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This is the author's version of the manuscript accepted for publication in *Journal of Family Psychology*. Changes resulting from the publishing process, namely editing, corrections, final formatting for printed or online publication, and other modifications resulting from quality control procedures, may have been subsequently added.

The published version can be found in: Vieira, J., Matias, M., Ferreira, T., Lopez, F. G., & Matos, P. M. (2016). Parents' work-family experiences and children's problem behaviors: the mediating role of the parent-child relationship. *Journal of Family Psychology*, 30(4), 419-430. doi: 10.1037/fam0000189

Parents' Work-Family Experiences and Children's
Problem Behaviors: The Mediating Role of the Parent-Child Relationship

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This research is funded by FEDER through the Operational Competitiveness Factors Program – COMPETE, and by National Funds through FCT (Portuguese Foundation for Science and Technology), within the projects PTDC/MHC-CED/5218/2012 and SFRH/BD/73930/2010.

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Abstract

Studies on the impact of work-family dynamics on both parenting and children's outcomes are scarce. The present study addressed this gap by exploring how parents' negative (conflicting) and positive (enriching) experiencing of work and family roles related to children's internalizing and externalizing problem behaviors through its association with the quality of parent-child relationships. A sample of 317 dual-earner couples with preschool children was used to conduct a dyadic analysis of both within- and cross-dyad influences of parents' work-family experiences on child problem behaviors. Our results indicated that the way parents balance work and family is associated with their parent-child relationships, which in turn is differentially linked with their children's behaviors. We found that mothers' work-family conflict (WFC) contributed to children's externalization difficulties through its detrimental associations with their own and with their partners' parent-child relationship quality. By contrast, mothers' work-family enrichment (WFE) was negatively linked to children's externalization difficulties through its positive link with the mother-child relationship. Fathers' experience of WFC was associated with both children's internalization and externalization difficulties through its negative association with their own father-child relationship quality. In addition, fathers' experience of WFE also linked to children's externalization difficulties, but only indirectly, via its positive association with the quality of their relationship with the child. Further implications of these findings for advancing understanding of the impact of work-family dynamics on intrafamily relationships, as well as for individual and organizational interventions, are discussed.

Keywords: Work-family dynamics; Conflict; Enrichment; Parenting; Parent-child relationship; Children's outcomes

Parents' Work-Family Experiences and Children's

Problem Behaviors: The Mediating Role of the Parent-Child Relationship

Research on the work-family interface have proliferated in recent years; however, studies regarding the way parents' experiences of managing their work and family roles affect parent-child relationships and children behaviors/development is scarce. The present investigation extended this line of inquiry by addressing at least three limitations of prior studies of the work-family (WF) interface. First, WF research has largely emphasized a stress perspective by focusing on the negative consequences of work-family conflict, and there is limited research integrating both negative and positive perspectives on work-family dynamics (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Parasuraman & Greenhaus, 2002; Shaffer, Joplin, & Hsu, 2011). Second, few studies have specifically examined the impact of WF dynamics on both parenting and children's outcomes (Eby et al., 2005) or conjointly considered the experiences of both working mothers and fathers in order to better assess how each parent's WF experiences affect intra-family dynamics that may contribute to particular child behavior problems. A third limitation of prior work has been its typical focus on individual-level analyses that preclude the identification of dyadic effects (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Wieder-Boer, Gerris, Vermulst, Malinen, & Anderson, 2009) which cannot be completely understood without systematically accounting for the contributions of each member of a couple.

The present study addressed these important limitations by (a) assessing both the positive and negative features of the work-family interface for each member of a dual-earner couple (i.e., their respective work-family conflict and work-family enrichment experiences); (b) exploring the impacts of these work-family experiences on parent-child relationships and children's internalizing and externalizing problem behaviors; and (c) conducting dyadic analyses that controlled for the nonindependence of couple data, and allowed an appropriate

evaluation of crossover effects within couples that were associated with parent-child relationship quality (Cook & Kenny, 2005; Kenny, Kashy, & Cook, 2006). Our study's approach is thus consistent with family systems theory (Cox & Paley, 1997) which emphasizes the interdependence among all family members, and also with Bronfenbrenner's ecological theory (1979), which supports a contextualized understanding of the child's family situation that concurrently considers how the particular work experiences of parents may differentially affect the quality of parent-child relationships as well as the child's development. In the sections that follow, we more closely consider the research evidence supporting our study's goals.

Work-Family Dynamics

Over the past four decades, WF research has been dominated by the conflict perspective which emphasizes the potential detrimental effects of fulfilling multiple roles (for reviews, see Bianchi & Milkie, 2010; Byron, 2005; Eby et al., 2005). Work-family conflict (WFC) is assumed to stem from the competing responsibilities and demands associated with participation in multiple and salient roles, which may exhaust individuals' limited amount of time and energy resources, undermining their physical and psychological well-being and diminishing their quality of life within those competing roles (Greenhaus & Powell, 2006). 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). .

The potential benefits of multiple role involvement have also been studied, although to a lesser extent. According to Greenhaus and Powell (2006), work-family enrichment (WFE) occurs when experiences in one life role improve the quality of performance and experiences in another life role, either directly (instrumental path) or indirectly through its influence on positive affect (affective path). This perspective assumes that the performance of multiple roles can provide individuals with greater resources (e.g., skills, knowledge, enhanced esteem,

income) that lead to improvements in personal well-being and better functioning across several life domains.

Both conflict and enrichment can occur from either role (i.e., work or family) and operate in either direction. Commonly, 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. This cross-domain perspective is common in the work-family literature and has received considerable empirical support (see Frone, 2003 for a review). Given our interest in clarifying linkages between work-related dynamics and children via the parent-child relationship, the work-to-family direction was chosen in this study.

Work-Family Dynamics and Parenting

To date, most existing studies of the influence of WF dynamics on parenting and child outcomes have focused on how parents' work characteristics and specific job demands impact family functioning and parenting experience, with most research taking the work-stress perspective and focusing on the detrimental effects of parental work without considering its potentially positive influences (Eby et al., 2005).

Consistent with a spillover perspective (i.e., transference of experiences in one domain to another domain), several studies have shown that parents' negative work experiences reduce the quality of their family life. Specifically, stressful work conditions, such as feelings of pressure, overload or negative work atmosphere, have been linked to lower parental involvement and greater parental withdrawal in interactions with children (MacEwen & Barling, 1991; Repetti, 1994; Repetti & Wood, 1997), harsher parenting styles (Greenberger, O'Neil, & Nagel, 1994), more punishing behavior (Costigan, Cox, & Cauce, 2003; Repetti, 1994), lower levels of positive interactions and higher levels of negative parenting behaviors with children (Costigan et al., 2003; Repetti, 1994). In addition, longer working hours have

been associated with lower parental engagement of parents in leisure and caring activities with their children (Bass, Butler, Grzywacz, & Linney, 2009; Mattingly & Bianchi, 2003; Roeters, Van Der Lippe, & Fluwert, 2010).

Nonetheless, some studies have found that family life and parenthood can also benefit from parents' work experiences. Parents with greater job autonomy and more complex, stimulating, and challenging jobs have been shown to engage in more efficient parenting behaviors and to provide more positive home environments for their children, with more intellectual stimulation, warmth, responsiveness, and less punitive discipline (Greenberger, O'Neil, & Nagel, 1994; Parcel & Menaghan, 1994; Perry-Jenkins, Repetti, & Crouter, 2000).

Beyond the direct impacts of work demands and job characteristics on workers' family lives, parents' subjective appraisals of their work-family balance can influence their parenting experiences and the quality of their parent-child relationships. However, few studies have specifically and conjointly considered how WFC and WFE perceptions influence parenting practices and experiences (Cinamon, Weisel, & Tzuk, 2007; Lau, 2010), an aim we pursue in the present study. Our standpoint aligns with Voydanoff's model of the work-family interface (Voydanoff, 2008) in which work-family conflict and enrichment are cognitive appraisals that differentially reflect work and family demands and resources, with WFC occurring when demands are perceived to be superior to resources and thus lead individuals to feel strain in managing multiple roles, and WFE occurring when individuals appraise their involvement in work domains as granting them resources that favorably affect their home performance. The meager available literature on this topic found work-family conflict to be associated with negative parenting experiences in domains such as parenting self-efficacy (Cinamon, Weisel, & Tzuk, 2007), parenting satisfaction (Shreffler, Meadows, & Davis, 2011), parenting stress (Shreffler, Meadows, & Davis, 2011; Vieira, Ávila, & Matos, 2012) and parent-child interactions (Cinamon et al., 2007; Cooklin et al., 2014; Lau, 2010; Stewart & Barling, 1996).

Work-family enrichment, on the other hand, has been associated with less parenting stress (Vieira et al., 2012) and with higher maternal parenting consistency and warmth (Cooklin et al., 2014).

Taken together, these findings suggest that parenting experiences and practices of dual-earner couples with children will be influenced by how they perceive the positive and negative impacts of work on their family lives. Accordingly, we expected WFC to be negatively associated with parent-child relationship and WFE to be positively associated with parent-child relationship.

Another shortcoming of previous research relating work and parent-child relations has been its relative neglect of the interdependent characteristics of dual-earner families (Bumpus, Crouter, & McHale, 1999). 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 (Barnett & Gareis, 2007; Bass, Butler, Grzywacz, & Linney, 2009; Bryant & Zick, 1996). This is especially the case for dual-earner couples with children who share work and family experiences and their mutual task of child rearing (Barnett & Gareis, 2007; Roeters et al., 2010). *Crossover* is the term used to describe the dyadic/interpersonal process that occurs when one person's experiences influence another person in the same social environment (Bakker, Demerouti, & Dollard, 2008; Westman, 2001).

In some studies, the quality of father-child interactions was found to be affected by mothers' work experiences, whereas mothers' interactions with their children were not affected by fathers' work experiences. For example, Costigan et al. (2003) found that fathers increased their positive interactions and decreased their negative interactions with their child when mothers reported more job autonomy and better interpersonal atmospheres at work, while mothers' parenting was not affected by fathers' experiences at work. These findings suggest that fathers may be more prone to experience stronger partner crossover influences.

Accordingly, in the present study we expected mothers' work-family dynamics to be more strongly related to fathers' parenting experiences than fathers' work-family dynamics would be related to mothers' parenting experiences.

Consistent with Westman's (2001) argument that the bi-directionality of within-couple effects should be tested and that crossover research should expand its focus from the stress and strain perspective and encompass also positive crossover, our investigation extended the unit of analysis from the individual to the couple and analyzed the crossover of both WF conflict and enrichment links to parent-child relationships. To our knowledge, only one prior study has explicitly addressed work-family dynamics and parenting from a dyadic perspective, although using a correlational approach (Cinamon et al., 2007). In the present study, we expanded these authors' focus by considering both work-family conflict and enrichment dynamics, and also by exploring crossover effects within couples using a sophisticated statistical approach that controlled for the interdependence of couple effects

Work-family Dynamics and Children's Outcomes

Most of the existing literature on the relation of WF dynamics to children's outcomes has focused on the effects of maternal employment, been grounded in negative assumptions about mothers' workforce participation, and has typically neglected study of the positive and adaptive functions of maternal and dual-earner employment on children's adjustment. Of note, reviews and meta-analyses of this literature have concluded that studies of maternal employment showed either no or small adverse effects on child outcomes (Bianchi & Milkie, 2010; Gottfried, Gottfried, & Bathurst, 2002; Lucas-Thompson, Goldberg, & Prause, 2010; Ruhm, 2009). In fact, research suggests that maternal employment per se is not detrimental to children's development and that any effects that are due to mothers' employment can be understood only through parenting and other intervening environmental processes. Indeed, more so than earlier studies which failed to consider parenting or to control for confounding

factors, contemporary research is more concerned with the processes that mediate the relationship between parental employment and children's development (Gottfried et al., 2002). Overall, there is no consistent evidence across the multiple studies of a direct association between parent job characteristics and child well-being (e.g., Crouter et al., 1999; Galambos, Sears, Almeida, & Kolaric, 1995; Stewart & Barling, 1996). Instead, research typically supports the view that parental work or work-family experiences and children's development are linked through parenting or parent-child mediating processes (Beyer, 1995; Crouter et al., 1999; Galambos et al., 1995; Hoffman & Youngblade, 1999; MacEwen & Barling, 1991; Stewart & Barling, 1996; Whitbeck et al., 1997). And, as noted by Repetti (2005), there are strong theoretical and empirical rationales for placing family social interaction in this key role, as research findings consistently suggest that the quality of family relationships, in particular parent-child relationships, help shape the development of children's social, emotional and cognitive processes (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Maccoby, 2000), affecting an impressive array of child outcomes, including internalizing and externalizing child behavior problems (Barnett, Shanahan, Deng, Haskett, & Cox, 2010; Rinaldi & Howe, 2012; Tharner et al., 2012; Van Aken, Junger, Verhoeven, Van Aken, & Deković, 2008; Wood, McLeod, Sigman, Hwang, & Chu, 2003).

The present study analyzed the association of parents' conflicting and enriching experiences of their work-family roles with their children's internalizing and externalizing problem behaviors through the mediating link of parent-child relationship quality, while controlling for potentially confounding variables, such as the child's gender. The importance of studying these internalizing and externalizing outcomes in children derives from the well established evidence that emotional/behavioral patterns emerge early in life and remain relatively stable throughout childhood and adolescence (e.g., Angold & Egger, 2007;

Bornstein, Hahn, & Haynes, 2010; Campbell, Shaw, & Gilliom, 2000), along with the evidence that children's exposure to socialization begins within the family, mainly through early child-parent relationships (Fabes, Gaertner, & Popp, 2005). In this regard, and once again, parent-child research has largely focused on mothers and has neglected fathers' parenting inputs (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000), thus missing an opportunity to analyze the unique and combined contributions that both parents make to their young children's development (Rinaldi & Howe, 2012). Finally, our interest in examining the association between parents' work-family balance experiences and children's internalizing and externalizing behaviors derives from the available research showing that the characteristics of the parent-child relationship that appear to be shaped by parents' experiences at work – the amount of parental warmth and responsiveness, on the one hand, and the level of parenting-related harshness, punishment, rejection, and conflict, on the other – are presumably the types of interactions that more proximally affect children's risk for behavior problems (Repetti, Taylor, & Seeman, 2002). In light of the available evidence, we expected parents' WFC to be associated with lower parent-child relationship quality, which, in turn, would be linked to higher levels of children's externalizing and internalizing problem behaviors. Conversely, we hypothesized that parents' WFE would be positively associated with parent-child relationship quality, which in turn would be linked to lower levels of children's externalizing and internalizing problems.

Method

Participants and Procedure

The present sample consisted of 317 dual-earner couples with preschool children (aged between 3 and 6 years old). We limited our focus to preschool children for two reasons: first, the type of childcare services for this group tends to be distinct from care services available for infants, school-age children, and adolescents; second, we sought to avoid the potentially

confounding effects of children's age on parents' work-family dynamics and parent-child relationships, as well as on children's behavioral outcomes. These 317 working parents were recruited between February 2012 and May 2013 from both public and private preschools in Porto and Gaia metropolitan area, two contiguous urban centers in the North region of Portugal, the most populated area of the country (Statistics Portugal, INE, 2011). After obtaining permission from these preschools, the general objectives of the study were explained to school coordinators and their preschool 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 who were currently employed. Parents who expressed interest in participating were assured that their responses would remain confidential. Following their completion of informed consent materials, each member of the participating couples was instructed to complete the surveys separately, place them in individual sealed envelopes, and then return them to their children's teacher. All collected surveys 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 few single parents, divorced parents and stepparents in our sample, we eliminated these cases and only retained in the final sample those working parents who were married/living together and 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. Multi-informant data on child problem behavior were gathered by having fathers, mothers, and teachers independently rate participating children's behavior. Subsequent to the collection of both parents' ratings, teacher ratings of each participant child's were gathered. An average of 13 children was assessed in each of the 25 participating preschools, with a mean number of 4 children for each classroom/teacher.

Parents age range was from 23 to 54 years old ($M = 36$ years, $SD = 4.9$), and the majority held an university degree (bachelor's/master's/PhD - 51.8%), 3.8% had attended the 6th grade, 14.5% had attended the 9th grade and another 30.1% had completed secondary education. Couples were living together for an average of 9 years ($SD = 3.9$), most of them had one child (53%), 42% had two children, and only 5% had 3 or more children. Regarding work, the vast majority (99.3% of men and 95.3% of women) worked full-time and on a fixed schedule (76.6% of men and 75.7% of women). Approximately half (49.5%) of the men and 31.5% of the women in our sample worked more than 40 hours per week. Regarding the monthly household income in our sample, most of the couples reported an income between 1000€ and 2000€/month (45.7%), with 11.4% of the couples reporting an income of 1000€/month, 32.8% an income between 2000€ and 3000€/month, and 10.1% an income of more than 3000€/month.

This convenience sample was quite characteristic of the Portuguese dual-earner population described in the most recent national census (Statistics Portugal, INE, 2011). Our participants were very close to the dual-earner Portuguese population in terms of age range (according to 2011 national census, 55% of the population have between 25-64 years old), as well as the number of working hours per week (according to that same census, around 9% of active individuals work less than 30 hours and 88% work more than 35 hours per week). Moreover, 47% of the Portuguese population is married and the most typical family pattern is couples with children (50%). Among Portuguese couples with children, 55% of couple members were employed and 50% of these dual-earner couples have at least one child under 6 years of age. Around 91% of pre-school children are enrolled in formal pre-school facilities. Our sample, thus, reflected a characteristic family pattern in Portugal: dual-earner couples with pre-school aged children enrolled in both private and public institutions; however, it

contained a substantially higher proportion of college-educated individuals than those identified in the 2011 census (27%).

Measures

Work-Family Conflict Scale (Carlson, Kacmar, & Williams, 2000). This instrument measures the following three forms of work-to-family and family-to-work 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). In the present study we used the Portuguese version of this instrument (WFCS-P; Vieira, Lopez, & Matos, 2013). Only the dimensions of conflict from the work-to-family direction were considered and scores on each of these subscales demonstrated high internal consistencies: WFC time based Cronbach's α fathers = .86/ mothers = .82; WFC strain-based α fathers = .88/.89; WFC behavior-based α fathers = .81/ mothers = .83; WFC total α fathers = .87/ mothers = .86.

Work-Family Enrichment Scale (Carlson, Kacmar, Wayne, & Grzywacz, 2006). This instrument measures six dimensions of enrichment in both directions [work-to-family enrichment (WFE) and family-to-work enrichment (FWE)]: *development-based WFE and FWE*; *affect-based WFE and FWE*; *capital-based WFE and efficiency-based FWE* (e.g. "My involvement in my work provides me with a sense of accomplishment and this helps me be a better family member"). Each of the six dimensions of enrichment is assessed with three items and all items are rated on a 5-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (5). In the present study we used the Portuguese version of this instrument (WFES-P; Vieira, Lopez, & Matos, 2013). Once again, only the dimensions of enrichment

from work-to-family direction were considered and scores on these subscales evidenced good reliabilities: WFE development-based α fathers = .89/ mothers = .90; WFE affect-based α fathers = .92/ mothers = .95; WFE capital-based α fathers = .87/ mothers = .87; WFE total α fathers = .91/ mothers = .91.

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. In this 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"). Items were rated on a 4-point scale from *never* (1) to *always* (4). PRQ items 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 develop and validate a culturally appropriate and linguistically equivalent Portuguese version of the scale (Hambleton, Merenda, & Spielberger, 2005). This Portuguese version of PRQ showed reasonable fit indices on first- and second-order confirmatory factor analysis (Vieira, Cadima, Leal, & Matos, 2013). In the present study, scores on each of the four dimensions of PRQ evidenced

acceptable to strong internal consistencies: attachment (9 items; $\alpha = .83/.75$ for fathers and mothers, respectively), involvement (8 items; $\alpha = .86/.89$ for fathers and mothers, respectively), relational frustration (7 items; $\alpha = .70/.76$ for fathers and mothers, respectively), parenting confidence (6 items; $\alpha = .70/.67$ for fathers and mothers, respectively) and total score (30 items; $\alpha = .89/.90$ for fathers and mothers, respectively).

Strengths and Difficulties Questionnaire - teacher and parent versions (Goodman, 1997; SDQ - Portuguese version, Fleitlich, Loureiro, Fonseca, & Gaspar, 2005). The SDQ is a widely used brief behavioral questionnaire for assessing a child's psychosocial adjustment that asks caregivers to rate the child on each of twenty-five behavioral attributes (some positive and others negative), using one of three possible response alternatives ("not true", "somewhat true", "certainly true"). In its original form, SDQ is composed of 5 subscales (emotional problems, peer problems, behavioral problems, hyperactivity and prosocial behavior); however this structure was not replicated through confirmatory factor analyses. Goodman, Lamping, and Ploubidis (2010) subsequently recommended that the emotional and peer items be combined to form an 'internalizing' problem behavior subscale, and the behavioral and hyperactivity items be combined into an 'externalizing' problem behavior subscale, and they gathered evidence to support this approach. In fact, this approach appears best-suited for studies of low-risk samples, whereas the use of five separate subscales may only be justified in studies of high-risk children (Goodman et al., 2010; Niclasen, Skovgaard, Andersen, Somhøvd, & Obel, 2013). Accordingly, we tested a three-factor model: internalizing, externalizing, and prosocial behaviors. Confirmatory factor analyses using diagonally weighted least squares (DWLS)¹ supported a common structure for fathers ($\chi^2 = 315.90$; $df = 182$; $p < .001$; $\chi^2/df = 1.74$; CFI = .94; RMSEA = .05), mothers ($\chi^2 = 299.14$; $df = 182$; $p < .001$; $\chi^2/df = 1.64$; CFI = .93; RMSEA = .04) and teachers ($\chi^2 = 359.18$; $df = 182$;

¹ This estimator is recommended when analyzing ordinal data with less than four category ratings, as is the case of SDQ measure (Hutchinson & Olmos, 1998)

$p < .001$; $\chi^2/df = 1.97$; CFI = .94; RMSEA = .06). This structure suggested an internalizing factor composed of 6 items (e.g., “unhappy, down-hearted or tearful”; “rather solitary, tends to play alone”), an externalizing factor composed of 8 items (e.g., “easily distracted, concentration wanders”; “restless, overactive, cannot stay still for long”) and a prosocial factor composed of 7 items (e.g., “helpful if someone is hurt, upset or feeling ill”). As previously mentioned, we gathered multi-informant data on child problem behavior by having fathers, mothers, and teachers independently rate participating children on the internalization and externalization subscales. Although we had some children in the same class that were, therefore, rated by the same teacher, the mean of children by classroom ($M = 4$, $SD = 2.98$), and the intraclass correlation coefficients (for $sdq_internalization$ $ICC = .038$, and for $sdq_externalization$ $ICC = .034$) were quite low in our sample and suggested a high level of independence of teachers' SDQ reports, which supports our decision not to use a multilevel approach in our subsequent analyses.

Cronbach's alphas for the internalization subscale were as follows: mothers ($\alpha = .58$), fathers ($\alpha = .63$) and teachers ($\alpha = .65$); externalization subscale alphas were as follows: mothers ($\alpha = .77$), fathers ($\alpha = .79$) and teachers ($\alpha = .85$). Consistently with previous research (Stone, Otten, Engels, Vermulst, & Janssens, 2010, for a review), parents' ratings of their child's problem behavior were less reliable compared to ratings obtained from the child's teacher.

Analysis Plan

We tested the proposed models with structural equation modelling (SEM) using maximum likelihood estimation (AMOS 19; Arbuckle, 2006). We chose to perform SEM because it is particularly suitable for testing mediated relationships and models, including latent variables, while simultaneously allowing testing of relationships between sets of variables and comparison of competing regression paths. In addition, we analyzed both

individual (intrapersonal) and dyadic (interpersonal) effects within our models, namely within parents' WFC/WFE and parent-child relationship variables. Specifically, we estimated individual effects due to each parent's WF variables on his/her own parent-child relationship, as well as on the other partner's parent-child relationship. The intrapersonal effects were estimated controlling for interpersonal effects, interpersonal effects are estimated controlling for intrapersonal 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, Kashy, & Cook, 2006). In the second part of the model we estimated the effect of each parent-child relationship on children's internalizing and externalizing behavior as well as the direct and indirect effect of each parent's WF variables on children's behavior. To evaluate the fit of the models to the data, and following Schweizer (2010) recommendation, the χ^2/df ratio, the comparative fit index (CFI) and the root mean square error of approximation (RMSEA) were used. Missing values were addressed by imputation through expectation maximization (EM) method. EM is an adequate method when data is missing completely at random and none of the items has more than 5% of missing values (Tabachnick & Fidell, 2007), assumptions that were checked and verified in our sample.

Prior to testing our hypothesized models, we tested the measurement model of all subscales to ensure that the items produced the expected factor structures. More specifically, we estimated a six-factor solution including WFC for the mother and for the father, father-child relationship quality and mother-child relationship quality, and externalizing internalizing problem behaviors. Each latent variable was modelled with at least three predictors. WFC was modeled with the three subscales (time, strain, and behavior), parent-child relationship quality with four subscales (confidence, involvement, attachment, and relational frustration) and externalizing and internalizing child problem behaviors with the

three informants' reports (father, mother, and teacher). This measurement model demonstrated a good fit to the data ($\chi^2 = 387.19$; $df = 155$; $p = .000$; $\chi^2/df = 2.50$; CFI = .92; RMSEA = .07) and all of the standardized loadings were significant ($p < .01$). A six-factor measurement model for WFE was similarly tested, with the three subscales of WFE as observed variables of the latent WFE construct.

This measurement model yielded good adjustment indexes ($\chi^2 = 380.37$; $df = 158$; $p = .000$; $\chi^2/df = 2.41$; CFI = .93; RMSEA = .07) and all of the standardized loadings were significant ($p < .01$). In a second stage, we controlled for the child's gender and age, and for each parent's working hours when testing the hypothesized mediation models for WFC and WFE

There is a growing consensus that the significance of indirect effects is best tested by the bootstrap method (Mackinnon, Lockwood, & Williams, 2004). The bootstrap is a statistical resampling method for estimating the sample-specific parameters of a model and their standard errors (Preacher & Hayes, 2008). Following this procedure, we randomly (with replacement) drew 2000 bootstrap samples and calculated the 90% bias-corrected bootstrapped confidence intervals. A given indirect effect is significant if the respective confidence interval does not contain zero.

Results

Preliminary analyses

Table 1 presents the means (derived from the averages of item scores), standard deviations, and zero-order intercorrelations of all variables in the model. WFC was negatively associated with parent-child relationship quality (both from the same informant and the partner informant) and positively associated with the child's externalizing (same and partner informant) and internalizing problem behaviors (only same-informant); WFE was positively associated with parent-child relationship quality (except the association between mothers'

enrichment and father-child relationship) and negatively associated with child's externalizing and internalizing problem behaviors (same-informant). Parent-child relationship quality was negatively associated with both internalizing (same-informant) and externalizing behavior (both for same informant and for partner informant). The ratings of children's internalizing as well as externalizing problem behaviors were positively correlated across the three informants. Beyond their similar ratings of child problem behaviors, the only significant (negative) correlation found between teachers' and parents reports' was between teachers' reports of internalization behavior and fathers' WFE.

Table 1 about here

Direct and Indirect Effects of Work-Family Conflict on Children's Outcomes

We first tested the paths between father and mothers' WFC and children's outcomes and found fathers' WFC to be associated with both internalizing ($\beta = .26, p = .003$) and externalizing child problem behaviors ($\beta = .21, p = .007$), while mothers' WFC was only associated with their child's externalizing behaviors ($\beta = .27, p < .001$; $\beta = .02, p = .846$ for internalizing behaviors). The controls of child's age and gender were all significant except for the path between child's gender and internalization behaviors ($\beta = -.02, p = .742$).

Next, the mediation model for WFC was fitted (Figure 1). We found direct and indirect paths from fathers' WFC to children's externalizing behaviors and only a direct path from fathers' WFC to children's internalizing problem behaviors. For mothers, we found only indirect paths from mothers' WFC to both children's internalizing and externalizing behaviors. Mothers' WFC was related to both the quality of fathers' and mothers' relationship with the child, and mother-child relationship quality was associated with both internalizing and externalizing behaviors, while father-child relationship quality only associated with externalizing behaviors. A trimmed model where non-significant ($p > .05$) paths were removed (see path coefficients for the final model in Figure 3) provided a good fit to the data

($\chi^2 = 552.67$; $df = 235$; $p = .000$; $\chi^2/df = 2.35$; CFI = .90; RMSEA = .07). Subsequently, we tested for the significance of these indirect effects through bootstrapping (see Table 2) and found only the indirect effects via mother-child relationship to be significant. Thus, whereas fathers' WFC had only direct associations with both internalizing and externalizing child behaviors, mothers' WFC was only indirectly related to these outcomes. Regarding the control variables, child's age was negatively associated with both internalizing and externalizing behaviors, while child's gender was only negatively to their externalizing problem behaviors (with girls exhibiting fewer externalizing behaviors than did boys).

Overall, the combined effects for this WFC model accounted for 23% of the variance in fathers' parent-child relationship quality and 15% of mothers' parent-child relationship quality, and the direct and indirect effects found accounted for 24.8% of the variance in child's externalization behavior and 11.7% of child's internalization behavior.

Figure 1 about here

Direct and Indirect Effects of Work-Family Enrichment on Children's Outcomes

In the model examining the link between WFE and child problem behaviors, we found no significant direct path from fathers' WFE to either children's externalizing ($\beta = -.13$, $p = .060$) or internalizing problem behaviors ($\beta = -.14$, $p = .051$). Mothers' WFE was negatively associated with externalizing problems ($\beta = -.16$, $p = .017$) and not significantly related to internalization problems ($\beta = -.12$, $p = .109$). The controls of child's age and gender were again all significant except for the path between child's gender and internalization behaviors ($\beta = -.02$, $p = .516$).

Next, the mediation model for WFE was fitted (Figure 2). We found an indirect path from fathers' WFE to children's externalizing problem behavior (via father-child relationship quality) and indirect paths from mothers' WFE to children's externalizing and internalizing difficulties (via mother-child relationship quality). All these indirect paths were significant

when tested through bootstrapping procedures (see Table 2). A trimmed model where non-significant ($p > .05$) paths were removed (see path coefficients for the final model in Figure 4 provided good fit to the data ($\chi^2 = 499.77$; $df = 238$; $p = .000$; $\chi^2/df = 2.10$; CFI = .92; RMSEA = .06).

Overall, the combined effects for this WFE model accounted for 7.7% of the variance in fathers' parent-child relationship quality and 2% of mothers' parent-child relationship quality, and the direct and indirect effects found accounted for 21.8% of the variance in children's externalizing problem behaviors and 7.7% of their internalizing problem behaviors.

Figure 2 and Table 2 about here

Discussion

The current study examined the extent to which parents' perceived conflict and enrichment in managing their work and family roles were associated with their children's internalizing and externalizing problem behaviors through their links with the quality of father- and mother-child relationships. Unlike most studies in this domain, we used a multi-informant approach and gathered data from both parents and their preschool children's teachers when assessing children's problem behaviors and we conducted dyadic analyses that controlled for the nonindependence of couple data, as well as some potentially confounding child and parental variables.

Overall, our findings support the argument that the way parents balance their work and family roles is associated with the quality of their parent-child relationships, which in turn is linked to their children's internalizing and externalizing problem behaviors. These results are consistent with those in the broader WF literature, where there is little evidence of a direct link from work or work-family experiences to child well-being and typically greater support for the presence of indirect or mediated relationships (Beyer, 1995; Crouter et al., 1999;

Galambos et al., 1995; Hoffman & Youngblade, 1999; MacEwen & Barling, 1991; Stewart & Barling, 1996; Whitbeck et al., 1997).

Additionally, our results underscore the differential direct and indirect associations for parents' perceived work-family conflict and enrichment, and also the differential contributions of fathers' and mothers' work-family experiences. For example, in our model for work-family conflict, despite the indirect path between fathers' WFC and children's externalizing behaviors (via lower father-child relationship quality), only the direct associations between fathers' WFC and both externalizing and internalizing child problem behaviors were significant. By contrast, mothers' experience of WFC showed only indirect associations with both children's externalizing behaviors (via both father-child and mother-child relationship quality) and internalizing behaviors (via mother-child relationship quality). These differential associations suggest that mothers can buffer the negative influences of their work experiences on their children more efficiently than can fathers. Consistent with this speculation, Almeida, Wethington, and Chandler (1999) found that while fathers were more likely to have tense interactions with their children if they experienced a stressor outside the parent-child dyad such as work overload or family demands earlier in the day, mothers' interactions with their children were not affected by these stressors. Some studies have found that men and women tend to privilege different coping strategies to balance work and family. In their meta-analyses, Tamres, Janicki and Helgeson (2002) concluded that women were significantly more likely than men to use active coping, to seek social support for both emotional and instrumental reasons, to engage in general problem-focused coping, to engage in positive reappraisal, and to employ positive self-talk. In their cluster-analytic study of segmentation-integration strategies used to balance work and family, Bulger, Matthews, and Hoffman (2007) found women to be more represented in the group where more segmentation (i.e., separation of roles) was used and less represented in the group where more integration

(i.e., blurring of roles) was used. Future studies should address whether these differential strategies used by men and women in dealing with work-family balance may enable mothers to more effectively buffer the negative influences of work on family members.

Another possible explanation for our findings that fathers' perceived WFC was directly associated with child problem outcomes while the link between mothers' WFC and these outcomes was only indirect, may lay in working mothers' greater time investment in parenting activities. Indeed, recent evidence has demonstrated that employed women are very protective of their parent-child time and often sacrifice household tasks and leisure activities to spend time with their children, reporting fewer hours spent sleeping, in personal care, and in leisure (Bianchi, 2000; Barnett & Gareis, 2009; Roeters, Van Der Lippe, & Kluwer, 2009). In addition, the maintenance of traditional gender roles in the Portuguese culture, where mothers still remain as the primary caregivers of children even in dual-employment marriages (Fontaine, Andrade, Matias, Gato, & Mendonca, 2007; Perista, 2007), reinforce the idea that the higher amount of time spent by mothers with their children may, to some extent, mitigate the adverse influence of WF conflict on their children.

Regarding our model findings for work-family enrichment, and contrary to what we observed for work-family conflict, a direct link from parents' WFE to children's behavior was not established. Instead, and for both fathers and mothers, only indirect associations were found. These results are consistent with previous empirical findings and suggest that, whether through socialization or spillover, the connection from parental work-family enrichment to children outcomes seems to be essentially indirect, with emotions, behaviors, and interactions that take place within the parent-child relationship playing the central linking role.

It is also worth speculating why we found direct associations of parents' WFC with children's behavior, but not direct links from their WF enrichment experience to these outcomes. These findings may reflect the stronger influence that WFC appears to have on

family and children's well-being. Indeed, WFC showed stronger associations with both parent-child relationship quality and children's problem behavior outcomes than did the experience of WFE. Our findings clearly suggest that parents' time and strain difficulties in balancing work and family demands play a more central role in influencing their family experiences, and particularly among those with their young children who require more parental time and energy, and demand greater parental effort and attention to satisfy their instrumental and emotional needs (e.g., daily primary care, play and leisure activities, etc.). Prior studies have shown that parents of young children tend to experience higher levels of WFC and FWC compared to nonparents and to parents of older children (Grand-Vallone & Donaldson, 2001; Winslow, 2005). Indeed, the time and strain difficulties operationalized through WFC might have a stronger effect on children because parents are stressed or unavailable, which directly affects the child. Parents' conflicting experiences of work and family demands might also impact children's behaviors through other intrafamily contagion processes. Future studies would thus do well to consider other family subsystems, such as the couple or the siblings, as possible alternative mediators of the associations between parents' WFC and children's behavioral problems.

Finally, another notable set of findings in our study involved the differential pattern of crossover effects between partners. In particular, and in line with our predictions, we found that mothers' work-family experiences had stronger associations with fathers' parenting than vice versa. 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), including their partners' negotiation of their work-family roles. Unlike the maternal role that has remained clearly defined over time, cultural norms pertaining to the paternal role have been changing in recent decades (Wall, Aboim, & Cunha,

2010). Accordingly, fathers may currently face more ambiguity in their parental role and experience stronger pressures to be more involved with child rearing and education while, at the same time, remaining susceptible to persisting norms that are primarily responsible for the family's income (Wall et al., 2010). Mothers' parenting role, however, has been more consistent over time despite women's increased participation in the labor force. On the other hand, several recent studies have consistently found that mothers' (not fathers') daily experiences at work influence overall family functioning (e.g., Almeida & McDonald, 1998). Perhaps mothers' work shows more crossover because they have greater responsibility for childrearing and housework and therefore the effects of their work experiences are more acutely felt throughout the family.

Limitations and Future Directions

Although our findings further clarify important links among the work-family dynamics of couples, their parent-child relationships, and their child's outcomes, 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 and those at later stages of family development. Second, the present study was limited by its cross-sectional design and by its exclusive use of self-report instruments. Future research should consider longitudinal and multi-method designs that include direct observations of both parent-child interactions and child's behavior.

Implications

Notwithstanding our study's limitations, we believe its findings have important implications for organizational and individual interventions. Our results suggest that the implementation of family-friendly policies in organizations, as well as intervention programs specifically designed for helping working parents adaptively balance their work and family roles, might have beneficial effects that extend beyond enhanced parents' well-being by influencing their children's positive development. Hence, the implementation of such programs should be the interest of educational, mental health, and family counseling professionals, as well as a main interest of any work organization that wants to enhance its employees' motivation and performance. Also, because our results demonstrate that individuals within families continually influence one another, efforts to reduce the stress and strain on employees and to promote their positive work-family role negotiations should include their partners as part of these interventions. In particular, and because our findings suggest that the quality of care provided to children is more strongly associated with mothers' work-family experiences, 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, as well as for the child.

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Table 1

Descriptive Statistics and Pearson Correlations between Work-Family Dynamics, Parent-child Relationship and Child Outcomes

	1	2	3	4	5	6	7	8	9	10	11	12
1. WFC_Mother	1											
2. WFC_Father	.21***	1										
3. WFE_Mother	-.21***	-.05	1									
4. WFE_Father	-.13*	-.18**	.18**	1								
5. Mother-child Relationship	-.37***	-.11*	.15**	.11*	1							
6. Father-child Relationship	-.21***	-.42***	.10	.29***	.35***	1						
7. Children' Internalization_Father	.05	.24***	-.08	-.15*	-.10	-.20***	1					
8. Children' Internalization_Mother	.13*	.09	-.11*	.02	-.22***	-.09	.46***	1				
9. Children' Internalization_Teacher	-.10	.07	-.00	-.13*	.05	-.03	.31***	.28***	1			
10. Children' Externalization_Father	.21***	.28***	-.09	-.19**	-.24***	-.39***	.16**	.01	.00	1		
11. Children' Externalization_Mother	.25***	.17**	-.19**	-.03	-.38***	-.17**	-.01	.18**	.04	.61***	1	
12. Children' Externalization_Teacher	-.04	.02	.04	.00	-.10	-.08	-.08	-.02	.15**	.36***	.40***	1
Mean	3.17	3.02	5.35	5.37	2.72	2.61	.42	.39	.25	.84	.82	.53
SD	.88	.90	.91	.87	.22	.26	.33	.32	.30	.42	.42	.47

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

Table 2

Bootstrap Test for Indirect Effects from Work-Family Conflict and Enrichment on Child's Internalization and Externalization Behavior

							Bootstrapping	
							Bias-Corrected 90% CI for mean indirect effect	
Effect				Estimate	SE	p	Lower	Upper
Fathers' Relationship	WFC	→	Father-child →Externalization	.052	.031	.066	.007	.108
Mothers' Relationship	WFC	→	Father-child →Externalization	.016	.013	.072	.001	.044
Mothers' Relationship	WFC	→	Mother-child →Externalization	.084	.032	.001	.037	.140
Mothers' Relationship	WFC	→	Mother-child →Internalization	.033	.017	.026	.010	.067
Fathers' Relationship	WFE	→	Father-child →Externalization	-.032	.018	.033	-.066	-.006
Mothers' Relationship	WFE	→	Mother-child →Externalization	-.019	.013	.026	-.049	-.004
Mothers' Relationship	WFE	→	Mother-child →Internalization	-.011	.007	.022	-.032	-.003

Note. N= 317; 2 000 bootstrap sample. Bootstrap bias corrected p-values. WFC = Work-family conflict; WFE = Work-family enrichment; B = non-standardized estimate; SE = standard error; p = significance

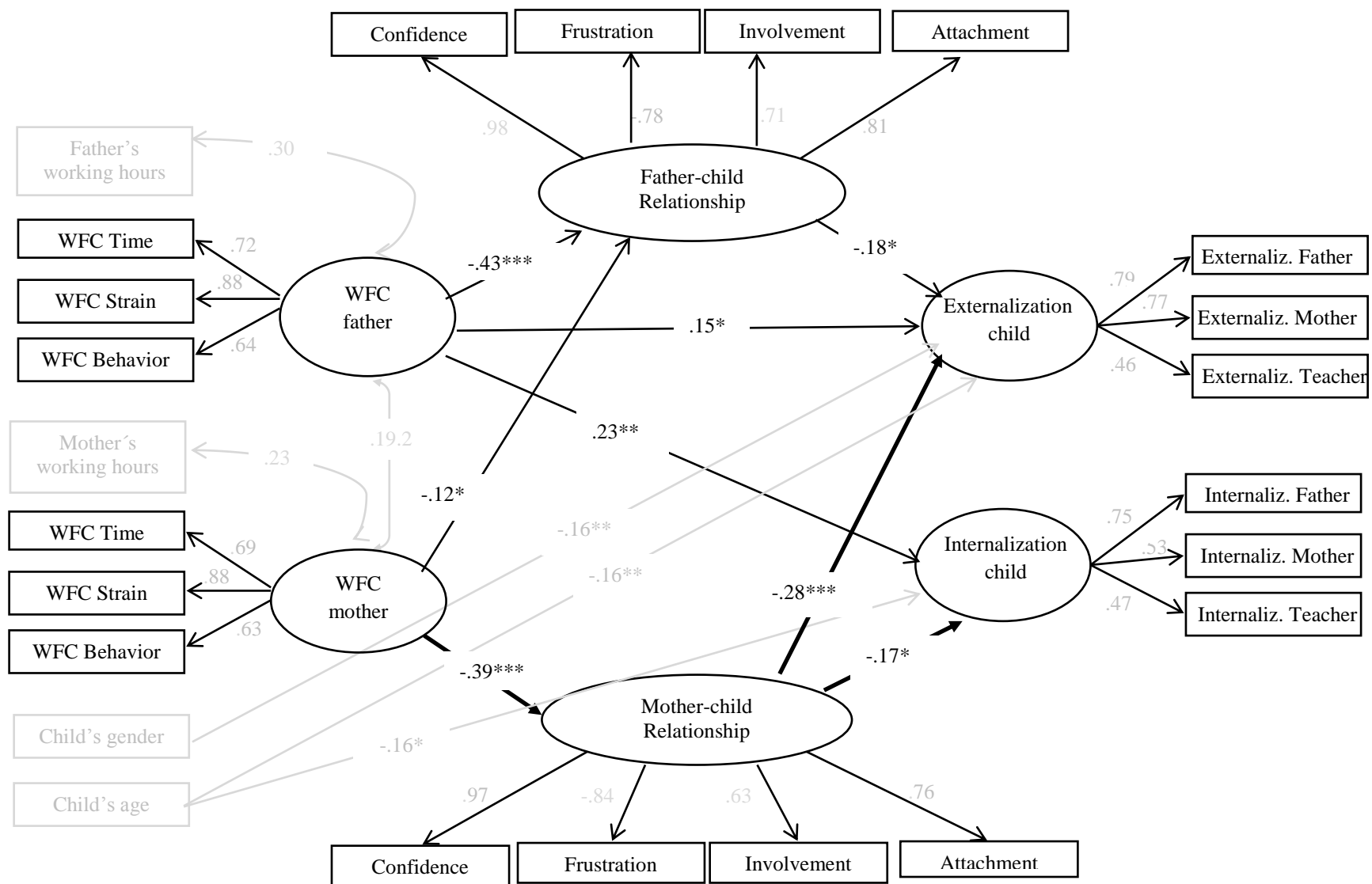


Figure 1. Final model for work-family conflict, controlling for mothers' and fathers' working hours and child's gender and age. Path numbers are standardized regression coefficients (β), significant at * $p < .05$, ** $p < .01$, *** $p < .001$. All pathways not shown were nonsignificant. Gray arrows refer to the controlled variables' effects. Bolded arrows depict significant indirect effects.

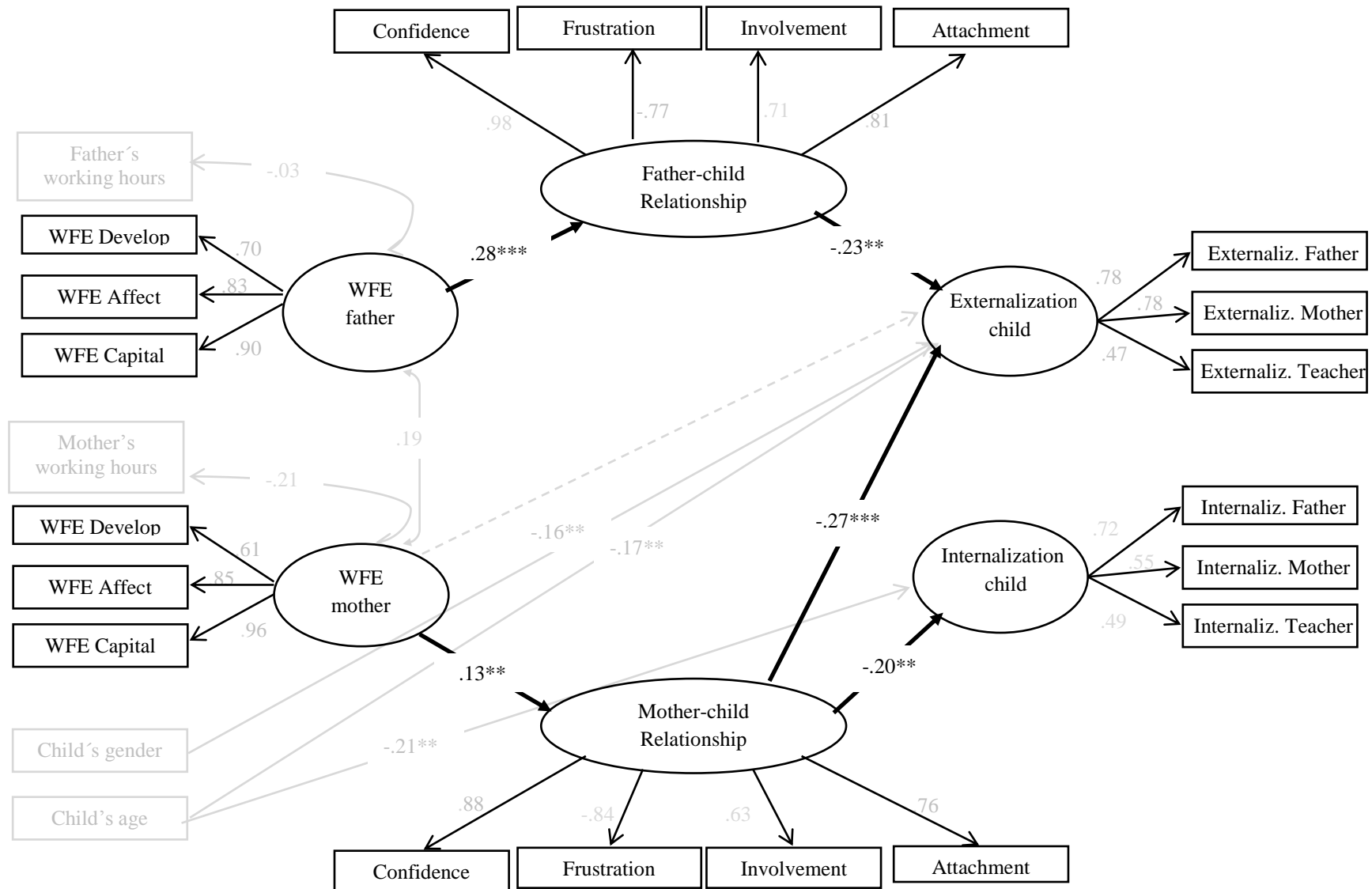


Figure 2. Final model for work-family enrichment, controlling for mothers' and fathers' working hours and child's gender and age. Path numbers are standardized regression coefficients (β), significant at * $p < .05$, ** $p < .01$, *** $p < .001$. All pathways not shown were nonsignificant. Gray arrows refer to the controlled variables' effects. Bolded arrows depict significant indirect effects.