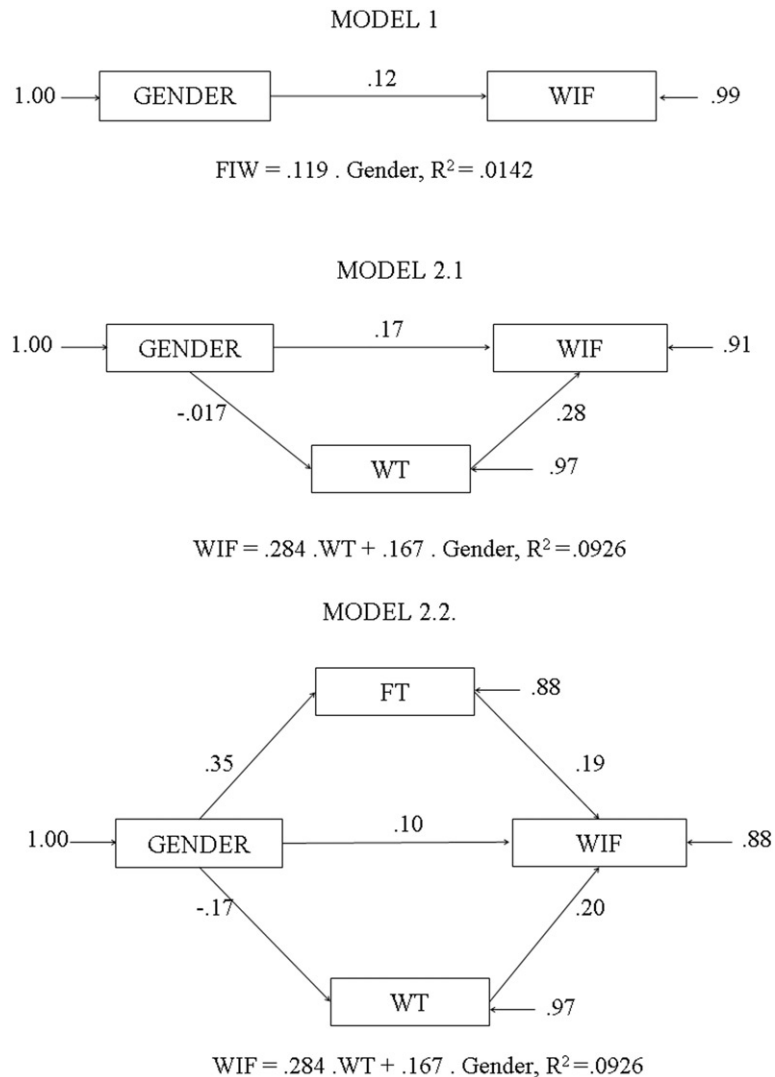
The results obtained for FIW revealed the existence of a relationship between gender and FIW in Model 1 ( $\beta = 0.153$ ;  $p = .019$ ). Women experience a higher degree of FIW. Likewise, the results of Model 2 indicated that, when the mediating effects of the time spent on the family are considered, the direct relationship between gender and FIW ceased to be significant ( $\beta = 0.0549$ ;  $p = .414$ ). Gender had a significant relationship with the time spent on the family ( $\beta = 0.352$ ;  $p < .001$ ) and the latter with FIW ( $\beta = 0.279$ ;  $p < .001$ ). Women spend more time on the family than men, and the more time spent on the family, the greater is the experience of FIW. The results reveal that the relationship between gender and FIW is due to the mediating effect of the time spent on the family (see Figure 2). So we can say that the results support Hypothesis 4 of the rational model.

Lastly, it is worth considering the percentage of variance explained by the established models. To this effect, the results indicated that the  $R^2$  obtained for WIF in Model 1 was .0142, in Model 2 it was .0926, and in Model 2.2 it was .131. The  $R^2$  for FIW was .0234 in Model 1 and .0914 in Model 2. To test whether the increment in variance explained by Model 2, with regard to Model 1, in both conflicts was significant, a general  $F$  test for an increment was carried out, as indicated by Cohen and Cohen (1983). The results indicated that the percentage of variance explained by Model 2 was indeed significantly higher than in Model 1, both for FIW:  $F(1, 228) = 8.53$ ,  $p = .004$ , and for WIF:  $F(1, 228) = 9.85$ ;  $p = .002$  (Model 2 – Model 1) and  $F(2, 227) = 10.17$ ;  $p < .001$  (Model 2.2 – Model 1).

## DISCUSSION AND CONCLUSIONS

### Gender and work–family conflict

The general objective of this study was to test the rational model and the gender role expectations



**Figure 2.** Relationships between gender and WIF (Model 1); between gender and WIF, taking account of mediating effects of time spent on work (WT: work time) (Model 2.1); and between gender and WIF, taking account of mediating effects of time spent on work and on the family (Model 2.2).

model in a sample of Spanish working men and women, in order to test which of two models better explains gender differences in work–family conflicts (WIF and FIW). The results support the rational model: The time spent on work predicts WIF (Hypothesis 1) and the time spent on family predicts FIW (Hypothesis 2). These results are consistent with those obtained in other studies (Byron, 2005; Fu & Shaffer, 2001; Gutek et al., 1991).

Seeing as the interactions between gender and the time spent on work in the case of WIF, and between gender and the time spent on family in the case of FIW, were not significant, the Alternative Hypotheses 1 and 2 of the gender role expectations model were not supported. However, the

interaction between gender and the time spent on the family predicted differences in WIF, such that in the case of women, the time spent on family predicts a greater level of WIF than in men. We believe that this effect may be due to the fact that the women in our study are subjected to major time demands in order to meet their family responsibilities (mean: 45.487), when they already spend a lot of time on work (mean: 40.496). So it is more likely that, as family time increases, they will experience more WIF, as they have more family activities that work can prevent them from carrying out.

With regard to Hypothesis 3 and Alternative Hypothesis 3, at first the results revealed that there were no gender differences in WIF. However,

when the time spent on work was considered, gender differences emerged, indicating that women experience a greater degree of WIF. These differences later disappeared when the time spent on both domains was taken into account (time spent on work and on the family). These results suggest that although men spend more time on work than women, there are no gender differences in WIF, because the time spent on the family influences the degree to which women experience that conflict. Given that women spend more time on the family than men, it is reasonable that there are no gender differences. These results are not entirely consistent with the predictions established in the rational model, as the model does not predict that the time spent on the family would affect WIF. Nevertheless, in keeping with this model, they do suggest that the amount of time spent on the roles may be a crucial factor in explaining both genders' experience of WIF, over and above the gender role expectations. These results contradict those obtained in studies with North American samples (Gutek et al., 1991; McElwain et al., 2005), which have found that the gender role expectations do have a significant effect on women's experience of WIF.

With regard to Hypothesis 4 and Alternative Hypothesis 4, the results indicated the existence of gender differences in FIW, such that women experience this conflict to a greater extent than men. Nevertheless, when the time spent on family was considered, the gender differences disappeared. Consequently, and in keeping with Hypothesis 4 of the rational model, the results suggest that the gender differences in FIW are due to the greater amount of time that women spend on the family, compared with men. These results differ from those obtained in studies with North American samples (Gutek et al., 1991; McElwain et al., 2005), in which gender differences in FIW have not been found, despite the fact that women spend more time on the family. It is worth pointing out that the amount of time that the women in those studies spend on the family is significantly less than the amount of time spent by the women in this study.

### **CULTURE AND WORK-FAMILY CONFLICT**

Given the cultural dimensions that characterize Spanish society, we expected to find greater support for the gender role expectations model than for the rational model. However, the results mostly support the hypotheses of the rational

model. Likewise, the analysis of the tested models' coefficient of determination indicated that the variance of both types of conflict is better explained when the mediating effects of the time spent on each domain are considered in the relationship between gender and WIF, and FIW. Thus it may be said that, in the Spanish context, the time spent on work and the time spent on family appear to emerge as essential factors in explaining work-family conflict according to gender, while the gender role expectations appear to have no effect.

These results are partially consistent with those obtained in studies using North American samples (e.g. Bernas, 2003; Gutek et al., 1991; Higgins et al., 1994; McElwain et al., 2005; Valtison, 1998; Wallace, 1999; Wharton & Blair-Loy, 2006), as the North American samples obtained support for both models, highlighting that, even though time is a crucial factor, the gender role expectations may play an important part in the experience of work-family conflict, at least in the case of women.

In the light of these results, it is worth asking: If the ideology of the traditional gender role is more deep-rooted in Spanish culture than in North American cultures, why do gender role expectations not enable Spanish women's experience of WIF to be explained? In the introduction to this work, we assume that the characteristic meaning of family and work in Spanish culture may alter the expected effects of the time spent on both domains from the perspective of rational model. Since the results do not seem to support this assumption, we believe it is possible to propose that the socio-cultural model that emphasizes family for both genders, which is typical of Spanish culture, may alter the predicted effects by the gender role expectations model, rather than the effects predicted by the rational model. Given that, in those cultures that share this notion of family, both domains may be perceived as a single whole, i.e. the development of the work role may be perceived to form part of the family responsibilities (Lu & Gilmour, 2004; Lu et al., 2006; Yang et al., 2000), it is possible that Spanish women perceive that the development of the work role forms part of their family responsibilities. Seeing as the gender role expectations establish that the family role is a priority for women, Spanish women may not perceive any inconsistency between the development of the work role and the directions of the gender role expectations.

From this perspective, gender role expectations may explain North American women's experience of WIF, due to the fact that, in these cultures, work and family may be perceived as different and

independent domains (Sanchez-Burks, 2005), where there is competition between the two domains (Lu et al., 2006). So it is possible that these women indeed perceive an inconsistency between the development of the work role and the directions of the gender role expectations, since they may perceive that the development of the work role prevents them from fulfilling their family responsibilities.

In short, we may conclude that it is possible that gender role expectations do not explain Spanish women's experience of WIF, due to the fact that the meaning of family and work in this culture appears to be consistent with the expectations that the gender role prescribes for them. Our results support the suggestion put forward by Valtison (1998) that the gender roles that moderate the relationship between the time spent on both domains and work-family conflict may not be generalizable from one culture to another. In the case of Spain, the greater importance placed on the family may alter or modify the effects prescribed by gender role expectations regarding the perception of work-family conflict.

Furthermore, and contrary to the results obtained in North American studies, the results obtained in this study suggest that the time spent on the family is an essential factor in terms of explaining Spanish women's experience of WIF and FIW. Therefore, it may be said that the sociocultural model that emphasizes family, which is typical of Spanish culture, does not appear to alter the expected effects predicted by the rational model respect the time spent on the work and family domains. We believe that these differences between cultures may be a result of the fact that North American women spend less time on the family than Spanish women. In accordance with the authors of some North American studies, for example, Gutek et al. (1991), the relatively small amount of time that American women spend on the family, compared with the amount of time they spend on work, may be due to it being easier to reduce the number of hours spent on the family and the fact that family demands can be perceived with greater flexibility than the strict and limiting hours and demands of work. Then, the key question is: Why can't Spanish women maintain or introduce a certain level of flexibility in the amount of time they spend on the family, despite the great deal of time they already spend on work?

The division of work according to gender and the low implementation of family-friendly policies, which are characteristic of Spanish society, may be key factors in explaining this phenomenon. In the Spanish context, the increased participation of

women in the labor market has come about fairly recently in comparison with American society. So while in Spain the division of paid work and family work is still largely consistent with traditional gender roles, American society has been experiencing a more egalitarian division of work to a greater extent for over a decade now. In keeping with that, while some Spanish studies indicate that the differences between men and women in the amount of time spent on the family are extreme (INE, 2007), some North American (USA and Canada) studies indicate that these differences are being reduced, as women are spending less time than before on the family and men are spending more time on this domain (e.g., Bianchi et al., 2000; Higgins et al., 1994). Furthermore, the more widespread tradition of family-friendly, gender equality policies and organizational practices in American society may contribute to reducing the amount of time that is spent on work and on the family, compared with Spanish society, which has only recently started to advance in this direction (Chinchilla et al., 2003; Molero, 2000). In this way, the causes of the problems that Spanish women find in reconciling work and family do not lie only in the unequal division of family responsibilities between spouses, but also in the mismatch between work hours and school hours, in the lack of nurseries with reasonable fees and opening hours, and in the way time is organized within the working day—typically a split working day that is excessively long, involving a break for lunch, and which prevents one from returning home until after 7 p.m. (Meil, García, Luque, & Ayuso, 2007). Consequently, we believe that these cultural dimensions represent significant obstacles to reducing and/or introducing a level of flexibility, and matching family and work demands of Spanish women, and to fulfilling the obligations derived from both domains.

#### LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Although we believe that our study contributes to the empirical literature on work-family conflict, there are methodological limitations that must be taken into account when interpreting the results. Although the sample size comes within the generally acceptable limits (Cohen, 1988), a larger sample size might offer significant interaction effects that were not obtained in this study. Likewise, the fact that the sample is made up of workers from the same organization and that all the workers work full-time and have a relatively

high level of education makes it clear that this sample has particular characteristics. Therefore, the consequences implied by these results must be limited to the population the analyzed sample represents.

The fact that the study has not assessed the key cultural dimensions to which the results are related is another significant limitation to bear in mind, and which should be rectified in future research studies. Lastly, our study is of a cross-sectional, correlational and self-reporting nature; these are also limiting factors.

Nonetheless, this research study has extended the existing literature in several ways. The current study offers data about how both models behave in a culture other than North American culture. Furthermore, despite the fact that, since the publication of the Gutek et al. (1991) study, a considerable number of studies have obtained a certain level of proof in favor of one model or the other, none of them have been aimed at analyzing the two models, testing the specific hypotheses that derive from said models. Likewise, the study reduces the existing void in studies analyzing work–family conflicts in Spain. Lastly, as Gelfand & Knight (2005) point out, the modern global economy requires us to know how work–family relationships operate within and between cultures. In this sense, perhaps our study's most important contribution has been to test not which of the models is more applicable to Spanish culture, but rather the practical consequences that this entails for governmental institutions and other organizations. Recognition of the importance of cultural gender, work, and family models in forming people's attitudes and actions related to these topics plays a role in the construction of policies aimed at improving the work–family balance. Managers of multicultural and transnational organizations could be more effective if they knew about different cultural beliefs and assumptions regarding the family and work, as the policies that have been set up to reduce work–family stress and have been effective in American society may not be so effective in a different culture, such as Spain.

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