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## Work–Family and Family–Work Conflict: Does Intrinsic–Extrinsic Satisfaction Mediate the Prediction of General Job Satisfaction?

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#### ABSTRACT.

The objective of this study is to analyze the mediating role of intrinsic and extrinsic job satisfaction in the relationship between the 2 dimensions of work–family conflict—family interfering with work (FIW) and work interfering with family (WIF)—and general job satisfaction. Step-by-step hierarchical regression analyses were carried out on a sample of 151 men and women from a Spanish public organization. The results confirmed the mediating role of intrinsic job satisfaction in the case of FIW. This highlights the importance of taking into account the level of satisfaction with the intrinsic facets of one's job as a measure for understanding why FIW has a negative impact on general job satisfaction.

**Keywords**: family–work conflict, general job satisfaction, satisfaction with the extrinsic facets, satisfaction with the intrinsic facets of the job, Spain, work–family conflict

Address correspondence to Antonia Calvo-Salguero, Department of Social Psychology, University of Granada, Campus de Cartuja, s/n, 18071 Granada, Spain; acalvo@ugr.es (email). Work and family are two of the most central and significant roles of adulthood. Both roles are important, given the amount of time they occupy in and the impact that they have on people's lives (Butler, Grzywacz, Bass, & Linney, 2005). That is why it is hardly surprising that there is so much research focused on exploring the interface between work and family, to study the reciprocal influence that each domain has over the other, and to better understand how that interface produces significant outcomes in different spheres of life (Adams, King, & King, 1996; Frone, Yardley, & Markel, 1997).

Most of this research has mainly dealt with analyzing the work–family conflict (Butler, Grzywacz, Bass, & Linney, 2005). Work–family conflict occurs when the demands or expectations associated with one domain are incompatible with the demands or expectations associated with the other domain (Greenhaus & Beutell, 1985). Existing studies have distinguished two dimensions of work–family conflict: when activities related to work interfere with family responsibilities (WIF) and when activities related to the family interfere with work responsibilities (FIW; Gutek, Searle, & Klepa, 1991).

A significant amount of research has shown the negative consequences and problems that result from work–family conflicts, not only for the people them- selves but for business and society as a whole. Studies have pointed out certain difficulties in the development of paternal–maternal functions, anxiety, dissatisfaction, depression, stress at work, and a whole range of psychosomatic problems (Allen, Herat, Bruck, & Sutton, 2000; Frone et al., 1997; Spector et al., 2005). Furthermore, the experience of conflict gives rise to dissatisfaction with one's job, lower productivity, less commitment to the organization and higher levels of absenteeism and job change (Bruck, Allen, & Spector, 2002; Hammer, Bauer, & Gradey, 2003; Kossek & Ozeki, 1999).

Recently, researchers have begun to take an interest in the factors that favor a balance and facilitate integration between the work–family domains, as well as their positive consequences (e.g., Grzywacz & Bass, 2003). This balance and integration is hard to achieve, as a human being's time and energy limitations make it difficult to cover the demands of both domains (work and family). Nevertheless, as Hyde and Weathington (2006) suggest, work and family can be structured in organizations such that one domain supports another, through the use of programs that offer employees assistance, flexible hours, or decent planning and organization. From this point of view, organizations can play a fundamental role when it

comes to facilitating a balance and reducing work–family conflicts and the negative consequences that these entail for their employees. To do so, we need to know how the work–family conflicts relate and affect work attitudes and behavior. From this perspective, the objective of this study is to analyze the mediating role of intrinsic and extrinsic job satisfaction in the relationship between the two dimensions of work–family conflict: family–work conflict (FIW) and work–family conflict (WIF), and general job satisfaction.

#### **Job Satisfaction**

Job satisfaction is a positive or negative emotional state resulting from the appraisal of one's job and job experiences (Locke, 1976). It represents the degree of employees' well-being and predicts negative attitudes and behavior in the work context, such as absenteeism, external turnover, and reduced productivity (Spector, 1997). Given the negative consequences that may come with a low level of job satisfaction, an analysis of the factors that determine this level of satisfaction is of great interest to managers and directors in an organizational context, as such an analysis can facilitate and improve the creation of programs that are designed to increase job satisfaction and, as a result, reduce negative work behavior. Among others, the job's characteristics and people's personal preferences for certain aspects of the job have been identified as factors that may predict the level of satisfaction (Hackman & Oldham, 1975; Spector, 1997). However, due to high prevalence among employees, one of the factors that is currently arousing substantial interest in researchers and professionals is work–family conflict (Williams, 2004).

#### WIF and FIW and Job Satisfaction

Role theory suggests that work–family conflict has a negative relationship with job satisfaction, such that an increase in work–family conflict reduces the level of satisfaction (Frone, Russell, & Cooper, 1992; Kopelman, Greenhaus, & Connolly, 1983). From the role stress perspective, work–family conflict represents the incompatibility between the demands and expectations of two roles, leading to tension, worry, and fatigue (Kanh, Wolfe, Quinn, Snoek, & Rosenthal, 1964). The role stressors create a negative mood that leads to negative attitudes (Beehr & Glazer, 2005). Although there is agreement in the empirical literature to the effect that work–family conflict is related to job satisfaction (e.g., Bruck, Allen, & Spector, 2002; Kossek & Ozeki, 1998), a range of factors exist that make this a controversial or debatable relationship (Grandey, Cordeiro, & Crouter, 2005). So, for example, there is no

agreement among researchers on how the two dimensions of work–family conflict are related to job satisfaction.

The resulting debate has thrown up a wide range of theoretical proposals that, to some \_extent, contradict each other. In this way, Grandey, Cordeiro, and Crouter (2005) argue that WIF (more than FIW) should have a negative relationship with job satisfaction, whereas FIW could have a negative effect on the level of satisfaction with one's family. However, other researchers, such as Frone, Yardley, and Markel (1997), to name but a few, argue that FIW (more than WIF) should have a direct effect on job satisfaction, whereas WIF could have a direct effect on satisfaction with one's family, and merely an indirect effect on job satisfaction through FIW. Both theoretical arguments have obtained empirical support. Thus, a large number of studies suggest that WIF relates to work results and that FIW relates to family results, supporting the idea that conflict in one domain does not affect the results in the other domain (e.g., Adams, King, & King, 1996; Judge, Boudreau, & Bretz, 1994; Netemeyer, Boles, & McMurrian, 1996; O'Driscoll, Ilgen, & Hildreth, 1992). However, the results of other studies suggest a less restrictive pattern, in which both work-family conflicts relate to work results (e.g., Bruck, Allen, & Spector, 2002; Carlson, Kacmar, & Williams, 2000; Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997; Parasuraman, Purohit, Godshalk, & Beutell, 1996). More specifically, Kossek and Ozeki (1998), after a meta-analytical study review, found that job satisfaction shows a mean correlation of .31 with (global) work-family conflict, .27 with WIF, and .18 with FIW, supporting the argument that both work-family conflicts related to job outcomes. However, the authors point out that the nature and strength of the relationship varies greatly from study to study, revealing inconsistent results.

Different research projects suggest that the inconsistency and variability of the results between studies may be due to a range of different limitations and problems (Allen, Herst, Bruck, & Sutton, 2000; Bruck, Allen, & Spector, 2002; Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Kossek & Ozeki, 1998; Lapierre et al., 2008; Mesmer-Magnus & Viswesvaran, 2005). One of the most significant limitations is that most researchers still use a global measure of work–family conflict, without considering its multidimensional nature (Casper et al., 2007; Mesmer-Magnus & Viswesvaran, 2005). Due to the fact that researchers have not considered these two dimensions, we still have little knowledge about how each dimension relates to job satisfaction (Bruck et al., 2002; Lamber, Hogan, & Barton, 2002).

Another important limitation that has been revealed in these studies is the lack of consideration given to the role that other variables may play in that relationship. They have shown that few researchers have attempted to explain the mixed results between work–family conflict and job satisfaction by analyzing the influence of mediating variables, despite the fact that results from existing studies suggest that other unidentified variables may be involved (Allen, Herst, Bruck, & Sutton, 2000; Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Kossek & Ozeki, 1998; Mesmer-Magnus & Viswesvaran, 2005).

We carried out this research project in an attempt to reduce the void in studies analyzing the mediating role that other variables may have in the relationship between both dimensions of work–family conflict (WIF and FIW) and general job satisfaction. So this study's objective is to analyze the mediating role of satisfaction with both the intrinsic and extrinsic facets of one's job in the relationship between WIF and FIW and general job satisfaction. To do so, in the following paragraphs we will discuss the relationship between the level of satisfaction with specific facets of one's job and general job satisfaction as well as the relationship between WIF and FIW and the level of satisfaction with specific facets of one's job.

#### Intrinsic, Extrinsic, and General Job Satisfaction

In existing literature about occupational satisfaction, two different approaches have been established: the approach dealing with specific facets of the job, and the general or global approach (Spector, 1997). This distinction is important, as researchers have pointed out that the two approaches reflect different concepts and that each one is useful, depending on how it is to be used (Rothausen, 1994; Scarpello & Campbell, 1983).

The specific satisfactions refer to a person's attitude to certain characteristics or facets of their job. One distinction that is usually established with regard to the level of satisfaction with specific facets is that which differentiates between the level of satisfaction with the intrinsic aspects and the level of satisfaction with the extrinsic aspects of the job. Intrinsic satisfaction has its origins in the characteristics of the job itself (for example, its content, autonomy, responsibility, achievement, variety, interesting work), whereas extrinsic satisfaction derives from the context in which the job is performed (e.g., the salary, company policies, job security, relationships with coworkers and supervisors) (Herzberg, Mausner, & Snyderman, 1959).

Different researchers, such as Wernimont (1972), have indicated that, bearing in mind the theoretical definition of both types of specific satisfaction, they clearly refer to different types of variables. In accordance with all this, different research studies have verified that the distinction between intrinsic and extrinsic factors is both important and useful (e.g., Brough & Frame, 2004; Churchill, Ford, & Walter, 1974; Saari & Judge, 2004). Likewise, other studies indicate that the cor- relations between the facets of job satisfaction tend to be relatively small (Spector, 1985).

Furthermore, they have pointed out that there are individual differences in terms of the relative importance placed on the different factors (Brough & Frame, 2004; De Vaus & McAllister, 1991; Saari & Judge, 2004). The general or global job satisfaction measure can lead us to think, or conclude, that all employees with similar satisfaction scores are equally satisfied with all facets of the job (Boles, Wood, & Johnson, 2003). However, one aspect of the job may not necessarily be as important as another for a given employee, and each employee may have different priorities (Spector, 1997). From this perspective, an employee may be satisfied with his or her job in general terms and not be satisfied with certain intrinsic or extrinsic facets of his or her job. Consequently, an advantage of this approach, as opposed to the general or global measure of job satisfaction, is that it enables us to discover each employee's degree of satisfaction with each of the multiple facets of the job, such as the pay, supervisors, coworkers, and autonomy (Spector, 1997). Given the benefits of this measure, organizations have generally preferred to use it when, for example, they are interested in improving their employees' job satisfaction or when they want to explain why their employees are leaving the organization (Scarpello & Campbell, 1983).

As far as general or global job satisfaction is concerned, this has been under- stood and measured in two different ways. On the one hand, some authors, such as Kalleberg (1977), propose that general job satisfaction is a unitary concept that assesses the employee's global affective reaction to his or her total work situation. From this perspective, general satisfaction has been assessed using globally pre- pared items that refer to an employee's attitude to his or her job as a whole. On the other hand, in line with the definition offered by Locke (1976), other authors have conceived general satisfaction as an aggregate construct that comprises the sum of the points scored in the items that refer to an employee's satisfaction with particular characteristics or facets of the job.

Although there are authors (e.g., Judge, Parker, Colbert, Heller, & Ilies, 2002; Judge & Locke, 1993; Parsons & Hulin, 1982) who believe that both satisfactions (global and the sum of facets) define the same construct, there is enough empirical support for the idea that both constructs are not equivalent (e.g., Ferratt, 1981; Highhouse & Becker, 1993; Ironson, Smith, Brannick, Gibson, & Paul, 1989; Jiang, 2004; Kalleberg, 1977; Scarpello & Campbell, 1983). So, for example, Ironson et al. (1989) find that global job satisfaction explains a significant additional proportion of the variance of several dependent (attitudinal) variables after control the satisfactions with specific facets. So we can conclude that there is evidence that the assessment of global job satisfaction may indicate somewhat different psychological processes to those given in the assessment of satisfaction with specific facets (Jiang, 2004).

Among the main arguments that have been given to explain this lack of equivalence, we can highlight the different frames of reference that employees use when assessing both types of satisfaction (e.g., Ironson, Smith, Brannick, Gibson, & Paul, 1989; Smith, Kendall, & Hulin, 1969). Smith et al. (1969) argue that when the employee assesses satisfaction with each facet, he or she uses a relative frame of reference and focuses on the alternative facets that are available. However, when the employee assesses global job satisfaction, he or she uses an absolute frame of reference. As Scarpello and Campbell (1983) point out, when assessing global satisfaction, the employee can consider a wide range of factors related to that satisfaction that are not considered in the assessment of satisfaction with specific facets. So, for example, the results of the aforementioned study reveal that certain factors, such as satisfaction with other aspects of working life, occupational choice, career progress, and even satisfaction with life outside of work, correlate better with global satisfaction than with measures of satisfaction with specific facets of the job. The authors conclude that the definition of general satisfaction as the sum of the assessments given to the discrete characteristics that make up the job may lead to a rejection of other major determining factors or causes of job satisfaction. So, they indicate that the whole appears to be more complex than the sum of the parts of the job that have traditionally been measured.

Nevertheless, to say that general or global job satisfaction is a concept different from satisfaction with specific facets of the job does not imply that the satisfaction with specific facets is not related with that (Kalleberg, 1977). As several researchers have suggested, the level of general or global job satisfaction can be determined by the range of specific satisfaction and dissatisfaction that a person experiences with regard to varying characteristics of the job, among other factors (Kalleberg, 1977; Locke, 1976; Wernimont, 1972). So, the relationship between

the satisfaction with the intrinsic and extrinsic facets and general or global job satisfaction has been identified. Wide-ranging empirical literature has found that both types of satisfaction contribute to explaining general job satisfaction, and that, out of all the facets of satisfaction, the one with the strongest relationship is the level of satisfaction with the intrinsic factors (De Vaus & McAllister, 1991; Decker, Harris- Kojetin, & Barcovitz, 2009; Hackman & Oldham, 1975; Kalleberg, 1977; Locke, 1976; Randolph, 2005; Rothausen, 1994; Saari & Judge, 2004; Wernimont, 1966).

#### WIF and FIW and Intrinsic Versus Extrinsic Job Satisfaction

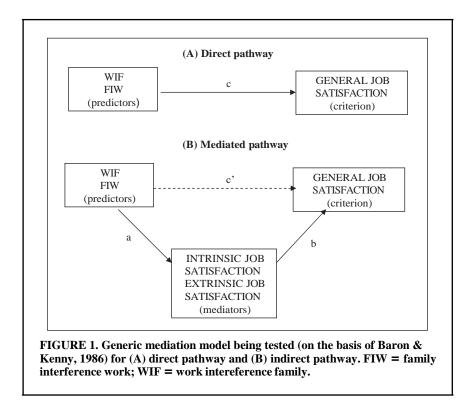
The relationship between WIF and FIW and one's satisfaction with the in- trinsic and extrinsic facets of the job has also been dealt with in existing literature. Some researchers have suggested that work-family conflict may be related to intrinsic and extrinsic job satisfaction due to the fact that certain intrinsic and ex- trinsic aspects of the job (autonomy, pay, security, supervision style, relationships with work colleagues) may contribute to exacerbating (and/or reducing) conflict (Bruck, Allen, & Spector, 2002). To this effect, some studies point out that the absence of intrinsic job characteristics, such as autonomy (Aryee, 1992; Greenhaus, Parasuraman, Granrose, Rabinowitz, & Beutell, 1989; Voydanoff, 1988), or extrinsic characteristics, such as supervisor or coworker behavior and job secu- rity (Batt & Valcour, 2003; Frone, Yardley, & Markel, 1997; Frye & Breaugh, 2004; Grzywacz & Marks, 2000; Thomas & Ganster, 1995), can help to generate work-family conflict and reduce general job satisfaction. Given that satisfaction with the specific facets of one's job is an attitude aimed at a specific target, the experience of work-family conflict may cause a low level of satisfaction with those specific aspects of the job that are contributing to making the conflict worse. As Williams (2004) points out, few studies have analyzed the relationship between both dimensions of work-family conflict and satisfaction with the specific facets of one's job. Nevertheless, such a relationship has indeed been identified in at least three studies (Boles, Howard, & Donofrio, 2001; Boles, Wood, & Johnson, 2003; Bruck, Allen, & Spector, 2002). To be more specific, in the study carried out by Bruck et al. (2002), both FIW and WIF relate to both types of satisfaction (intrinsic and extrinsic). Furthermore, the relationship between both dimensions of work-family conflict and the composite job satisfaction (the sum of scores in the satisfaction with the different facets of one's job) was greater than the relationship that exists between both dimensions and general job satisfaction. Likewise, Boles et al. (2001) find that WIF and FIW predict satisfaction with the different facets of the job, although WIF proves to be a better predictor than FIW. The results of these studies suggest the existence of a significant negative relationship between WIF and FIW and the different specific facets of one's job, both the intrinsic and extrinsic facets.

#### The Present Study

In short, the studies that have been reviewed show that there is a relationship between WIF and FIW and general job satisfaction (e.g., Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997; Kossek & Ozequi, 1998). Likewise, some studies have indicated the existence of a relationship between WIF and FIW and satisfaction with both the extrinsic and intrinsic facets of one's job (Boles, Howard, & Donofrio, 2001; Boles, Wood, & Johnson, 2003; Bruck, Allen, & Spector, 2002) and between this and general job satisfaction (e.g., De Vaus & McAllister, 1991; Kalleberg, 1977; Saari & Judge, 2004). So it would be reasonable to propose that the satisfaction with the intrinsic and extrinsic facets of one's job may play an important role in the relationship between work–family conflict and general job satisfaction. Taking these results as a framework of reference, the following hypotheses were set:

*Hypothesis 1:* The satisfaction with the intrinsic and extrinsic facets of one's job mediates the relationship between FIW and general job satisfaction (see Figure 1).

*Hypothesis 2:* The satisfaction with the intrinsic and extrinsic facets of one's job mediates the relationship between WIF and general job satisfaction (see Figure 1).



#### **Controlling Variables**

Another major limitation in research studies on the work–family conflict and job satisfaction has been the lack of control of key variables (Grandey, Cordeiro, & Crouter, 2005). Due to the fact that the empirical literature has pointed out that gender and the job's characteristics or the level of occupation may have a bearing both on the levels of work–family conflict (Behson, 2002; Kinnunem, Geurts, & Mauno, 2004; Parasuraman & Simmers, 2001) and of job satisfaction (De Vaus & McAllister, 1991; Donohue & Heywood, 2004; Hackman & Oldham, 1975; Parasuraman & Simmers, 2001), both variables are controlled in this study. Likewise, the variables of age and preferences for certain aspects of the job are controlled, as they have been shown to have a significant influence on the degree of job satisfaction (Deward & Werbel, 1979; Hackman & Oldham, 1980; Lorence, 1987; Saal, 1978; Wernimont, 1966).

#### Affective Versus Nonaffective Measure of Job Satisfaction

Given that this study assesses job satisfaction, we need to clarify certain relevant aspects of its measurement, such as the use of affective versus nonaf- fective measures. In the definition of job satisfaction given by Locke (1976), the need to consider affect (emotional state) and cognition (appraisal) when assessing such satisfaction is made clear. Different research studies have suggested that the job satisfaction measures may differ in the extent to which they stress affective satisfaction or cognitive satisfaction (e.g., Brayfield & Rothe, 1951; Moorman, 1993).

Affective satisfaction is a satisfaction based on an assessment of the emotional state brought on by work, that is, whether one's job causes a good mood and positive feelings or the opposite. On the other hand, cognitive satisfaction is a satisfaction based on a more rational and logical assessment of one's work conditions. This does not depend on emotional judgment but on the assessments or comparisons of conditions, opportunities, or results. So the scales of job satisfaction that reflect cognition include questions regarding the nature of the job, work conditions, and the opportunities to satisfy important needs (Moorman, 1993).

Some authors, such as Brief (1998), point out that organizational scientists have more often used cognitive measures, while affective measures have only been used sparingly, if at all. These revelations have sparked a debate questioning the extent to which it is appropriate to use both measures, or whether either of them is better than the other. While some studies

highlight that job satisfaction includes affective and cognitive elements and that consequently both should be measured (Weis, Nicholas, & Daus, 1999), others state that the job satisfaction measures that have a greater cognitive than affective angle appear to be better predictors of work conduct (e.g., Moorman, 1993; Organ & Konovsky, 1989). Nevertheless, given that when it comes to assessing job satisfaction, both cognition and affect appear to be involved and closely related, several prominent researchers in this field (Brief, 1998; Judge, Parker, Colbert, Heller, & Ilies, 2002; Spector, 1997; Weis, Nicholas, & Daus, 1999) suggest that both should be measured. For these reasons, we have assessed both components of job satisfaction in this study.

#### Method

#### **Participants**

The study's initial sample was made up of 303 workers from two main professional categories at a Spanish public university: Teaching and Research Staff and Administration and Services Staff. A range of studies have pointed out that an essential determining factor of employees' experience of work-family conflict is the fulfillment of the parental role, particularly when the children are young or still living at home with their parents (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Frye & Breaugh, 2004; Parasuraman & Simmers, 2001). Given the objective of this study, in the initial sample we selected those participants who still had children living at home. In this way, the final sample used in our study was made up of 151 workers (69 men and 82 women) from three occupational levels: teaching staff, administrative staff, and maintenance staff, janitors and porters. The percentage of the participants who were married or living with their partner was 88.7%. The average number of children was 2.1 (SD 1.0). The average age of the workers was 40.7 years (SD 7.6 years). The distribution of workers according to level of education was as follows: with primary education or graduado escolar (the most elementary level of education in the Spanish education system): 40; with *bachiller superior* [secondary education certificate]: 34; with intermediate level courses (university graduates or diploma students): 27; and with higher degree courses (postgraduate, masters, and/or doctorate): 50. The level of education strongly and significantly correlated with the occupational level or job (r = .75; p < .00).

#### Measures

The sociodemographic variables considered in this study, such as gender, number of children, the number living at home, age, level of education, professional category, and occupational level, were assessed using a questionnaire that had been expressly drawn up for this study. Gender was understood as being the person's biological sex. The coding as dummy variable was men = 1, and women = 2.

#### Work-Family Conflict

The work-family conflict was assessed with the scales used by Gutek, Searle, and Klepa (1991). The WIF scale was developed by Kopelman, Greenhaus, and Connoly (1983), and the FIW scale was developed by Burley (1989) with parallel items to those developed by Kopelman et al. (1983) for WIF. Gutek et al. (1991) selected four out of the eight original items in each scale. Despite there being other work-family conflict scales available, our chosen scales were selected due to the fact that a recent study, in which a meta-analytical study of the convergence between measures of WIF and FIW was carried out, revealed that out of the different scales analyzed, the scales proposed by Gutek et al. (1991) are the most widely used in studies and are the scales that best distinguish the two dimensions of work-family conflict (Mesmer-Magnus & Viswesvaran, 2005). Moreover, in the Spanish context, the WIF scale put forward by Kopelman et al. (1983) has been validated by Martínez-Pérez and Osca (2001), obtaining an Alpha coefficient of .83. So, this study has taken the items from that scale, which are parallel to those used by Gutek et al. (1991). 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 for the WIF scale were .77, and for the FIW scale they were .77. There were 7-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."

#### Job Satisfaction

To assess job satisfaction, we used the job satisfaction scales from the Job Diagnostic Survey (JDS) by Hackman and Oldham (1975). This scale deals with both the cognitive and affective measure of job satisfaction. For example, Williams (1988) tested for relative cognitive and affective influence in job satisfaction mea- sures. His results indicated that 18% of the

variance in the JDS could be explained by cognition, while 12% of the variance could be explained by affect. The scales enabled us to assess the employees' general satisfaction using 5 items and to assess the satisfaction with different specific facets of the job using 14 items. Intrinsic satisfaction (self-fulfillment, personal growth and development, autonomy, and interesting and stimulating work) is assessed using 4 items. Satisfaction with extrinsic facets covers pay (2 items), supervisor (3 items), job security (2 items), and social relationships (3 items). An example of an item for intrinsic satisfaction is "the degree of independence of ideas and action that my job allows me." The JDS has been validated into Spanish by Fuertes, Munduate, and Fortea (1996), obtaining acceptable reliability coefficients. The following reliability coefficients were obtained in this study: general job satisfaction, .82; intrinsic satisfaction with the wages, .90; satisfaction with job security, .86; satisfaction with the supervision, .84; satisfaction with social relationships and coworkers, .70. There were 7–point response options, from *very much disagree* (1) to *very much agree* (7).

#### Preferences for Aspects of the Job

To assess the preferences for certain aspects of the job, the "Importance of Work Goals" scale drawn up by the MOW group (1987) was used. This scale is made up of 11 items that refer to the degree of importance a person places on certain aspects of their job, both regarding the content of the job itself (intrinsic or expressive aspects, 5 items), and the job's context (extrinsic or instrumental aspects, 5 items), as well as the social aspects of the job (1 item), and assessing what people expect to find in or get out of their job. The scale validated by García, Padilla, and Zarco (1993) for the Spanish context was used in this study. In this scale, the participants must first read all the items, to get an idea of what kind of aspects are going to be considered, and then they must evaluate them according to a Likert-type scale that ranges from 1 (*very much disagree*) up to7 (*very much agree*). Some examples of items in this scale are as follows: "opportunities to learn new things" (intrinsic work goals); "convenient working hours" (extrinsic work goals). The reliability coefficient obtained in this study for each of the dimensions that were assessed was as follows: intrinsic work goals, .85; extrinsic work goals, .74.

#### Procedure

The questionnaires were handed out in a range of faculties, covering different subjects and fields (law, medicine, computer science, psychology, pharmacology, etc.). The questionnaires were administered individually to each worker. Participation was voluntary and anonymous. After requesting their collaboration, the workers were given the questionnaire and, even though it had specific instructions attached, we explained to them the correct way to complete the survey. Given that the questionnaires were distributed during working hours, they were given a week to fill in the forms. Of the 520 questionnaires that were handed out, a total of 339 were returned.

After removing those that were incomplete as regards the central variables in the study and those that did not reach an acceptable number of questionnaires according to occupational level, we had 303 questionnaires. The number of questionnaires that was last used in the study, after removing those of the participants who did not meet the parenthood criteria, was 151.

#### Results

#### **Descriptive Statistics**

The SPSS 15.0 statistics packages were used to analyze the data. Before testing the hypotheses, the correlations between all the central variables in the study were calculated. These correlations are shown in Table 1.

To verify the existence of independence between the constructs of general job satisfaction and both satisfactions with the specific facets of the job, we carried out a confirmatory factor analysis. To do so, we used the LISREL 8.3 statistical software package. Taking the theoretical and empirical literature on job satisfaction as our frame of reference, this analysis must show that, even though the three variables are related, they are not equal. With this purpose in mind, two models were established. In both models, the 23 items that make up the three measures of job satisfaction were related to their respective underlying variables or factors. In the first model, the hypothesis that states that the three variables (although related) do not refer to the same construct was tested. Consequently, in this model, the three underlying variables or factors were introduced, leaving the correlations between them free. In the second model, the null hypothesis that states that the three underlying variables or factors refer to the same construct was tested. In this case, the correlation between the three underlying variables was made to be equal to one. In this contrast of hypotheses, the relevant statistic that is generally used to confirm or reject those hypotheses is the adjustment difference between both models, which is found by carrying out a statistical comparison. The statistical comparison of the models is carried out by comparing the differences between the chi-square values associated with each model, bearing in mind that these differences are distributed as a chi-square with degrees of freedom that are the same as the differences between the degrees of freedom associated with each model. A significant change in chi-square indicates that one model has better adjustment than the other (Jöreskog & Sörbom, 1993). When we compared the adjustment rates for the proposed models, the results indicated that the second model shows a significant adjustment difference as regards the first model ( $\chi^2 = 219.1$ ; df = 3, p < .00), so we could say that the adjustment for this second model is worse than that for the first. In short, the results lead us to conclude that, even though the variables are related, they refer to different constructs.

#### **Mediation Analysis**

According to Baron and Kenny (1986), a series of three regression equations should be estimated to test whether there is a mediating effect of intrinsic and extrinsic job satisfaction on the relationship between WIF and FIW and general job satisfaction. First, the mediating variable (intrinsic job satisfaction or extrinsic job satisfaction) is regressed on the independent variable (WIF or FIW). The independent variable must be related with the mediating variable. With this purpose, step-by-step hierarchical regression analyses were carried out. In the first step, gender, age, occupational level and the preferences for intrinsic, extrinsic and social aspects of the job were included as control variables. In the second step, WIF and FIW were included as independent variables. The different facets of job satisfaction were included as dependent variables. For this analysis, the results indicated that, out of the two dimensions of work-family conflict, only FIW had a negative relationship with the mediating variable intrinsic job satisfaction ( $\beta = -.15$ ; p = .04) (see Table 2). Thus, the relationship between the independent variable FIW and the mediating variable intrinsic job satisfaction was established, but no relationship was established between the independent variable FIW and the mediating variable extrinsic job satisfaction or between the independent variable WIF and the mediating variables, intrinsic and extrinsic job satisfaction. So the remaining equations were only carried out for FIW and extrinsic job satisfaction.

Second, the dependent variable (general job satisfaction) is regressed on the independent variable FIW. A step-by-step hierarchical regression analysis was carried out. In the first step, the control variables were introduced, and in the second step, FIW was included. The results indicated that FIW negatively and significantly predicts general job satisfaction ( $\beta = -.16$ ; p = .03;  $R^2 = .34$ ;  $\Delta R^2 = .02$ ; p = .03).

Third, the dependent variable of general job satisfaction is regressed on FIW and the mediating variable (intrinsic job satisfaction). Mediation results can be found in Table 3. For mediation to be established, the effect of the independent variable on the dependent variable must be less in the third equation than in the second. If the beta is less in the third equation but still significant, partial mediation has been established. If the beta is no longer significant in the third equation, full mediation has been established (Baron & Kenny, 1986). As Table 3 shows, when intrinsic job satisfaction is entered into the equation, the negative relationship between FIW and general job satisfaction drops ( $\beta = -.08$ ; p = .17), ceasing to be significant, and indicating full mediation for the intrinsic satisfaction. Intrinsic job satisfaction is a strong and significant predictor ( $\beta = -.67$ ; p < .00;  $R^2 = .34$ ;  $\Delta R^2 = .28$ ; p < .00) of general job satisfaction.

The results of mediation indicate that the data is consistent with the mediation effects hypothesis, as the quantity of mediation is defined as the reduction of the effects of the initial variable in the results, when the mediating variable is included in the equation. However, the question still remains as to whether the beta reduction is statistically significant. Baron and Kenny (1986) provided a modification of the mediation significance test originally put forward by Sobel (1982). This test is an approximation to calculating the significance of the indirect effect of the independent variable on the dependent variable through the mediating variable. To determine the significance, Baron and Kenny (1986) designate the path from the independent variable to the mediating variable as *a* and the standard error as *sa*; and the path from the mediating variable to the dependent variable as *b* and the standard error as *sb*. The test of the indirect effects is given by dividing *ab* by the square root of the variance equation. The variance equation is the square root of  $b^2 \cdot sa^2 + a^2 \cdot sb^2 + sa^2 \cdot sb^2$ . This is treated as a *z*-score test. The mediation model tested was significant (*z* = -2.05; *p* = .02).

#### **Additional or Supplementary Analyses**

Lastly, with a view to verifying whether WIF negatively predicts general job satisfaction, a step-by-step regression analysis was carried out in which the effect of the control variables was taken into account. The results showed that there was no relationship ( $\beta = .07$ ; p = .33). A step-by-step regression analysis was also carried out in which the effect of the control variables was again taken into account, in order to analyze the relationships between both facets of job satisfaction and general job satisfaction. The results indicated that intrinsic job satisfaction ( $\beta = .56$ ; p < .00) and satisfaction with the relationships with one's coworkers ( $\beta = .15$ ; p = .02) predict general job satisfaction. The tested model explained 65% of the variance of general job satisfaction. No other facet of extrinsic satisfaction explained the variance of general job satisfaction.

#### Discussion

The aim of this study was to verify the mediating role of intrinsic and extrinsic job satisfaction in the relationship between FIW and WIF and general job satisfaction. The results obtained reveal the mediating role of intrinsic satisfaction in the relationship between FIW and general job satisfaction. In all the other cases, no relationship was found between the independent variable and the mediating variable. Given that this relationship was not confirmed, the analysis of the mediating effect must be aborted (Baron & Kenny, 1986), so the results suggest that there is no mediating effect of extrinsic job satisfaction in the relationship between FIW and general job satisfaction and no mediating effect of intrinsic and extrinsic job satisfaction in the relationship between WIF and general job satisfaction. The results only partially support the second hypothesis.

#### **Mediating Role of Intrinsic Job Satisfaction**

The results revealed evidence of the total mediating effect of intrinsic satisfaction in the relationship between FIW and general job satisfaction. So, in the first equation, FIW has a negative relationship with general job satisfaction. Nevertheless, the strength of the relationship was reduced when intrinsic satisfaction was included in the equation. So, intrinsic satisfaction proved to be a significant mediating variable between FIW and general job satisfaction. The interpretation of these results leads us to the conclusion that a highly plausible explanation as to why FIW has a negative effect on general job satisfaction is due to the negative impact that FIW has on the satisfaction with the intrinsic facets of the job.

We believe that there are at least two possible explanations for this negative effect. On the one hand, and following the suggestion made by several researchers (Bruck, Allen, & Spector, 2002), it is possible that the absence of certain intrinsic characteristics of a job may hinder the family–work balance, contributing to making the family–work conflict worse and consequently leading to negative attitudes towards those characteristics of the job. To this effect, empirical evidence has shown that, for example, a lack of autonomy in one's job has a negative relationship with work–family conflict (Aryee, 1992; Greenhaus, Parasuraman, Granrose, Rabinowitz, & Beutell, 1989; Voydanoff, 1988). So the negative mood brought about by the role stressor (lack of autonomy) could negatively affect one's intrinsic satisfaction.

On the other hand, the effect of FIW on job satisfaction has been explained in terms of a "resource drain" (Eckenrode & Gore, 1990; Edwards & Rothbard, 2000; Hobfol, 1989). Different authors have proposed that FIW could be related with job satisfaction due to the fact that the excessive demands of the family role take time and energy away from employees, making it difficult for them to appropriately perform their work duties and ensure their satisfaction with the benefits associated with the work experience (Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997; Lapierre, Hackett, & Taggar, 2006; Lapierre et al., 2008). Other studies have also obtained empirical evidence that highlights the fact that FIW affects the results related to how effective people are in their job. For example, FIW has been related to lower levels of job development and higher levels of absenteeism (Burke & Greenglass, 1999; Frone et al., 1997; Netemeyer, Boles, & McMurrian, 1996). Given that the intrinsic facets of one's job are related to the development of the tasks themselves (variety of tasks, tasks with meaning, the importance of the tasks, autonomy, etc.), it is possible that the inability to suitably perform the work role, (due to a lack of time and energy), might affect the reception of the intrinsic job-related compensation. So it would be logical to expect a negative relationship between FIW and intrinsic job satisfaction, as some studies have indicated (Bruck, Allen, & Spector, 2002). The absence of a relationship between WIF and intrinsic satisfaction could be explained from this same perspective. When a worker experiences WIF, the responsibilities of the job may demand a great deal of time and energy from that worker, so a greater amount of time and energy spent on carrying out their work may lead them to appreciate the beneficial characteristics that this offers. In this way, WIF does not have a negative impact on intrinsic job satisfaction.

#### **Extrinsic Satisfaction and Work–Family Conflict**

The results show that there is no mediating effect of extrinsic satisfaction both in the case of WIF and in that of FIW, and there is no mediating effect of intrinsic satisfaction in the case of WIF. In the three cases, the relationship between the independent variable (WIF or FIW) and the mediating variable (intrinsic or extrinsic satisfaction) failed. These results are contrary to those found in other studies analyzing the relationship between WIF and FIW and intrinsic and extrinsic satisfaction. More specifically, Boles, Howard, and Donofrio (2001) and Bruck, Allen, and Spector (2002) found that both FIW and WIF relate to both types of satisfaction, intrinsic and extrinsic. In this study, only FIW related to intrinsic satisfaction. Given that few studies have analyzed these relationships, it is clear that more re- search is needed on this subject. One aspect to consider in this study, as opposed to those mentioned above, and which has been used in Anglo-American samples, is that the effects of different dimensions or values that are typical of the Spanish culture cannot be ruled out. To this effect, some research studies point out that certain cultural values, such as individualism-versus-collectivism, may influence the degree to which work-family conflict has a relationship with job satisfaction (Masuda, Poelmans, Spector, & Allen, 2008; Yang, Chen, Choi, & Zou, 2000). So, while in Anglo-American countries (which tend to be more individualistic) a moderately strong relationship is usually found between work-family conflict and job satisfaction, in collectivist cultures such as Asia, Latin America, and Eastern Europe, for example, these relationships are not found or if they are, they are significantly weaker than those found in Anglo-American countries (Aryee, Luk, Leung, & Lo, 1999; Spector et al., 2005). Some studies also suggest that, although the results show that there are no differences in general job satisfaction between different cultures, there may be major differences in satisfaction with the different facets of work (Spector, 1997). From this perspective, Spector et al. (2005) ar- gue that people in individualist countries are more likely to emphasize their own needs, and this is why they could respond more negatively to a job that interferes with their needs. According to the research carried out by Hofstede (1980), Spain is a less individualist and more collectivist country than other, Anglo-American countries such as the United States and Canada. So the fact that no relationship has been found between WIF and intrinsic and extrinsic satisfaction, as well as the lack of relationship between FIW and extrinsic satisfaction, could be due to the effects of the values inherent in Spanish culture.

From the pattern of results obtained, we should stress that not only did WIF not relate to intrinsic (and extrinsic) satisfaction, but also it had no significant relationship with general job

satisfaction. To a certain extent, these results are consistent with the idea that there is no relationship between WIF and general job satisfaction, because WIF does not relate to intrinsic satisfaction. This reasoning is supported by the fact that the results obtained in additional analyses indicate that, out of the two facets of job satisfaction, only the intrinsic satisfaction contributes to explaining general satisfaction.

Lastly, the results support those studies in which FIW better predicts general job satisfaction than WIF (Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997).

#### Limitations

Although we believe that our study contributes somewhat to reducing the void in knowledge regarding the relationship between the two dimensions of work–family conflict and satisfaction with the intrinsic and extrinsic facets of the job, there are some methodological limitations that need to be considered when interpreting the results. Although the sample size comes within the acceptable limits that the experts in this field generally indicate (Cohen, 1988; Jaccard & Wan, 1996), a larger sample size might offer significant effects that were not obtained in this study. From this point of view, the results must be interpreted with discretion. Likewise, the fact that the sample is made up of workers from three jobs at a single organization reveals that this sample has particular characteristics, so the derivations implied by these results must be limited to the population that the analyzed sample represents.

Furthermore, this study is cross-sectional by nature, yielding a major limitation. So, for example, the experience of work–family conflict will probably increase over time before predicting work attitudes. From this perspective, re- search into everyday events expects not only that a single event will have a major effect on the results, but rather that the accumulation of events that are produced over time will predict strain. A longitudinal study would enable us to determine whether the work–family conflicts can explain changes in work satisfaction over time. Due to the fact that job satisfaction is a sufficiently stable attitude, this compound effect needs to be studied over a long period of time, to allow the change to happen. Likewise, although our hypotheses were proposed following the theoretical and empirical literature, the fact that the data in this study was cross-sectional makes it difficult to make causal inferences regarding the direction of the relationship between the work–family conflicts and job satisfaction. It is not our intention to imply that inverse causality is not possible, seeing that the work–family conflicts lead to a low level of job satisfaction, and this, in turn, can

exacerbate the work–family conflicts. Further longitudinal research is necessary in this matter. Last, this study is correlational and self–reporting, also posing a limitation.

#### **Conclusion and Contributions**

Given the objectives and the obtained results, on the one hand we may conclude that the satisfaction with the intrinsic facets emerges as a significant mediating variable between FIW and general job satisfaction. These results help to explain why FIW has a negative effect on general job satisfaction, highlighting how FIW negatively affects intrinsic satisfaction and how this has a negative impact on general job satisfaction.

On the other hand, the results from the present study indicate that WIF and FIW may have different relationships with the intrinsic and extrinsic facets of job satisfaction. So, while WIF does not have any relationship with either of the facets of job satisfaction, FIW predicts a negative relationship with the satisfaction with the intrinsic facets. Therefore, these results support the suggestion that has been proposed by some authors, that each one of the dimensions of the work–family conflict may affect satisfaction with multiple facets of work in different ways (Boles, Howard, & Donofrio, 2001; Bruck, Allen, & Spector, 2002). Consequently, the utility of distinguishing between both dimensions of work–family conflict and between both facets of job satisfaction in the analysis of the relationships between work–family conflict and general job satisfaction is highlighted.

Lastly, the results suggest the need to make greater efforts to identify the mediating role that other variables may have in the relationship between work–family conflict and general job satisfaction. These relationships would also need to be analyzed, taking into account the possible influence of cultural variables. To this effect, a recent study review by Casper, Eby, Bordeaux, Lockwood, and Lambert (2007) reveals that 75% of all studies have been carried out with samples from the United States. Given that the results obtained in U.S. society cannot easily be generalized to other countries or cultures (e.g., Aryee, Luk, Leung, & Lo, 1999; Hill, Yang, Hawkins, & Ferris, 2004; Lu, Gilmour, Kao, & Huang, 2006), it is important to know the relationship between the work–family conflicts and job satisfaction in countries and cultures other than those of North America.

In spite of the aforementioned limitations, we believe that the study contributes in different ways. Firstly, the study contributes to reducing the void in studies analyzing the relationship between work–family conflict and satisfaction with the intrinsic and extrinsic facets of the job.

It is also the first study to highlight the mediating role of the satisfaction with the specific (intrinsic and extrinsic) facets of satisfaction in the relationship between both work–family conflicts and general job satisfaction. Furthermore, it recognizes and considers the multidimensional nature of work–family conflict, helping to clarify the relationship between both dimensions of such conflict and job satisfaction. It also reveals the importance of considering the measure of the specific facets of satisfaction in the analysis of the relationships between the work–family conflicts and job satisfaction, as each dimension of work–family conflicts and job satisfaction, as each dimension of work–family conflict may have a stronger relationship with certain facets of job satisfaction.

Furthermore, given that most studies dealing with this relationship have mainly been carried out in Anglo-American or Asian countries (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Poelmans, 2003; Spector et al., 2005), the study contributes to broadening our knowledge about the consequences of work–family conflict on workers' attitudes towards work in another culture (i.e., the Spanish culture).

These contributions are extremely important, as a greater knowledge of how the different dimensions of work-family conflict are associated with one's satisfaction with specific facets of the job may help to prioritize and design assistance programs in businesses and organizations and to improve counseling action. Ac- cording to our results, it seems that we should focus our attention on interventions that may contribute to reducing FIW and improving satisfaction with the intrinsic facets of the job. An absence of intrinsic attributes in the job, such as autonomy, may be making the conflict worse and making it difficult for employees to achieve a family-work balance, through having a lack of time in which to satisfy family demands. Faced with this situation, organizations could offer programs that would promote balance or more time for the employees to spend with their family, or perhaps greater flexibility as regards how and when to distribute time between family and work. To this effect, policies could be adopted such as, for example, alternative working hours, compressed work weeks, flexible hours, employee- controlled schedule, leave on family grounds, help for childcare—to name but a few. Although there is still little research into the effects that organizations' adoption of these policies may have, some studies have highlighted the positive effects that they may have on the employee's job satisfaction (e.g., Olafson, 2003; Thomas & Ganster, 1995). In this context, an organizational culture that supports these policies and interventions is of the utmost importance. While organizations may have policies and procedures that support a work-family balance, the organizational culture may not necessarily support the use of the benefits that they provide (Behson, 2002).

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| Variable                                  | Alpha | М     | SD   | 1     | 2     | 3     | 4       | 5    | 6    | 7    | 8   | 9     | 10    | 11   | 12    | 13    |
|---|-------|-------|------|-------|-------|-------|---------|------|------|------|-----|-------|-------|------|-------|-------|
| 1. Gender                                 | _     |       |      | _     |       |       |         |      |      |      |     |       |       |      |       |       |
| 2. Age                                    |       |       |      | 10    | _     |       |         |      |      |      |     |       |       |      |       |       |
| 3. Job                                    |       | 40.67 | 7.60 | 07    | 12    | _     |         |      |      |      |     |       |       |      |       |       |
| 4. Intrinsic preferences                  | .85   | 5.70  | 1.31 | 02    | .14   | .16   |         |      |      |      |     |       |       |      |       |       |
| 5. Extrinsic preferences                  | .74   | 5.86  | 1.13 | .05   | .13   | 30**  | .56 *** | _    |      |      |     |       |       |      |       |       |
| <ol><li>Social preferences</li></ol>      | _     | 6.56  | 5.90 | 05    | .19*  | 15    | .15     | .17* | _    |      |     |       |       |      |       |       |
| 7. WIF                                    | .77   |       | 1.33 | .22*  |       | .13   | .16^    | .08  | 02   |      |     |       |       |      |       |       |
| 8. FIW                                    | .77   | 2.33  | 1.20 | .22** | *24** | .07   | 02      | .02  | 08   | .34* | ĸ   |       |       |      |       |       |
| 9. Intrinsic satisfaction                 | .89   | 4.69  | 1.63 | .06   | .08   | .48** | .46**   | .03  | .09  | .17* | 09  |       |       |      |       |       |
| 10. Supervision satisfaction              | .84   | 4.84  | 1.41 | .18*  | .01   | .01   | .18*    | .16  | .16* | .00  | 03  | .49** | _     |      |       |       |
| <ol> <li>Security satisfaction</li> </ol> | .86   | 5.59  | 1.70 | 02    | .08   | .02   | .03     | 03   | .05  | 02   | .02 | .08   | .25** |      |       |       |
| <ol> <li>Wages satisfaction</li> </ol>    | .90   | 3.99  | 1.76 | .13   | 01    | .15   | .20*    | .02  | .04  | .05  | .05 | .35** | .40** | .34* |       |       |
| <ol><li>Social satisfaction</li></ol>     | .70   | 5.09  | 1.30 | .03   | .12   | .14   | .36**   | .16* | 13   | .07  | 14  | .56** | .50** | .09  | .24** | _     |
| 14. General satisfaction                  | .82   | 5.09  | 1.35 | .18*  | .11   | .43** | .36**   | .07  | .07  | .07  | 11  | .76** | .44** | .16  | .37** | .53** |

p < .05. p < .005.

| Step | Factor                                      | В             | SE B       | β         |
|------|---|---------------|------------|-----------|
| 1    | Gender                                      | .36           | .21        | .11       |
|      | Age   | .02           | .01        | .08       |
|      | Job   | .86           | .16        | .40*      |
|      | Intrinsic preferences                       | .56           | .11        | .45*      |
|      | Extransic preferences<br>Social preferences | 19            | .15        | 13<br>.10 |
| 2    | Gender                                      | .39           | .21        | .12       |
|      | Age   | .01           | .01        | .06       |
|      | Job   | .86           | .16        | .40*      |
|      | Intrinsic preferences                       | .54           | .11        | .43*      |
|      | Extrinsic preferences<br>Social preferences | $^{18}_{.03}$ | :13<br>:02 | 13<br>.09 |
|      | WIF   | .11           | .09        | .09       |
|      | FIW   | 20            | .09        | 15*       |

## TABLE 2. Coefficients of the Step-By-Step Hierarchical Regression Analysis for Intrinsic Satisfaction

# TABLE 3. Step-by-Step Hierarchical Regression Analysis Coefficients for the Effect of Mediation for the Intrinsic Satisfaction Between Family Interference Work (FIW) and General Job Satisfaction

| Step | Factor                 | В   | SE B | β    |
|------|------------------------|-----|------|------|
| 1    | Gender                 | .62 | .19  | .23  |
|      | Age                    | .02 | .01  | .14  |
|      | Job                    | .77 | .14  | .43* |
|      | Intrinsic preferences  | .27 | .09  | .26* |
|      | Extrinsic preferences  | .01 | .11  | .01  |
|      | Social preferences     | .02 | .02  | .08  |
| 2    | Gender                 | .46 | .15  | .17  |
|      | Age                    | .01 | .01  | .07  |
|      | Age<br>Job             | .30 | .12  | .17* |
|      | Intrinsic preferences  | 05  | .08  | 05   |
|      | Extrinsic preferences  | .13 | .09  | .11  |
|      | Social preferences     | .00 | .01  | .02  |
|      | FIW                    | 09  | .00  | 08   |
|      | Intrinsic satisfaction | .56 | .06  | 67*  |