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Relations of Work-Family Dynamics to Parenting Experiences:  
A Dyadic Analysis of Dual-Earner Couples

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### Abstract

Research on the work-family interface has not consistently addressed how the positive and negative features of work-family dynamics conjointly relate to the experience of parenting, and still fewer studies have explored these interrelationships from a dyadic perspective. The present investigation addressed this gap by examining the extent to which mothers' and fathers' reports of work-family conflict and enrichment influenced their own and their spouse's parenting experiences. Each member of 346 dual-earner couples completed measures of work-family conflict (WFC) and work-family enrichment (WFE), along with measures of parenting attitudes and competencies. A dyadic analysis revealed that WFC and WFE differentially affected the quality of parenting attitudes and competencies. In addition, a differential pattern of crossover effects between partners was found, particularly with respect to the effect of mothers' work-family dynamics on fathers' parenting experience. More specifically, while only one significant partner effect was observed for women (from fathers' WFC to mothers' increased relational frustration), four partner effects were found in men's parenting experience (from mothers' WFC to fathers' increased relational frustration, reduced sense of competence and reduced attachment; and from mothers' WFE to fathers' increased involvement). Further implications of these findings for advancing understanding of the impact of work-family dynamics on intrafamily relationships are discussed.

**Keywords:** Work-family dynamics; Conflict; Enrichment; Parenting; Parent-child relationship.

## Relations of Work-Family Dynamics to Parenting Experiences:

### A Dyadic Analysis of Dual-Earner Couples

Work-family dynamics are of enormous significance to the daily lives of workers and family members. The growing numbers of dual-earner couples in contemporary, post-industrialized societies are increasingly requiring both women and men to confront the potentially stressful tasks of integrating and coordinating their work and family roles. In particular, among dual-earner couples with children, the outcome of these personal and interpersonal negotiations are likely to impact the quality of their parenting and family experiences. Yet, despite the recent proliferation of research on the work-family interface and its theoretical and practical importance, studies of the consequences of work-family dynamics on parenting experiences and parent-child relationship outcomes are comparatively meager (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Considering the fundamental role of parents in child development as well as the role of children's wellbeing on parent's work (Major, Cardenas & Allard, 2004), the link between work-family dynamics and parenting is not only an important concern for individuals, their families and societies, but also a relevant business concern (Cho & Allen, 2012; Major et al., 2004).

It is widely accepted that being involved in multiple roles is at times challenging and stress inductive (work-family conflict, WFC) but can also be rewarding and enriching (work-family enrichment, WFE) (Eby et al., 2005). Disentangling how work-family conflict and work-family enrichment relates to parenting may assist on identifying which parenting experiences are more susceptible to negative and positive influences stemming from the work role, and this may, in turn, inform the development of more differentiated interventions.

In addition to differentiating positive and negative links between work-family dynamics and parenting experiences, it is also relevant to distinguish between spillover and

crossover processes within dual-earner couples; that is, to address not only intra-individual and inter-domain transmission of experiences, but also inter-individual and inter-domain transmissions. Indeed, crossover effects appear between closely related partners who share a great part of their lives together (Westman, 2001). Although early crossover studies originally focused on the transmission of stress and psychological strain, more recently Westman, Brough and Kalliath (2004) proposed crossover to be a “bi-directional transmission of positive and negative emotions, mood and dispositions between intimately connected individuals” (p. 589). Therefore, efforts to advance a more complete understanding of how work experiences affect engagement in the parental role at both the within and between persons levels may similarly inform the design of interventions for improving the working and employment conditions of parents of young children.

We sought to do this by examining, in a study of dual-earner couples in Portugal, how both negative and adaptive features of work-family dynamics link with the quality of parenting experiences, while controlling for potentially confounding variables, such as the child’s gender and parents’ family-to-work conflicting and enriching dynamics. This approach complements the majority of extant studies which emphasize a stress perspective and focus mainly on how work characteristics (e.g., autonomy and work schedule) and working conditions (e.g., job demands and time pressure) influence employees’ physical and emotional well-being (Eby et al., 2005; Perry-Jenkins, Repetti, & Crouter, 2000). In addition, and because the reciprocal influences of work and family cannot be completely understood without systematically accounting for the contributions of each member of a dual-earner couple, we used an Actor Partner Interdependence Model approach to analyze the link between work-family interactions and parenting experiences of each member, allowing us to also test for gender differences as well as partner (crossover) effects. In the sections that follow, we more closely consider the research evidence supporting our inquiry objectives.

**Work-family interaction**

Work-family research has largely been guided by a conflict perspective (Greenhaus & Beutell, 1985). This perspective derives from a scarcity hypothesis that assumes individual resources, like time, attention, and energy are limited; thus, as the individual assigns time or energy to one role, this choice inevitably drains away resources that can be dedicated to the other role. In other words, this perspective emphasizes that “role pressures from work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985; p.77). Empirical research has demonstrated links between work-family conflict and burnout, depression, poor physical health (Allen, Herst, Bruck, & Sutton, 2000; Frone, Yardley, & Markel, 1997), decreased job and life satisfaction (Allen et al., 2000; Kossek & Ozeki, 1998), decreased organizational commitment (Allen et al., 2000) and with less emotional support from the family (Poelmans, O’Driscoll, & Beham, 2005).

To a lesser extent, the potential benefits of multiple role involvement have also been studied. This view is grounded in the role expansion perspective which holds that participation in multiple roles can provide individuals with greater opportunities and resources that can be used to promote growth and effective functioning in other life domains (Barnett, 1998; Grzywacz & Marks, 2000). According to Greenhaus and Powell (2006), work-family enrichment is the extent to which experiences in one life role improves the quality of performance and experiences in another life role either directly or indirectly through its influence on positive affect. Work-family enrichment has been associated with better mental health (Grzywacz & Marks, 2000; Stephens, Franks, & Atienza, 1997) and physical health (Demerouti & Geurts, 2004), with higher levels of family satisfaction (Edwards & Rothbard, 2000; Grzywacz, Almeida, & McDonald, 2002), with stronger organizational commitment, higher job satisfaction, and personal growth (Aryee, Srivas, &

Tan, 2005), and lower levels of stress, depression, alcohol abuse, and marital conflict (Grzywacz & Marks, 2000; Hammer, Cullen, Neal, Sinclair, & Shafiro, 2005).

Both conflict and enrichment can occur from either role (i.e., work or family) and operate in either direction (i.e., work-to-family or family-to-work) (Frone, 2003; Frone, Russell, & Cooper, 1992). The work-to-family direction mainly encompasses work domain antecedents and family domain consequences, whereas the family-to-work direction considers family characteristics as antecedents and work aspects as consequences (Frone et al., 1997; Matias & Fontaine, 2012; Voydanoff, 2005). This cross-domain perspective has dominated the work-family literature and has also received empirical support (see Frone, 2003 for a review). Nonetheless, a matching hypothesis that assumes work-family conflict has a primary impact on the domain where the conflict originates has more recently been proposed (Amstad, Meier, Fasel, Elfering & Semmer, 2011). Empirical testing of both hypotheses through meta-analysis lends support to both, revealing reciprocal relationships between both forms of work-family conflict and strain (Nohe, Meier, Sonntag, & Michel, 2015). Given our interest in clarifying the impacts of work-related dynamics on parenting experiences, the work-to-family direction was selected. However, due to the reciprocal relationships between the two directions, the family-to-work direction was also adjusted in our analyses (see Figure 1).

### **Work-family dynamics and parenting**

There are two different ways in which strain can be transmitted: through spillover and through crossover. The former refers to within – person, across-domains, transmission of characteristics and consequent strain or positive experiences from one area of life to another. The later involves transmission across individuals, namely across individuals sharing the same environment (Westman et al., 2004). This section considers the spillover process.

Work to family spillover can be framed within an ecological systems framework for understanding the parental work to family spillover as part of the ecological system where

children's development is embedded. Parent's work, a characteristic of child's exosystem, can affect parenting skills, a characteristic of the child's microsystem (Bronfenbrenner & Morris, 1998). Thus, parent's interactions with their children constitute the proximal processes fostering child developmental acquisitions. In addition, parenting (which occurs within the family system) is influenced by interactions with the broader social environment, including cultural characteristics and the work environment, making individuals and families embedded in multilayered contextual systems (Belsky, 1984; Bronfenbrenner & Morris, 1998).

Relatively few studies have specifically considered how work-family conflict and work-family enrichment conjointly relate to parenting practices and experiences (Cinamon, Weisel, & Tzuk, 2007; Lau, 2010). Most have focused on how parents' daily work experiences associate with family functioning (Crouter, Bumpus, Head, & McHale, 2001; Galambos, Sears, Almeida, & Kolaric, 1995; Repetti, 1994; Roeters, Van der Lippe, & Kluwer, 2010). Going beyond the perspective of associating work indicators with parenting aspects, we explicitly focus on WFC and WFE perceptions as the appraisals individuals make regarding their work and family interferences. Because work-family conflict occurs when demands are perceived to be superior to resources and thus lead individuals to feel strain in managing multiple roles, we expect work-family conflict to be associated with less positive parenting experiences (i.e., lower confidence; lower involvement; lower attachment, and higher relational frustration) (Hypotheses 1). On the contrary, enrichment occurs when individuals appraise their involvement in work domains as affording them resources that favorably affect their home performance. Therefore we expect work-family enrichment to link with positive parenting experiences (i.e., higher parental confidence, involvement, and attachment, and lower relational frustration) (Hypotheses 2). In fact, the meager available literature on the topic tends to sustain these associations. Work-family conflict has been associated with less favorable parent-child interactions (Cinamon et al., 2007; Lau, 2010),



such as lower parental engagement in educational and recreational activities with the children (Cho & Allen, 2012), less maternal warmth and responsiveness, and greater maternal irritability (Cooklin et al., 2014). Also, work-family conflict was negatively related to parental self-efficacy (Cinamon et al., 2007) and to individuals' engagement in social activities with their spouses and children (Ilies et al., 2007), and positively related to parenting stress, especially in the case of avoidantly attached individuals (Vieira, Ávila, & Matos, 2012). By contrast, work-family enrichment has been negatively associated with parenting stress (Vieira et al., 2012) and positively related with mothering consistency and warmth (Cooklin et al., 2014).

Based on Cooklin et al.'s (2014) recent findings that greater maternal irritability, and diminished maternal warmth and responsiveness, occurred when more demands were appraised in the work domain, we expected WFC to be associated with lower attachment quality (Hypothesis 1.1) and with higher parental frustration (Hypothesis 1.2). Although their study focused solely on mothers, we also expected the same pattern for fathers. Based on the findings of Bass, Butler, Grzywacz, and Linney (2009), Repetti, (1994), and Roeters et al. (2010), longer work hours and demanding, stressful jobs were related to less time spent in leisure and caring activities as well as to fewer involvement behaviors. Thus, these higher demands imply more WFC which we expected to be associated with less parental involvement (Hypothesis 1.3). A decreased sense of parenting confidence may also be expected (Hypothesis 1.4) in regard to Cinnamon et al.'s (2007) finding of a negative association between parental self-efficacy and WFC.

Much less evidence has been produced concerning work-family enrichment or positive work environments. However, based on Greenberger, O'Neil and Nagel (1994) and Parcel and Menaghan (1994) findings of positive work environment associations (job autonomy, work complexity, stimulation, and challenge) with parental warmth and responsiveness, we

expected higher levels of WFE to be associated with higher quality of attachment (Hypothesis 2.1). If individuals appraise their work as a source of positive affect, it can be expected that their parenting role will be driven by lower levels of relational frustration (Hypothesis 2.2). In fact, Vieira et al. (2012) found that WFE was related to lower parental stress, a construct similar to parenting relational frustration. Although no prior studies have directly examined relations of WFE with parental competence and parental involvement, we expected higher levels of WFE to also be associated with higher self-reported levels of parental involvement (Hypothesis 2.3) and parental confidence (Hypothesis 2.4).

### **Crossover effects on parenting within couples**

As noted earlier, crossover describes the interpersonal process that occurs between individuals and involves a dyadic transmission of negative and positive experiences (Westman et al., 2004). Clearly, in addition to having direct influences on their children, parents also have indirect influences on them by way of their crossover impacts on their partners. A crossover perspective is a central feature of family systems theory which emphasizes that families are systems of interconnected and interdependent individuals and each individual can only be understood in relation to the others (Kerr & Bowen, 1988). These reciprocal influences are relevant to assess in dual-earner couples with children, as both members of the couple face challenging demands from both work and family. Indeed, such influences augment the risks of emotional contagion from one member's work role to the other member's family role, namely parenting (Barnett & Gareis, 2007; Keizer & Schenk, 2012; Roeters et al., 2010). It is therefore likely, that one member's experience of work-family conflict or enrichment will link with the other couple member's parenting experience. If one parent perceives their work as draining time and energy for engaging with the family (work-family conflict) and understandably with the child (parental role) this may relate to the other partner's parenting experience. For example, the other partner may need to change

his/her interaction with the child. Similarly, if one partner perceives their work as enriching their family engagement this again may relate to the other partner's parenting quality.

In this regard, Barnett and Gareis (2007) found that mothers' work schedules were not associated with the amount of time they were directly involved with their children; however, they were associated with fathers' parenting behaviors as well as with fathers' ratings of their own parenting skills. Relatedly, there is evidence that fathers engaged in routine childcare activities when their female partners worked longer hours and in more restrictive and less "family friendly" work settings, whereas mothers' child-related activities were greater when their partners worked more paid hours (Roeters et al., 2010). Other studies have found that the quality of father-child interactions was affected by mothers' work experiences, while mothers' interactions with their children were not affected by fathers' work experiences (e.g., Almeida & McDonald, 1998; Costigan, Cox & Cauce, 2003). These findings suggest that fathers may be more prone to experience stronger partner crossover influences because their parenting role is less well scripted than the maternal role and therefore more susceptible to contextual influences (Belsky, Youngblade, Rovine, & Volling, 1991; Thompson & Walker, 1989), including their partners' experience of work-family integration. Although cultural norms pertaining to the paternal role have been changing in recent decades (Wall, Aboim, & Cunha, 2010), mothers' parenting role has been more consistent over time despite women's increased participation in the labor force. Related to this inference are consistent findings of an asymmetrical and gender-linked division of family responsibilities, with women continuing to be mainly responsible for childcare and household tasks (Fontaine, Andrade, Matias, Gato, & Mendonca, 2007; Perista, 2007; Poeschl, 2000). Indeed, Westman et al.'s (2004) finding of gender differences in crossover suggests caution in drawing conclusions regarding the moderator role of gender. Gender may be intertwined with the breadwinner role and with traditional gender relationships. Therefore, taking into account the cultural context

of this study, namely the view of women's predominant role in the family (shared by both genders), we expected mothers' work-family conflict to be more strongly related to fathers' parenting experiences than fathers' work-family conflict would be related to mothers' parenting experiences (Hypothesis 3). In regard to crossover effects of work-family enrichment, few research findings can be used to derive hypotheses; nevertheless, following the reasoning that mothers have a stronger involvement in work-family balance, we again tested for gender differences in crossover, expecting mother's work-family enrichment to be more strongly associated with father-child relations than vice versa (Hypothesis 4).

To our knowledge, only one prior study explicitly addressed work-family linkages and parenting from a dyadic perspective (Cinamon et al., 2007). Though these authors did not find a crossover effect between (partner) work-family conflict and (self) quality of parent-child interaction, we sought to expand their focus by simultaneously analyzing work-family enrichment and conflict and their associations with a wider array of parent-child relationship dimensions, including attachment, involvement, parenting confidence, and relational frustration.

## **Method**

### **Participants and Procedure**

The present sample consisted of 346 dual-earner couples with preschool children (aged between 3 and 6 years old). By limiting our focus to preschool children we sought to avoid the potentially confounding effects of children's age on parents' work-family dynamics and parent-child relationships. These working parents were recruited between February 2012 and May 2013, among 25 public and private preschools in the Porto and Gaia metropolitan areas, two main urban areas from the North region of Portugal, the most populated area of the country (Statistics Portugal, INE, 2011). After obtaining permission from these childcare institutions, the general objectives of the study were explained to school coordinators and

their kindergarten teachers. The teachers were then provided with flyers describing the study, along with copies of packets containing the research measures for subsequent distribution to parents. Couples who agreed to participate in the study provided their written informed consent and were instructed to complete the surveys separately, to place them in individual sealed envelopes, and to return them to their children's teacher. All collected questionnaires were then returned to the researcher once data collection was completed. Only those surveys in which both partners provided information were considered for this study. In addition, as there were very few stepparents in our sample (less than 2%), and because stepparents' parenting roles are more complex and less defined than biological parenting roles (Shapiro, 2014), we eliminated these parent-stepparent pairs and only retained in the final sample those participants who were their child's biological parents. The parents' participation rate was 38%. This rate was equivalent among parents of children from public (37%) and private (39%) schools.

Participants ranged in age from 23 to 54 years old ( $M = 36$  years,  $SD = 4.9$ ), and their highest educational levels were as follows: 3.8% had attended the 6<sup>th</sup> grade, 14.5% had attended the 9<sup>th</sup> grade, 30.1% had completed secondary education, and slightly over half of the participants (51.8%) had a higher education degree (bachelor's/master's/PhD). Couples were living together for an average of 9 years ( $SD = 3.9$ ), most of them had one child (53.8%), 42% had two children, and only 4.2% had 3 or more children. Regarding parents' workloads, 5.3% worked part-time (up to 30 hours per week) and 94.7% worked full-time (53.4% worked 35 to 40 hours per week and 41.3% worked more than 40 hours per week). More specifically, 1.7% of men and 9% of women worked up to 30 hours per week, 47.7% of men and 59% of women worked 35 to 40 hours per week, and 50.6% of men and 32.1% of women worked more than 40 hours per week. Among our participants, 24.4% (23.4% of men and 25.4% of women) worked in rotating shifts (where job schedules change periodically

according to a predefined set of shifts and employees take turns on these different shifts), and 75.6% (76.6% of men and 74.6% of women) worked in fixed schedules (where job working hours and working days remain the same from week to week).

This convenience sample was nonetheless quite characteristic of the Portuguese dual-earner population (Statistics Portugal, INE, 2011), with respect to parents' age range (according to 2011 national census, 55% of the population have between 25-64 years old), parents' working hours (around 9% of active individuals work less than 30 hours and 88% work more than 35h per week), as well as family structure (the most typical family pattern in Portuguese population is couples with children (50%); 55% of couple members are employed and 50% of these dual-earner couples have at least one child under 6 years of age). Our sample therefore reflects a characteristic family pattern in Portugal (dual-earner couples with pre-school aged children) and wherein work-family balance is a particularly relevant issue, as Portugal is one of the European Union (EU) countries with the highest percentage of full-time dual-earner couples and with one of the highest rates of women working outside the home while raising children under 6 years of age (72.8%) (Eurostat, 2010). In addition, and in contrast with other European countries where women with young children tend to work part time, the majority of employed Portuguese women work full time (84.5%) (INE, 2010).

## Measures

*Work-Family Conflict Scale* (WFCS; Carlson, Kacmar, & Williams, 2000). This instrument measures the following three forms of work-to-family conflict: (a) *time-based conflict* ("My work keeps me from my family activities more than I would like"); (b) *strain-based conflict* ("I am often so emotionally drained when I get home from work that it prevents me from contributing to my family"); (c) *behavior-based conflict* ("Behavior that is effective and necessary for me at work would be counterproductive at home"). Each of these

dimensions of conflict is assessed with three items. All items are rated on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). The WFCS has proven to have good validity and reliability (Carlson et al., 2000). We used the Portuguese version of this instrument (WFCS-P; Vieira, Lopez, & Matos, 2013). In the present study, WFCS-P scores demonstrated high internal consistency reliability (Cronbach's  $\alpha = .86$ ).

*Work-Family Enrichment Scale* (Carlson et al., 2006). This instrument assesses three forms of work-to-family enrichment: (a) *development-based WFE* ("My involvement in my work helps me to understand different viewpoints and this helps me be a better family member"); (b) *affect-based WFE* ("My involvement in my work makes me feel happy and this helps me be a better family member"); (c) *capital-based WFE* ("My involvement in my work provides me with a sense of accomplishment and this helps me be a better family member"). Each of these dimensions of enrichment is assessed with three items. All items are rated on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). The WFES has proven to have good validity and reliability (Carlson et al., 2006). We used the Portuguese version of this instrument (WFES-P; Vieira et al., 2013). In the present study, WFES-P scores demonstrated high internal consistency reliability ( $\alpha = .86$ ).

*Parenting Relationship Questionnaire - Preschool Form (PRQ; Kamphaus & Reynolds, 2006)*. This questionnaire contains five subscales assessing parents' perspectives on their parenting role and on their relationship with the preschool child. Given the particular purposes of our study, we used the following four subscales: (a) *attachment*, measuring the affective, cognitive, and behavioral relationship between a parent and child that results in feelings of closeness, empathy, and understanding on the part of parent for the child ("When upset, my child comes to me for comfort"); (b) *involvement*, assessing the extent to which the parent and child participate together in a variety of common activities, along with the parent's knowledge of the child's activities ("I teach my child how to play new games"); (c) *relational frustration*,

measuring the parent's level of stress in relating to and controlling child's behavior and affect, along with the tendency to be overreactive and frustrated in common parenting situations ("I lose my temper with my child"); and (d) *parenting confidence*, assessing the comfort, control, and confidence of the parent when actively involved in the parenting process and when making parenting decisions ("I am confident in my parenting ability"). We used the Portuguese version of this instrument (PRQ-P; Vieira, Cadima, Leal, & Matos, 2013). A confirmatory factor analysis and goodness-of-fit indicators ( $\chi^2/df = 1.83$ ; CFI = .907; RMSEA = .045) yielded support for the measurement model. In the present study, scores on each of the four dimensions of PRQ evidenced acceptable to strong internal consistencies: attachment (11 items;  $\alpha = .82$ ), involvement (8 items;  $\alpha = .88$ ), relational frustration (8 items;  $\alpha = .72$ ), and parenting confidence (7 items;  $\alpha = .70$ ).

All these scales were translated according to the International Test Commission Guidelines (2010). Specifically, a forward-and-backward translation procedure using a panel of five translators was performed to validate and develop a culturally appropriate and linguistically equivalent Portuguese version of the scale (Hambleton, Merenda, & Spielberger, 2005).

### **Analysis Plan**

Our primary analyses investigated the relationships of each member of dual-earner couple's work-to-family (WF) conflicting and enriching dynamics to their own and to their partner's parenting experiences, while controlling for potential confounds of husband's and wife's family-to-work (FW) dynamics, as well as [the gender of the focal child, as this variable could influence mothers' and fathers' appraisals of parenting](#) In order to maintain sufficient statistical power of our analyses, and as a preliminary effort to determine those paths that ought to be controlled in our model, we first compared bivariate correlations between work-to-family variables and parenting variables (see Table 1) with partial



correlations between those same variables, controlling for child's gender and family-to-work directional variables. Based on that comparison, we then identified those initially significant correlations that became non-significant due to the control variables, and we only added the control variables to those model paths that were apparently confounded.

To test our dyadic hypothesis, we used the Actor–Partner Interdependence Model (APIM) with distinguishable dyads (Kenny et al., 2006), along with structural equation modeling (SEM) with maximum likelihood estimation (AMOS 19 software IBM SPSS). While SEM allows simultaneous testing of relationships between sets of variables and comparison of the magnitudes of competing regression paths, APIM allows for the estimation of both individual (intrapersonal) and dyadic (interpersonal) factors, thus enabling an examination of the influence of one person's predictor variables on his/her own outcomes (actor effects), as well as on the other partner's outcomes (partner effects). We indexed individual or actor effects due to each individual's WFC and WFE on his/her own parenting confidence, involvement, relational frustration, and parent-child attachment, whereas partner effects reflected the influence of each individual's WFC and WFE on their partners' parenting confidence, involvement, relational frustration and parent-child attachment. In the APIM, actor effects are estimated controlling for partner effects, partner effects are estimated controlling for actor effects, and errors of measurement in observed variables are allowed to covary across dyads members, thereby accounting for dyadic nonindependence by minimizing biases in the estimation of effects (Kenny et al., 2006).

Next, we used a nested model comparison procedure to examine differences in strength between fathers' and mothers' effects, in which these effects were constrained to be equal after testing the model with unconstrained paths. Within the APIM framework, these equality constraints allow testing for significant differences in the strength of both actor and partner effects, through the examination of chi-square difference test significance (Gonzalez &

Griffin, 2001). Due to the sample size ( $N = 346$  couples) and the number of parameters to be estimated all variables were modeled as observed variables. To convert each scale into an observed variable, we took the weighted average of scores (derived from CFAs previously tested) for all items on the scale.

## Results

### Preliminary analyses

Table 1 presents the means, standard deviations, and zero-order intercorrelations of all variables for both men and women. The correlations between mothers and fathers on parallel variables (i.e., within-dyad correlations, normally used to measure interdependence in distinguishable dyads) confirm the dependence of the partners' data and thus the need to take nonindependence into account in the analytical strategy. Mothers' WFC, WFE, parenting sense of competence, involvement, attachment, and relational frustration were positively associated with fathers' scores on the same dimensions. These correlations also revealed that, overall, men's experience of WFC and WFE was predominantly correlated with only their own parent-child relationship dimensions, whereas women's experience of WFC was, overall, correlated with both their own and their partner's parent-child relationship scores.

*Table 1 about here*

The results of the paired-samples  $t$ -tests conducted to assess gender differences in the variables' means are also reported in Table 1. Three differences emerged. Relative to men, women reported significantly higher WF conflict ( $t = -2.25, p = .025, d = .16$ ), higher parental involvement ( $t = -3.87, p < .001, d = .26$ ) and higher parent-child attachment quality ( $t = -8.17, p < .001, d = .55$ ).

### Actor and Partner Effects of Work-Family Dynamics on Parenting Experiences

Figure 1 depicts the significant actor and partner relationships between WF dynamics and parenting experience, and their respective beta values, while controlling for child's

gender and parents' FW variables. The model tested provided a good fit to the data ( $\chi^2_{(87)} = 176.28$ ;  $p = .000$ ;  $\chi^2/df = 2.03$ ; CFI = .97; RMSEA = .055; SRMR = .10).

*Figure 1 about here*

Significant actor effects were found for both men and women. For both genders, the experience of work-family conflict was positively linked with relational frustration in parent-child interactions ( $\beta = .35$ ,  $p < .001$ , for fathers;  $\beta = .39$ ,  $p < .001$ , for mothers) and negatively associated with their sense of parenting competence ( $\beta = -.36$ ,  $p < .001$ , for fathers;  $\beta = -.37$ ,  $p < .001$ , for mothers), with involvement in parental role ( $\beta = -.31$ ,  $p < .001$ , for fathers;  $\beta = -.28$ ,  $p < .001$ , for mothers) and with the perceived quality of attachment in parent-child relationship ( $\beta = -.25$ ,  $p < .001$ , for fathers;  $\beta = -.13$ ,  $p = .030$ , for mothers). By contrast, and again for both men and women, the experience of work-family enrichment was positively associated with their involvement in parental role ( $\beta = .17$ ,  $p < .001$ , for fathers;  $\beta = .12$ ,  $p = .004$ , for mothers) and negatively associated with relational frustration in their parent-child interactions ( $\beta = -.10$ ,  $p < .032$ , for fathers;  $\beta = -.09$ ,  $p = .002$ , for mothers). For fathers (but not for mothers), WF enrichment was positively associated with perceived quality of attachment in parent-child relationship ( $\beta = .23$ ,  $p < .001$ ) and with parenting sense of competence ( $\beta = .23$ ,  $p < .001$ ).

Regarding partner effects, whereas only one significant effect was observed for mothers' parenting experience, three partner effects were found for fathers' parent-child relationship. Specifically, men's work-family conflict was only positively associated with women's relational frustration in their interactions with the child ( $\beta = .06$ ,  $p = .030$ ), while women's work-family conflict was also positively linked to men's parent-child relational frustration ( $\beta = .17$ ,  $p < .001$ ), and negatively associated with men's parenting sense of competence ( $\beta = -.12$ ,  $p = .001$ ) and parent-child attachment ( $\beta = -.09$ ,  $p = .032$ ).

Overall, the combined actor and partner effects accounted for 21% of the variance in fathers' parenting confidence, 13% of mothers' parenting confidence, 17% of fathers' relational frustration, 16% of mothers' relational frustration, 14% of fathers' involvement in parental role, 11% of mothers' parental involvement, 14% of fathers' attachment relationship quality and 5% of mothers' attachment relationship quality.

### **Comparison of Actor and Partner Effects of Work-Family Dynamics on Parenting Experiences**

As noted earlier, equality constraints were used to statistically compare and evaluate the significance of differences in both actor and partner effects by examining the significance of the chi-square difference test. Specifically, the equality constraint test compares the value of the chi-square test of the nested model where the parameters are constrained to be equal with the chi-square value for the same model but without the constraints. If the difference between the two chi-square values is statistically significant, then the constrained model indicates poorer fit which then supports the inference that the parameters are not equal. These results are reported in Table 2.

#### *Table 2 about here*

The actor effects of WF conflict on parenting dimensions did not significantly differ for fathers and mothers. None of the constrained actor paths had a  $\chi^2$  value significantly higher than the unconstrained paths, indicating that men and women were similar in the strengths of their WFC-related actor effects on their own parenting experience. On the other hand, we found gender differences in the actor effects of WF enrichment on parenting ( $\chi^2_{(4)} = 11.66, p = .020$ ), with a greater positive effect of fathers' WFE on their own sense of competence and on their quality of attachment and perceived relational frustration with the child. Comparing actor effects from WFC and WFE, the chi-square difference tests demonstrated that, for both men ( $\chi^2_{(4)} = 78.48, p < .0001$ ) and women ( $\chi^2_{(4)} = 54.34, p < .0001$ ), the actor effects

associated with work-family conflict had stronger impacts on all the four dimensions of parent-child relationship than did actor effects associated with work-family enrichment.

Regarding partner effects, and despite the earlier observation that mothers' WF dynamics differentially influenced fathers' parenting experiences, we found no gender differences on the paths from both WF conflict and enrichment to the partner's dimensions of parenting. When partner effects from WFC and WFE were compared, we found that only parent-child relational frustration was affected differently by the partners' experience of WF conflict and enrichment. For both fathers ( $\chi^2_{(1)} = 4.59, p = .032$ ) and mothers ( $\chi^2_{(1)} = 5.51, p = .019$ ), relational frustration was more affected by the partner's experience of WFC than by partner's WFE.

Comparing actor and partner effects, the chi-square difference tests showed that the actor effects consistently differed from the partner effects, revealing that the fathers' and mothers' outcomes were affected more by their own WF dynamics than by their partner's WF dynamics (see Table 2).

## Discussion

The current study examined the extent to which working mothers' and fathers' reported levels of work-family conflict and work-family enrichment influenced their own and their partner's parenting experiences. Moreover, and unlike most studies in this domain, we gathered data from both members of working couples with preschool children and we conducted dyadic analyses that controlled for the nonindependence of couple data in order to more sensitively assess the effects of these work-family influences on each partner's parenting experiences. In general, and in line with a systemic perspective on family dynamics, our findings support the idea that the way parents deal with their work and family roles is associated with their parenting role experiences and with the quality of their parent-

child relationships, with significant effects associated with conflicting and enriching spillover observed for both fathers and mothers.

Consistent with findings of prior investigations (e.g., Cinamon et al., 2007; Costigan et al., 2003; Greenberger et al., 1994; Repetti, 1994; Roeters et al., 2010), we found negative effects of work-family conflict on parenting (perceived sense of competence, involvement, quality of attachment, and relational frustration). We additionally found evidence of the positive effects of work-family enrichment on parenting experiences; indeed, we believe these findings extend the relevant literature in that most of the extant research has adopted the work-stress perspective that emphasizes the detrimental effects of parental work and largely neglects consideration of the positive work-family spillover effects on parenting experiences. More specifically, we observed that, for both fathers and mothers, the experience of WFE was associated with higher parental involvement and lower parent-child relational frustration. In addition, for fathers, WFE was positively associated with perceived parenting competence and quality of parent-child attachment. Of special interest, gender differences were found at this level, with a greater positive effect of fathers' WFE on their sense of parental competence, on their parent-child attachment quality, and on their parent-child relational frustration, as compared to mothers.

It is also important to note that, both for men and women, WF conflict had greater effects on all the four dimensions of parenting experiences than did WF enrichment. This finding highlights the more central role that time and strain difficulties in balancing work and family demands may have on working parents, and particularly among those with young children. Studies have indeed shown that parents of young children generally experience higher levels of WFC and FWC compared to nonparents and to parents of older children (for a review, see Eby et al., 2005). This may occur because young children require more parental time, energy, and physical presence, as they are still very dependent on their caregivers. The

satisfaction of their instrumental and emotional needs (e.g., daily primary care, play and leisure activities) may thus demand great effort and attention from their caregivers. As a result, the parents of young children may be more psychologically overburdened by their competing work and family roles than are parents of older children, who have become more self-sufficient.

A second notable set of findings in our study involved the differential pattern of crossover effects between partners, and in particular the link between mothers' work-family dynamics and the parenting experience of fathers. Previous research on crossover effects has been inconclusive regarding gender differences, in part because women's employment status or levels of strain were not accounted for (Westman, 2002). In our couple study, wherein both members were employed, we found only one significant partner effect for women (from fathers' WFC to mothers' relational frustration), and three partner effects on men's parenting experience (from mothers' WFC to fathers' relational frustration, sense of competence, and attachment). These findings supported our predictions that maternal roles regarding caregiving are more clearly defined than are paternal roles. Adding to this argument, research has shown that the quality of father-child relationships has been associated with the attitudes of both partners toward paternal involvement (Lewis & Lamb, 2007) and with the quality of the marital interaction (Lamb & Lewis, 2010), although, in the latter study, the mother-child relationship was less influenced by these aspects. Either way, the asymmetric partner effects observed in this study suggest that mothers may set the emotional tone for the family, and that the way mothers reconcile their work and family roles may thereby shape the quality of fathers' parenting.

The only dimension of mothers' parenting that was affected by fathers' work-family dynamics, and specifically by fathers' WFC, was relational frustration. This dimension refers to the level of distress in relating to and controlling the child's behavior and affect, along with

the tendency to be overreactive and frustrated in common parenting situations. Perhaps fathers reporting high levels of work-family conflict are more likely to overburden their spouses with a disproportionate share of family responsibilities and, over time, this results in their spouses' less sensitive, tolerant, and patient parenting. The finding of Ten Brummelhuis, Haar and van der Lippe (2010) that men's time and energy deficit crossed over to wife's time and energy deficit is consistent with this tentative explanation.

### **Limitations and Future Directions**

Although our findings further clarify important interrelationships among the work-family dynamics of couples and their parenting experiences, several limitations must be considered when interpreting these results. First, and despite the fact that the background characteristics of our participants generally approximated those portrayed in 2011 national census, ours was still a convenience sample of Portuguese working parents; hence, caution should be exercised when generalizing our findings to other populations. Participants in our study were all heterosexual dual-earner couples, with moderately high levels of education, and the biological parents of preschool-aged children. Because these sample characteristics may limit the generalizability of the results, future research should examine work-parenting linkages in larger and more diverse samples that include working parents representing different family structures (i.e., "blended" families and families of gay/lesbian parents) and those at later stages of family development. Second, we acknowledge that, at the time of our data collection, the Portuguese economy was undergoing a severe recession, and that declining resources, an unstable job market, and the increased risk for unemployment and financial strain may have enhanced the potential for negative work-family spillover that affected our findings in unknown ways. Third, the present study was limited by its cross-sectional design and by its exclusive use of self-report instruments which are susceptible to response and social desirability biases. Future research should consider longitudinal, multi-



informant, and multi-method designs that include direct observations of parent-child interactions. Specifically, a longitudinal approach would allow for an exploration of how work-family dynamics impact parenting and parent-child relational processes over time. Also needed are studies that explore potential moderating and mediating mechanisms by which work-family dynamics affect parenting. Lastly, and because examining crossover relationships between mothers and fathers is only a first step toward examining families as systems, we encourage researchers to longitudinally explore how WF dynamics may indirectly affect children's developmental outcomes through their influence on parenting and parent-child relationships.

### **Implications**

Notwithstanding our study's limitations, we believe its findings have important implications for organizational and individual interventions aimed at reducing work-family conflict and advancing a positive integration of work and family roles. First of all, and from an organizational point of view, adopting policies that facilitate employees' positive work-family balance may yield benefits for organizations' outcomes, in part, by reducing employees' stressors at home which have been previously linked to their work-related performance, job satisfaction, organizational commitment, turnover intentions, exhaustion, and absenteeism (Allen, Herst, Bruck, & Sutton, 2000; Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Eby et al., 2005). Thus, the implementation of family-friendly policies in organizations (such as flexible working hours, parental leave opportunities to care for children, the availability of quality within-workplace childcare services during after-school hours, among others) may ultimately enhance employees' performance at work, by potentiating their positive parent-child relationships and family environments at home. Because our results demonstrate that individuals within families continually influence one another and that the work-family dynamics experienced by employed parents are

interdependent, efforts to reduce the stress and strain of employees and to promote their well-being when balancing work and family demands should include their partners as part of these assessments and problem-solving efforts. In particular, our findings suggest that the quality of care provided to children is more strongly associated with the work-family experiences of mothers. Therefore, efforts to enhance how women with young children are managing their work and family responsibilities may serve to minimize stress contagion and possibly enhance positive emotional crossover to other family members, with benefits for the parenting of both mothers and fathers.

Our results also suggest that intervention programs that provide instruction, support, and guidance for helping working parents of preschool children to adaptively integrate their work and family roles might have beneficial effects that extend beyond enhanced employee well-being and parenting competence. In particular, as the quality of parent-child relationships with children in the preschool years are likely influenced by the quality of parents' work-family negotiations, the latter dynamics may also shape the unfolding development of children's social, emotional and cognitive processes (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Maccoby, 2000). Hence, such intervention programs are not solely in the interest of work organizations, but also in the civic and policy interests of all modern societies.

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Table 1

*Intercorrelations of Scores on WF Dynamics and Parent-Child Relationship Measures*

	1	2	3	4	5	6	7	8	9	10	11	12
1. WFC (M)												
2. WFC (W)	(.222 <sup>**</sup> )											
3. WFE (M)	-.151 <sup>**</sup>	-.075										
4. WFE (W)	-.060	-.197 <sup>**</sup>	(.221 <sup>**</sup> )									
5. Parent.Confidence (M)	-.420 <sup>**</sup>	-.206 <sup>**</sup>	.290 <sup>**</sup>	.088								
6. Parent.Confidence (W)	-.107 <sup>*</sup>	-.368 <sup>**</sup>	.100	.144 <sup>**</sup>	(.297 <sup>**</sup> )							
7. Parent.Involvement (M)	-.332 <sup>**</sup>	-.082	.236 <sup>**</sup>	.150 <sup>**</sup>	.695 <sup>**</sup>	.199 <sup>**</sup>						
8. Parent.Involvement (W)	-.076	-.303 <sup>**</sup>	.088	.225 <sup>**</sup>	.173 <sup>**</sup>	.621 <sup>**</sup>	(.216 <sup>**</sup> )					
9. Parent.Attachment (M)	-.298 <sup>**</sup>	-.149 <sup>**</sup>	.275 <sup>**</sup>	.090	.789 <sup>**</sup>	.239 <sup>**</sup>	.653 <sup>**</sup>	.139 <sup>**</sup>				
10. Parent.Attachment (W)	-.014	-.207 <sup>**</sup>	.053	.121 <sup>*</sup>	.210 <sup>**</sup>	.736 <sup>**</sup>	.172 <sup>**</sup>	.537 <sup>**</sup>	(.250 <sup>**</sup> )			
11. Parent.Frustration (M)	.398 <sup>**</sup>	.249 <sup>**</sup>	-.167 <sup>**</sup>	-.053	-.762 <sup>**</sup>	-.324 <sup>**</sup>	-.399 <sup>**</sup>	-.154 <sup>**</sup>	-.468 <sup>**</sup>	-.179 <sup>**</sup>		
12. Parent.Frustration (W)	.177 <sup>**</sup>	.385 <sup>**</sup>	-.081	-.038	-.288 <sup>**</sup>	-.811 <sup>**</sup>	-.154 <sup>**</sup>	-.432 <sup>**</sup>	-.182 <sup>**</sup>	-.461 <sup>**</sup>	(.409 <sup>**</sup> )	
Mean	2.89	2.91	3.58	3.57	3.09	3.05	2.75	2.89	2.84	3.12	1.78	1.83
SD	.76	.74	.64	.66	.44	.41	.49	.52	.44	.38	.38	.34
T	-2.25 <sup>*</sup>		0.61		-1.03		-3.87 <sup>***</sup>		-8.17 <sup>***</sup>		-1.88	

Note: W = women; M = men. Correlations between parents on similar variables are given in parenthesis and italicized

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 2

*Nested Model Comparisons of Actor and Partner Effects*

Comparison of actor effects and partner effects ( $\chi^2$ )	df	$\chi^2$	Comparison of Actor vs. Partner effects ( $\chi^2$ )	df	$\chi^2$
Actor effects WFC-Parenting (Men = Women)	4	5.17	Actor and Partner effects WFC-Parenting (Men = Women)	8	40.97***
Actor effects WFE-Parenting (Men = Women)	4	11.73*	MenActorWFC_Conf = WomenPartnerWFC_Conf	1	10.24**
MenActorWFE_Conf = WomenActorWFE_Conf	1	6.69*	MenActorWFC_Rel.Frust = WomenPartnerWFC_Rel.Frust	1	4.77*
MenActorWFE_Rel.Frust = WomenActorWFE_Rel.Frust	1	5.13*	MenActorWFC_Involv = WomenPartnerWFC_Involv	1	16.33***
MenActorWFE_Involv = WomenActorWFE_Involv	1	.00	MenActorWFC_Attach = WomenPartnerWFC_Attach	1	4.29*
MenActorWFE_Attach = WomenActorWFE_Attach	1	5.74*	WomenActorWFC_Conf = MenPartnerWFC_Conf	1	16.74***
Partner effects WFC-Parenting (Men = Women)	4	5.53	WomenActorWFC_Rel.Frust = MenPartnerWFC_Rel.Frust	1	12.99***
Partner effects WFE-Parenting (Men = Women)	4	1.80	WomenActorWFC_Involv = MenPartnerWFC_Involv	1	11.41**
Men's Actor effects (WFC-Parenting = WFE-Parenting)	4	78.48***	WomenActorWFC_Attach = MenPartnerWFC_Attach	1	3.55
MenActorWFC_Conf = MenActorWFE_Conf	1	75.43***	Actor and Partner effects WFE-Parenting (Men = Women)	8	18.56*
MenActorWFC_Rel.Frust = MenActorWFE_Rel.Frust	1	45.31***	MenActorWFE_Conf = WomenPartnerWFE_Conf	1	9.56**
MenActorWFC_Involv = MenActorWFE_Involv	1	47.20***	MenActorWFE_Rel.Frust = WomenPartnerWFE_Rel.Frust	1	2.94
MenActorWFC_Attach = MenActorWFE_Attach	1	46.66***	MenActorWFE_Involv = WomenPartnerWFE_Involv	1	1.96
Women's Actor effects (WFC-Parenting = WFE-Parenting)	4	54.96***	MenActorWFE_Attach = WomenPartnerWFE_Attach	1	7.74**
WomenActorWFC_Conf = WomenActorWFE_Conf	1	37.53***	WomenActorWFE_Conf = MenPartnerWFE_Conf	1	.00
WomenActorWFC_Rel.Frust = WomenActorWFE_Rel.Frust	1	15.98***	WomenActorWFE_Rel.Frust = MenPartnerWFE_Rel.Frust	1	1.72
WomenActorWFC_Involv = WomenActorWFE_Involv	1	40.90***	WomenActorWFE_Involv = MenPartnerWFE_Involv	1	2.47
WomenActorWFC_Attach = WomenActorWFE_Attach	1	7.07**	WomenActorWFE_Attach = MenPartnerWFE_Attach	1	.44
Men's Partner effects (WFC-Parenting = WFE-Parenting)	4	6.57	Men's Actor and Partner effects (WFC-Parenting and WFE-Parenting)	8	43.80***
Women's Partner effects (WFC-Parenting = WFE-Parenting)	4	6.07	MenActorWFC_Conf = MenPartnerWFC_Conf	1	24.58***
			MenActorWFC_Rel.Frust = MenPartnerWFC_Rel.Frust	1	16.79***
			MenActorWFC_Involv = MenPartnerWFC_Involv	1	19.77***
			MenActorWFC_Attach = MenPartnerWFC_Attach	1	18.80***
			MenActorWFE_Conf = MenPartnerWFE_Conf	1	6.42**

MenActorWFE_Rel.Frust = MenPartnerWFE_Rel.Frust	1	.92
MenActorWFE_Involv = MenPartnerWFE_Involv	1	3.48
MenActorWFE_Attach= MenPartnerWFE_Attach	1	10.06**
Women's Actor and Partner effects (WFC_Parenting = WFE_Parenting)	8	35.37***
WomenActorWFC_Conf = WomenPartnerWFE_Conf	1	9.00**
WomenActorWFC_Rel.Frust = WomenPartnerWFE_Rel.Frust	1	6.86**
WomenActorWFC_Involv = WomenPartnerWFE_Involv	1	17.50***
WomenActorWFC_Attach= WomenPartnerWFE_Attach	1	.10
WomenActorWFE_Conf = WomenPartnerWFE_Conf	1	.80
WomenActorWFE_Rel.Frust = WomenPartnerWFE_Rel.Frust	1	.13
WomenActorWFE_Involv = WomenPartnerWFE_Involv	1	2.41
WomenActorWFE_Attach= WomenPartnerWFE_Attach	1	.81

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Note: \* $p < .05$ . \*\*  $p < .01$ . \*\*\* $p < .001$ .

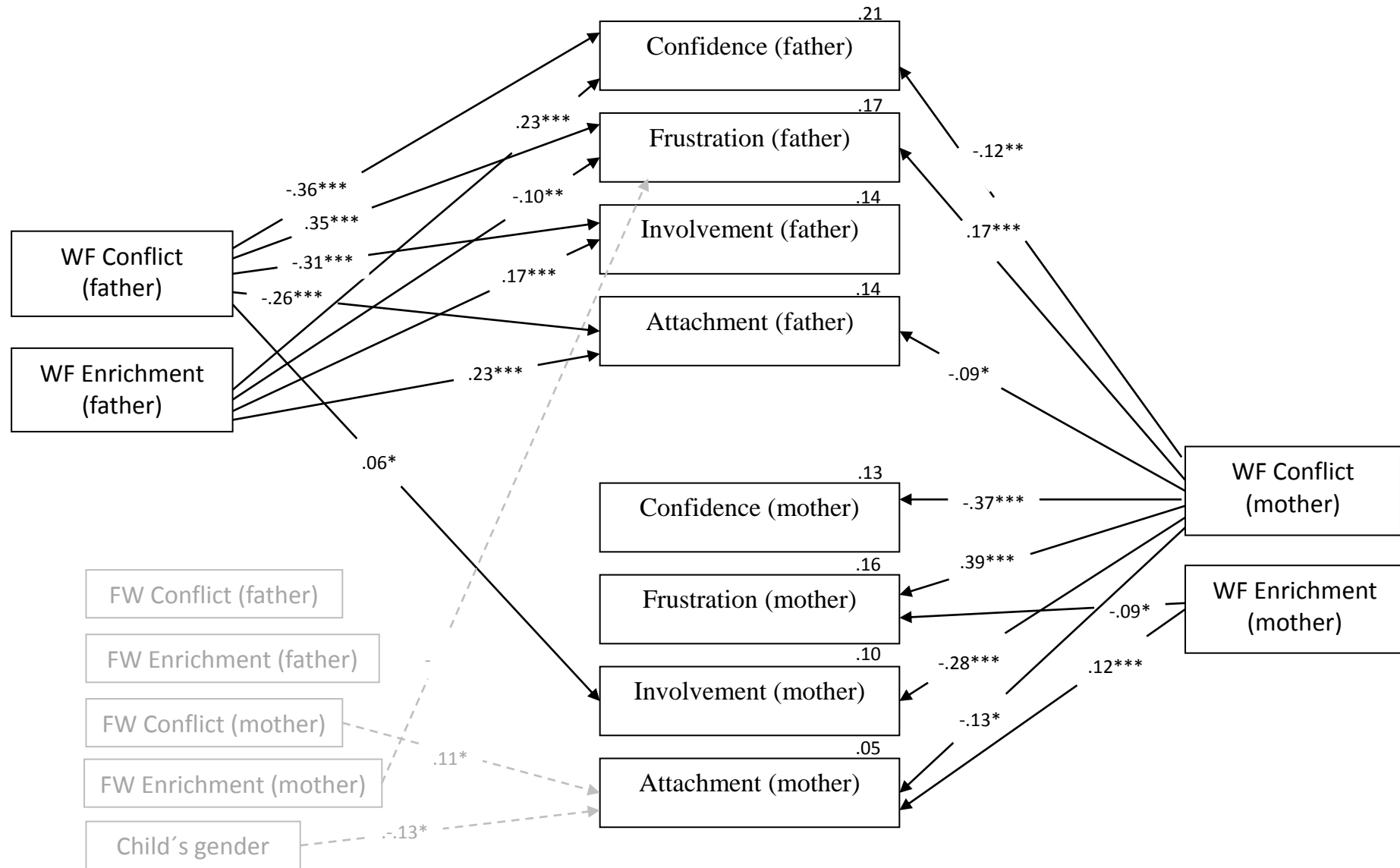


Figure 1. Final structural model: actor and partner effects of work-family conflict and enrichment on dimensions of parent-child relationship.

Note: Standardized coefficients significant at  $^* p < .05$ ,  $^{**} p < .01$ ,  $^{***} p < .001$