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## Work-to-family enrichment and atmosphere of family meals influence satisfaction with food-related life: An actor-partner interdependence approach in dual-earner parents with adolescent children

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#### ABSTRACT

The effects of work-to-family enrichment (WtoFE) have been examined on outcomes such as family and job satisfaction, with scarce research on the potential effects of WtoFE on the food domain. To fill in this gap, the present study explored actor and partner effects between WtoFE, the perception of the atmosphere of family meals (AFM), and satisfaction with food-related life (SWFoL) in different-sex dual-earner parents with adolescent children using the Actor-Partner Interdependence Model; the mediating role of AFM between WtoFE and SWFoL was also tested. Questionnaires were administered to 473 different-sex dual-earner parents and one of their adolescent children (average age 12.5 years, 51.4% male) in Temuco, Chile. The three family members answered the Project-EAT Atmosphere of family meals scale and the Satisfaction with Food-related Life Scale. Parents answered a measure of WtoFE based on the Work-Home Interaction Survey. Analyses were conducted using structural equation modelling. Results showed a positive association from WtoFE to SWFoL, directly and through the perception of the atmosphere of family meals in both parents (actor effects). Both parents' WtoFE was associated with their adolescent children' SWFoL via the adolescent's perception of the atmosphere of family meals, while the mother's perception of the atmosphere of family meals was directly associated with the adolescent's SWFoL (partner effects). Findings suggest that resources that mothers and fathers acquire from work and invest via WtoFE have positive effects on their own and their adolescent children's perception of the atmosphere of family meals and SWFoL. As higher WtoFE has also been related to other positive outcomes in the job and health domains in workers, policymakers and organizations must aim to promote WtoFE in working parents.

#### 1. Introduction

For workers, work-family dynamics entail not only job and family conflict and demands, but also acquiring resources (e.g., time, skills, family support; Landolfi, Barattucci, & Lo Presti, 2020). In this regard, Greenhaus and Powell (2006) developed the concept of work-family enrichment (WFE), referring to the contributions that one of these

roles make to improve the quality of life related to the other role. This relationship is bidirectional: In family-to-work enrichment (FtoWE), family can positively affect work, while in work-to-family enrichment (WtoFE), work can positively affect family (Greenhaus & Powell, 2006). This study focuses on WtoFE. This type of enrichment is understood here as the workers' transmission of resources (i.e., social, psychological, material, and emotional resources) from their workplace to the family

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domain (Greenhaus & Powell, 2006; Xu, Wang, Mu, Jin, & Gao, 2018). Higher levels of WtoFE have been linked to greater satisfaction with family life in workers from different occupations and in different countries (Landolfi et al., 2020; Lo Presti, Molino, Emanuel, Landolfi, & Ghislieri, 2020; Xu et al., 2018; Zhang, Xu, Jin, & Ford, 2018).

WtoFE can influence other domains of life beyond family and work (e.g., Liu & Cheung, 2015; Xu et al., 2018; Zhang et al., 2018). One of these domains, which has been scarcely explored in the enrichment literature, is food. The construct of satisfaction with food-related life (SWFoL, Grunert, Dean, Raats, Nielsen, & Lumbers, 2007) is a measure of the social dimension of food consumption (Schnettler, Miranda-Zapata, Orellana, Bech-Larsen, & Grunert, 2020a). SWFoL comprises a person's overall cognitive assessment of their food and eating habits –including meal planning, shopping and meal preparation, consumption, and disposal. Because SWFoL has been positively associated with job satisfaction in dual-earner parents (Schnettler et al., 2020b), a resource exchange (of time, energy and other psychological resources) between the work and family and home domains can be hypothesised.

The work-home resources model (W-HR, ten Brummelhuis & Bakker, 2012) assesses the dynamics of conflict and enrichment between the work and home domains. Focusing on enrichment, this model proposes that resources from the work domain can lead to the development of personal resources that can be invested in the home domain; home is stated instead of family to emphasise that employees have diverse life roles and tasks outside work and family relations (Greenhaus & Powell, 2006). Examples of work resources are support from supervisors and colleagues, flexibility of the employees' own schedule, and familyfriendly workplace policies (Kalliath, Kalliath, Chan, & Chan, 2020; Le, Newman, Menzies, Zheng, & Fermelis, 2020), while personal resources can be categorized as physical (e.g., energy), capital (e.g., time), intellectual (e.g., skills and experience), psychological (e.g., focus and attention) and affective (e.g., mood, empathy). For instance, research on the effects of work experiences on employees' affective well-being (Tremmel & Sonnentag, 2018; Tremmel, Sonnentag, & Casper, 2019) shows that individuals talk about work with their friends and family, often in the evening, during after-work hours. These conversations, in turn, are associated with the affect that employees experience at bedtime and the next morning (Tremmel et al., 2019). Positive work events are linked to an enhanced work-family balance (Ilies, Liu, Liu, & Zheng, 2017). Hence, work-to-home transmission of resources can improve the home quality of life, not only in workers but also in their partners, by facilitating a more efficient performance of household tasks, including food and meal preparation and food-related quality of life (ten Brummelhuis & Bakker, 2012).

There is evidence suggesting that WtoFE may be associated with positive outcomes in the food domain. Studies in this field have shown that women with higher balance between their work and home-related tasks are more likely to have frequent family meals and serve healthier meals to their families (Agrawal, Farrell, Wethington, & Devine, 2018; Pagnan, Seidel, & MacDermid, 2017). These outcomes, in turn, have

been associated with higher levels of SWFoL in adult and adolescent samples (Schnettler et al., 2018a, 2020c, 2021a, 2021b). Other studies have shown that eating behaviours and SWFoL are correlated between family members (Radtke et al., 2019; Schnettler et al., 2017), which allows to hypothesise that resources directed to SWFoL are also correlated among workers and their families. While most of the studies on enrichment have been carried out at an individual level, an interindividual transmission of resources between members of a dyad (e.g., a couple, parent-child dyad) is also possible (Hobfoll, Halbesleben, Neveu, & Westman, 2018; Lo Presti et al., 2020; Matias & Recharte, 2020). These individual and crossover effects can be explored using the actor-partner interdependence model (APIM). In this model (Fig. 1), actor effects are the outcomes predicted by the individuals' own characteristics, while partner effects (crossovers) are outcomes from one member of the dyad which are predicted by the characteristics of the other member (Kenny, Kashy, & Cook, 2006).

Studies conducted in the EU provide evidence in favour of a WtoFE crossover between family members. In Italian dual-earner couples, Lo Presti et al. (2020) reported that one member of the couple's WtoFE positively influenced their own and their partner's satisfaction with family life, while Matias and Recharte (2020) found that Portuguese mothers' WtoFE influenced their adolescent children's well-being. Other findings show that, in different-sex couples, men who experience higher balance between their work and home life get more involved in food shopping and cooking along with their female partner, which enhances the SWFoL for both members of the couple (Schnettler et al., 2020a, 2020c). Couples who have higher work-life balance (Schnettler et al., 2020b), and get more involved in meal preparation (Schnettler et al., 2020a) also report higher SWFoL. Furthermore, couples with higher balance between their work and home-related tasks tend to be more involved in their children's food habits (Sharif, Alcalá, Albert, & Fischer, 2017), and have a positive impact in their adolescent children's SWFoL (Schnettler et al., 2018b).

Researchers have reported that parents' WtoFE is associated with more positive parent-child interactions (Matias & Recharte, 2020; Vieira, Matias, Lopez, & Matos, 2016). These enrichment experiences, however, remain scarcely studied in parent-adolescent dyads. Adolescence is a developmental period with distinctive needs, challenges and desires for autonomy, independence, and support (Matias & Recharte, 2020), all of which entails new challenges for the parents (Meier, Musick, Fischer, & Flood, 2018). Focusing on the conflicting work and school schedules in working parents with children (Jones, 2018; Schnettler et al., 2017), family members may have few opportunities to share family time to interact with one another. In keeping with the social dimensions of food, family meals, in particular the evening meal, becomes a valuable opportunity for all family members to interact and exchange personal resources with one another. Family meals provide opportunities for preserving relationship closeness, resolving conflicts, expressing affection, sharing of values, family bonding, communication and providing emotional support and well-being among parents and

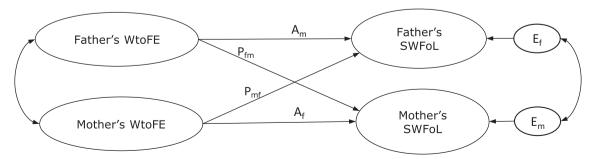


Fig. 1. Basic actor-partner interdependence model of work-to-family enrichment (WtoFE) and satisfaction with food-related life (SWFoL).  $A_m$ : actor effect of father's WtoFE on his own SWFoL;  $A_m$ : actor effect of mother's WtoFE on her own SWFoL;  $P_{fm}$ : partner effect of father's WtoFE on mother's SWFoL;  $P_{mf}$ : partner effect of mothers's WtoFE on fathers's SWFoL;  $P_{mf}$ : partner effect of mothers's WtoFE on fathers's SWFoL;  $P_{mf}$ : partner effect of mothers's SWFoL;  $P_{mf}$ : partner effect of moth

their children (Berge et al., 2018; Robson, McCullough, Rex, Munafò, & Taylor, 2020; Utter et al., 2018). Family meals have also been found to enhance SWFoL in parents and their children (Schnettler et al., 2018a, 2020c, 2021b). One of the possible dynamics behind this relationship is the adolescent's involvement in food-related tasks. This involvement may signify adolescents' support on food-related tasks (Vaughn, Tabak, Bryant, & Ward, 2013), which has been associated with higher levels of emotional well-being in adolescents (Utter, Denny, Lucassen, & Dyson, 2016) and greater SWFoL in their mothers (Schnettler et al., 2018b, 2021b).

There is limited evidence about mediating variables between WtoFE and domain satisfaction (Chan et al., 2016) in working parents and their children. Studies exploring interindividual effects have reported that, in dual-earner couples, work-family balance mediated between WtoFE and family life satisfaction for an individual and their partner (Lo Presti et al., 2020); and that, in mother-adolescent dyads, the adolescents' perception of the quality of their relationship with their mothers mediated between the mother's WtoFE and the adolescents' well-being (Matias & Recharte, 2020). From these findings, we suggest that intermediate variables between WtoFE and domain satisfaction are related to positive interactions between family members. We thus argue that the perception of the atmosphere of family meals may have a mediating role between WtoFE and SWFoL in dual-earner parents with adolescent children.

Against this background, there remains the question of how WtoFE can positively contribute to the food domain. This relationship between WtoFE and food-related life, and their potential mediating mechanisms have not been tested (Chan et al., 2016), nor the interindividual transmission of resources between workers and their family members, namely their partner and children. In this latter line, most of the available studies on the work-family interface have focused on the mother's work experiences, or on parents of younger children, neglecting the influence of the father's work experiences in the home domain and the involvement of adolescent children in the work-family interface (Matias & Recharte, 2020). Lastly, there is a lack of empirical evidence regarding WtoFE effects in Latin American countries, where traditional gender roles still prevail (Orellana et al., 2021; Schnettler et al., 2021a), which may account for different work-home interface experiences and effects between fathers and mothers than those previously reported in the United States, and European and Asian countries (Le et al., 2020).

To fill in these gaps in the literature, the present study focused on different-sex dual-earner parents with adolescent children in a Latin American country. Following the W-HR (ten Brummelhuis & Bakker, 2012) as a theoretical basis, and using the Actor-Partner Interdependence Model (APIM, Kenny et al., 2006), the influence of both parents' WtoFE on their own, and on their adolescent child's SWFoL was evaluated in parallel, considering each family member's assessments. The aims of this study were to explore the actor and partner effects between work-to-family enrichment, the perception of the atmosphere of family meals, and SWFoL in different-sex dual-earner parents with adolescent children; and to explore whether the perception of the atmosphere of family meals has a mediating role between work-to-family enrichment and SWFoL.

Therefore, the following hypotheses are proposed:

- H1. Work-to-family enrichment is positively associated with satisfaction with food-related life for each parent (actor effects).
- H2. Work-to-family enrichment of one parent is positively associated with satisfaction with food-related life of a) the other parent, and b) the adolescent (partner effects).
- H3. Work-to-family enrichment is positively associated with the perception of the atmosphere of family meals for each parent (actor effects)
- H4. Work-to-family enrichment of one parent is positively associated with the perception of the atmosphere of family meals reported by a) the other parent and b) the adolescent (partner effects).

- H5. The perception of the atmosphere of family meals is positively associated with satisfaction with food-related life for fathers, mothers, and adolescents (actor effects).
- H6. The perception of the atmosphere of family meals of one parent is positively associated with the satisfaction with food-related life of a) the other parent and b) the adolescent (partner effects).
- H7. The perception of the atmosphere of family meals of adolescents is positively associated with their parents' satisfaction with food-related life (partner effects).
- H8. The perception of the atmosphere of family meals has a mediating role between both parents' work-to-family enrichment and satisfaction with food-related life for the three family members (actor and partner effects).

The conceptual model showing the first seven hypotheses is shown in Fig. 2. The mediating relationships posed in the Hypothesis 8 were not included in the conceptual path diagram, so as not to overload the figure.

Lastly, we expect differences according to the parent's gender. Powell, Francesco, and Ling (2009) proposed that, based on gender role expectations, women may transfer more resources they generate in their work role to their families, thus reporting higher levels of WtoFE compared to men (Beham, Drobnič, Präg, Baierl, & Lewis, 2020). In the Latin American context, setting up family meals remain a highly gendered issue, and feeding children and food-related tasks are still predominantly female labour (Schnettler et al., 2021a). Therefore, as women assume more responsibility for family meals, it can be expected that the associations between WtoFE, the perception of the atmosphere of family meals and SWFoL may differ according to the parent's gender.

#### 2. Method

#### 2.1. Sample and procedure

A sample of 473 dual-earner families was recruited using nonprobability sampling in Temuco, Chile. Each family was composed of mother, father (married or cohabiting), and one adolescent child aged between 10 and 15 years (Table 1). Parents were contacted via their children's schools, which served diverse socioeconomical backgrounds. Directors from each school (seven in total) signed authorization letters to conduct the research with their students from fifth grade of primary level (minimum age of 10 years) to the first grade of secondary level (maximum age of 15 years), which result in a total of 3360 families. From this number, 754 families were contacted via the school with an invitation to participate in this study, with the following information: Aims of the study, sample criteria, the questionnaire structure and data collection procedure (see below), and the anonymous and confidential treatment of the data. Families were contacted by research assistants in cases when both parents and one of their children between 10 and 15 years of age responded to the letter and agreed to participate in the study. A total of 473 families agreed to participate in the study, which entails a response rate of 62.7%. When parents who decided to participate in the study had more than one child between 10 and 15 years of age, the child who received the letter of invitation to participate in this study was chosen to be interviewed.

Parents who agreed to participate provided their telephone numbers. Research assistants called these parents to agree on the date and time for the application of the surveys, and then visited these families in their homes between August and December 2019. During the visit, parents signed written informed consent and the adolescents signed assent forms, and the research assistants personally administered the questionnaire to each family member separately, registering their responses in the QuestionPro platform (QuestionPro Inc). There was no missing data, as the questionnaires were administered by trained research assistants to ensure that all questions were responded. No family nor individual participants withdrew from the study. Hence, the analysis

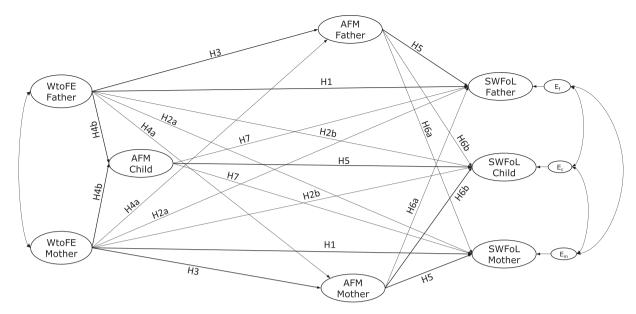


Fig. 2. Conceptual model of the proposed actor and partner effects of parent's Work-to-Family Enrichment (WtoFE) on the three family members' perception of the Atmosphere of Family Meals (AFM) and Satisfaction with Food-related Life (SWFoL) in dual-earner parents with adolescent children. Ef, Ec and Em: residual errors on SWFoL for the fathers, mothers and their adolescent children, respectively. The indirect effects of the atmosphere of family meals (H8) were not shown in the conceptual path diagram, so as not to overload the figure.

conducted included all responses from the 473 mothers, fathers, and adolescents (See the chart flow in Fig. 3).

Families received a 15 USD gift card as retribution for their participation. This study is part of a wider research on the relations between work, family, and food-related life in Chilean families. The Ethics Committee of the Universidad de La Frontera approved this study design (Protocol number 007/2019, Chile).

Twenty families took part in the pilot test for this study. The same recruitment method and data collection procedure was followed. The pilot test showed satisfactory results, and therefore no changes were made in the instrument nor to the data collection procedure.

#### 2.2. Measures

#### 2.2.1. The following scale was answered only by mothers and fathers

Nijmegen's Work-Home Interaction Survey (SWING; Wagena & Geurts, 2000; see Kinnunen, Feldt, Geurts, & Pulkkinen, 2006). To measure work-to-family enrichment, the three items from this subscale were used related to the positive influence of work on family in terms of positive mood, skills, or behaviour (De Simone et al., 2014, e.g., "You come home cheerfully after a successful day at work, positively affecting the atmosphere at home?"). This measure has shown a good internal consistency in a study conducted in Italy (De Simone et al., 2014). The Spanish version of this measure was used (Schnettler, Denegri, Miranda-Zapata, & Saracostti, 2018d). Each item was responded on a 5-point scale (1: never; 5: very often). In this study, the standardized factor loadings of the work-to-family enrichment measure ranged from 0.707 to 0.768 for mothers and from 0.707 to 0.732 for fathers, all statistically significant (p < .01). The average extracted variance (AVE) values were higher than 0.50 (AVE mothers = 0.53, fathers = 0.51). The work-to-family enrichment dimension showed acceptable internal reliability, Omega coefficient was 0.77 for mothers and 0.75 for fathers.

# 2.2.2. The following instruments were answered by the three family members

Project-EAT Atmosphere of family meals (AFM, Neumark-Sztainer, Story, Ackard, Moe, & Perry, 2000; Neumark-Sztainer, Wall, Story, & Fulkerson, 2004). This four-item scale assesses the perception of the mealtime atmosphere, with two items related to enjoyment of mealtimes

(e.g., "I enjoy eating meals with my family"), and two items about mealtime communication (e.g., "In my family, dinner/supper time is about more than just getting food, we all talk with each other"). A study in the United Kingdom showed that the AFM has good internal consistency (White et al., 2015). In this study, the Spanish version was used (Schnettler et al., 2018d), in which the last item includes the option "supper" in addition to dinner, as in Chile, the former is more customary than dinner. The response format type was a 6-point Likert scale (1: strongly disagree to 6: strongly agree), as previous testing of the scale in two different samples -one of them with the original 4-point Likert scale and another one with 6-point Likert scale- indicated a higher level of internal consistency when participants answered each statement with a 6-point Likert scale (Schnettler et al., 2018d). AFM scores were obtained by summing the scores from the four items, with higher scores representing a more positive mealtime atmosphere. In this study, the standardized factor loadings of the AFM scale ranged from 0.849 to 0.946 for mothers, from 0.799 to 0.919 for fathers and from 788 to 0.894 for adolescents, all statistically significant (p < .01). The AVE values were higher than 0.50 (AVE mothers = 0.78, fathers = 0.74, adolescents = 0.71). The AFM scale showed good internal reliability, Omega coefficient was 0.93 for mothers, 0.92 for fathers and 0.91 for adolescents.

Satisfaction with Food-related Life (SWFoL). The SWFoL (Grunert et al., 2007) comprises five items grouped into a single dimension that evaluates a person's overall assessment of their food and eating habits (e.g., "Food and meals are positive elements"). The Spanish version of the SWFoL was used (Schnettler et al., 2013), which has shown good internal consistency with adults, adolescents and dual-earner parent samples in Chile (e.g., Schnettler et al., 2017; Schnettler et al., 2018a,2018b,2018c; Schnettler et al., 2020b,2020c; Schnettler et al., 2021a, 2021b). Respondents indicated their degree of agreement with each statement using a 6-point Likert scale (1: completely disagree; 6: completely agree). SWFoL scores were obtained by summing the scores from the five items, with higher scores representing higher SWFoL. In this study, the standardized factor loadings of the SWFoL scale ranged from 0.723 to 0.847 for mothers, from 0.737 to 0.866 for fathers and from 0.495 to 0.843 for adolescents, all statistically significant (p < .01). The AVE values were higher than 0.50 (AVE mothers = 0.62, fathers = 0.66, adolescents = 0.54). The SWFoL scale showed good internal reliability, Omega coefficient was 0.89 for mothers, 0.91 for fathers and

Table 1 Sample characteristics (n = 473).

Characteristic	Total sample	P-value
Age [Mean (SD)] <sup>1</sup>		
Mother	39.1 (7.2)	0.000
Father	42.0 (8.9)	***
Adolescents	12.5 (1.7)	
Adolescents' gender (%)		
Male	51.4	
Female	48.6	
Number of family members [Mean (SD)]	4.4 (1.0)	
Number of children [Mean (SD)]	2.2 (0.8)	
Socioeconomic status (%)		
High	22.2	
Middle	61.5	
Low	16.3	
Gender of the main breadwinner (%)		
Female	23.3	
Male	76.7	
Number of days/week that all family members eat together [Mean (SD)]		
Breakfast	2.8 (2.3)	
Lunch	3.3 (2.2)	
Supper	5.1 (2.5)	
Dinner	2.5 (3.1)	
	2.5 (5.1)	
Number of days families eat different types of foods [Mean		
(SD)]	6 1 (1 E)	
Homemade foods Buy ready-to eat food	6.1 (1.5) 0.6 (1.1)	
Order food at home	0.6 (0.7)	
Eat at restaurants	0.3 (0.7)	
Eat at fast-food outlets	0.4 (0.7)	
Number of hours per day spent cooking during the week [Mean (SD)] <sup>2</sup>		
Mother	2 2 (1 2)	0.000
Father	2.2 (1.3) 1.0 (1.3)	***
Another person	0.9 (1.6)	
Number of hours per day spent cooking on the weekend [Mean (SD)] <sup>2</sup>	(,	
Mother	3.0 (1.7)	0.000
Father	1.6 (1.5)	***
Another person	0.6 (1.3)	
Type of employment (%) <sup>3</sup>	0.0 (1.0)	0.460
Woman employee	72.7	0.100
Woman self-employed	27.3	
Man employee	74.8	
Man self-employed	25.2	
Working hours (%) <sup>3</sup>		
Woman working 45 h per week	59.2	0.000
Woman less than 45 h per week	40.8	***
Man working 45 h per week	72.3	
Man working less than 45 h per week	27.7	

<sup>\*</sup> p < .05.

#### 0.85 for adolescents.

The three family members were asked about their age; adolescents were asked about their gender. Parents were asked about their type of employment and the number of working hours per week. Women were asked about the number of family members, the number of children, the gender of the person with the highest income in the household, the number of days per week that all family members eat together (breakfast, lunch, supper and dinner); the number of days per week that they eat homemade food, buy ready-to-eat food, order food at home, or eat at restaurants or fast-food outlets; and the number of hours per day that they, their male partner and other person spent cooking during the week and on weekends. The family socioeconomic status (SES) was determined based on the total household income and its size (de Investigadores (AIM), 2016).

#### 2.3. Data analysis

To conduct descriptive analyses, SPSS v.23 was used. The actorpartner interdependence model (APIM) with distinguishable dyads was tested using structural equation modelling (SEM, Kenny et al., 2006) with Mplus 8.4. In this study's APIM, associations between variables for one family member are termed "actor effects", while associations between variables from one family member to another (between parents, or between one parent and their adolescent child) are "partner effects". Members of a dyad are both an actor and a partner in the analysis; in the present study, adolescents were included as actors and partners, alongside their mother and father. The actor and partner effects tested were work-to-family enrichment (WtoFE) from both parents, and the perception of the atmosphere of family meals (AFM) and satisfaction with food-related life (SWFoL) from the three family members.

Other effects were controlled for in the APIM. First, the extent to which one parent affects the other in terms of WtoFE was controlled for by specifying a correlation between independent variables reported by each parent. Other sources of interdependence between partners, as suggested by Kenny et al. (2006), were controlled for by specifying correlations between the residual errors of the dependent variable (SWFoL) of the three family members. A second set of effects to be controlled for were those of parents' age, type of employment and number of working hours, and the family SES, number of children and times per week in which the family members had supper together. These variables with direct effects on the dependent variables of three family members (atmosphere of family meals and SWFoL) were incorporated.

To conduct the SEM, robust unweighted least squares (ULSMV) were used to estimate the structural model parameters. The polychoric correlation matrix was considered for the SEM analysis given that items were on an ordinal scale. To determine the model fit of the data, the following values were used: The Tucker-Lewis index (TLI) and the comparative fit index (CFI), which show a good fit with values above 0.95; and the root mean square error of approximation (RMSEA), which shows a good fit when values are below 0.06 (Hu & Bentler, 1999). Lastly, to test the mediating role of the perception of the atmosphere of family meals, a SEM through a bias-corrected (BC) bootstrap confidence interval using 10,000 samples (Lau & Cheung, 2012) was conducted. BC confidence intervals that do not include zero signal a mediating role.

#### 3. Results

#### 3.1. Sample description

A total of 473 dual-earner families participated in the study. Only one adolescent (aged between 10 and 15 years) per family was interviewed, resulting in a total of 473 responses for mothers, fathers and adolescents. The sociodemographic characteristics of the sample are displayed in Table 1. The mothers' mean age was 39.1 years, while the fathers' mean age was 42.0 years. The adolescents' mean age was 12.5 years, and 48.6% of this group were female. On average, families had four members including two children. Most families had a middle SES and reported that the person with the highest income in the household was male.

Family members ate together breakfast, lunch, and dinner few days per week (each meal), but for most of these mealtimes they consumed homemade food. On average, the person who cooked the most hours per day during the week and on weekends was the mother, compared to their male partners and other persons (p < .001). During the week, the average number of hours per day that fathers spent cooking did not

p < .01.

Independent sample *t*-test.

<sup>&</sup>lt;sup>2</sup> Analysis of variance.

<sup>&</sup>lt;sup>3</sup> P-value corresponds to the (bilateral) asymptotic significance obtained in Pearson's Chi-square Test.

p<.001

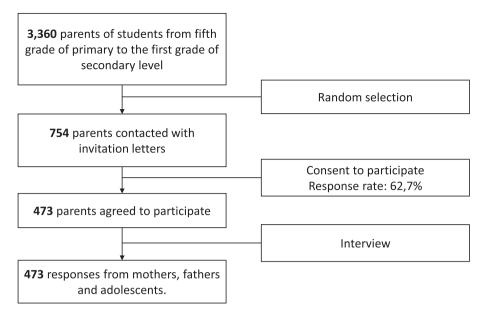


Fig. 3. Chart flow of participant's recruitment.

differ significantly from the number of hours spent by other persons like the adolescents or grandmothers, while on weekend fathers had a significantly higher average number of hours per day that they spent cooking than other persons. Most of the parents reported working full-time (45 h per week) as employees. A greater proportion of fathers worked full-time compared to mothers (p < .001), and the two groups did not differ in the proportion of employees vs. self-employed (p > .1).

Table 2 shows the average score and the correlations for work-tofamily enrichment (WtoFE), perception of the atmosphere of family meals (AFM) and satisfaction with food-related life (SWFoL). Most of the correlations were significant and in the expected directions, except the correlation between mother's WtoFE and fathers's AFM. Mothers and fathers did not differ in the average scores on WtoFE [t(944) = -0.069, p = .945]. The father's average score (3.72) in the item "You come home cheerfully after a successful day at work, positively affecting the atmosphere at home? was significantly higher [t(944) = -2.278, p = .023], than mothers (3.53). Fathers (3.26) and mothers (3.26) did not statistically differ [t(944) = -0.026, p = .979], in their average scores for the item "You fulfil your domestic obligations better because of the things you learned in your job?", while mothers' average score (3.46) in the item "You manage your time at home more efficiently as a result of the way you do your *job?*" was significantly higher [t(944) = 2.279, p = .023] than fathers (3.29). Adolescents scored significantly lower than their mothers and fathers in the AFM [F(2, 1416) = 6.299, p = .002], while both parents did not differ from each other. Adolescents scored significantly higher

than their mothers and fathers in the SWFoL [F(2, 1416) = 26.463, p < .001], while fathers scored significantly higher than mothers.

#### 3.2. APIM results: Testing actor-partner hypotheses

The results from the estimation of the structural model are shown in Fig. 4. Significant correlations were also found between the residual errors of mother's and father's SWFoL ( $r=0.347,\,p<.001$ ), between mother's and adolescent's SWFoL ( $r=0.290,\,p<.001$ ) as well as between father's and adolescent's SWFoL ( $r=0.153,\,p=.014$ ). The model that assessed the APIM association between the mother's and father's work-to-family enrichment (WtoFE), both parents' and their adolescent children's perception of the atmosphere of family meals (AFM) and satisfaction with food-related life (SWFoL) had an acceptable fit with the data (CFI = 0.944; TLI = 0.932; RMSEA = 0.025). A significant correlation (covariance) was found between WtoFE of both parents ( $r=0.245,\,p<.001$ ).

H1 stated that WtoFE is positively associated with SWFoL for each parent. As shown in Fig. 4, the path coefficients (standardized) indicate that the father's WtoFE was positively associated with his own SWFoL ( $\gamma=0.170, p=.001$ ). Similarly, the mother's WtoFE was positively associated with her own SWFoL ( $\gamma=0.144, p=.004$ ). These findings supported H1 for both parents.

H2 was twofold and sought partner effects, stating that WtoFE of one parent is positively associated with the SWFoL of the other parent (H2a)

Table 2
Descriptive statistics and correlations for parent's Work-to-Family Enrichment (WtoFE) and the three family members' perception of the Atmosphere of Family Meals (AFM), and Satisfaction with Food-related Life (SWFoL) in dual-earner parents with adolescent children (n = 473).

	M (SD)	Correlations							
		1	2	3	4	5	6	7	8
1. Mother's WtoFE	10.26 (2.78)	-	0.212***	0.142**	0.086	0.134**	0.191***	0.134**	0.165***
<ol><li>Father's WtoFE</li></ol>	10.27 (2.90)		1	0.128**	0.228***	0.159**	0.137**	0.249***	0.119*
3. Mother's AFM	21.67 (3.24)			1	0.437***	0.258***	0.294***	0.274***	0.241***
4. Father's AFM	21.26 (3.49)				1	0.245***	0.201***	0.422***	0.236***
5. Adolescent's AFM	20.88 (3.54)					1	0.112*	0.161***	0.328***
6. Mother's SWFoL	21.32 (4.83)						1	0.380***	0.308***
7. Father's SWFoL	22.41 (5.01)							1	0.243***
8. Adolescent's SWFoL	23.58 (4.50)								1

<sup>\*</sup> p < .05.

<sup>\*\*</sup> p < .01.

<sup>\*\*\*</sup> p < .001.

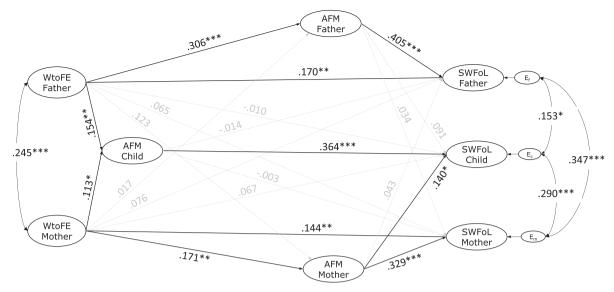


Fig. 4. Actor-partner interdependence model of the effect of parent's Work-to-Family Enrichment (WtoFE) on the three family members' perception of the Atmosphere of Family Meals (AFM) and Satisfaction with Food-related Life (SWFoL) in dual-earner parents with adolescent children.  $E_f$ ,  $E_c$  and  $E_m$ : residual errors on SWFoL for the fathers, mothers and their adolescent children, respectively. \* p < .05. \*\* p < .01. \*\*\* p < .001. The control for the effects both members of the couple's age, type of employment and their number of working hours as well as the family SES, the number of children and the number of supper meals in which all the family members ate together during a week on the dependent variables of the three family members (AFM and SWFoL) were not shown in the path diagram, so as not to overload the figure.

and of the adolescent (H2b). The father's WtoFE was not statistically associated with the mother's SWFoL ( $\gamma=0.065,p=.232$ ). Likewise, the mother's WtoFE was not statistically associated with the father's SWFoL ( $\gamma=0.076,p=.117$ ). The father's ( $\gamma=-0.010,p=.846$ ) and mother's ( $\gamma=0.067,p=.177$ ) WtoFE were not significantly associated with the adolescent's SWFoL. Therefore, neither H2a nor H2b were supported.

H3 tested actor effects, stating that WtoFE is positively associated with the perception of the AFM for each parent. The path coefficients indicate that the father's WtoFE was positively associated with his own perception of the AFM ( $\gamma=0.306,\,p<.001$ ). Likewise, the mother's WtoFE was positively associated with her own perception of the AFM ( $\gamma=0.171,\,p=.003$ ). These findings supported H3.

H4 stated that WtoFE of one parent is positively associated with the perception of the AFM of the other parent (H4a) and of the adolescent (H4b). Results showed that the father's WtoFE was not significantly associated with the mother's perception of the AFM ( $\gamma=0.123,\,p=.065$ ), nor the mother's WtoFE was significantly associated with the father's perception of the AFM ( $\gamma=0.017,\,p=.766$ ). By contrast, the father's ( $\gamma=0.154,\,p=.006$ ) and the mother's ( $\gamma=0.113,\,p=.023$ ) WtoFE were positively associated with the adolescent's perception of the AFM. These findings did not support H4a for parents, while they supported H4b for adolescents.

H5 tested actor effects for the three family members, namely that the perception of the AFM is positively associated with SWFoL for fathers, mothers, and adolescents. The path coefficients indicate that the perception of the AFM was positively associated with SWFoL for the father ( $\gamma=0.405, p<.001$ ), the mother ( $\gamma=0.329, p<.001$ ), and the adolescent ( $\gamma=0.364, p<.001$ ). These findings supported H5.

Per H6, it was expected that the perception of the AFM of one parent would be positively associated with the SWFoL of the other parent (H6a) and the adolescent (H6b). The father's perception of the AFM was not significantly associated with the mother's SWFoL ( $\gamma=0.034, p=.630$ ). Likewise, the mother's perception of the AFM was not significantly associated with the father's SWFoL ( $\gamma=0.043, p=.425$ ). While the father's perception of the AFM was not significantly associated with the adolescent's SWFoL ( $\gamma=0.091, p=.157$ ), the mother's perception of the AFM was positively associated with the adolescent's SWFoL ( $\gamma=0.140, p=.037$ ). These findings did not support H6a, while they partially

supported H6b.

H7 stated that the perception of the AFM of adolescents is positively associated with their parents' SWFoL. The adolescent's perception of the AFM was not significantly associated with the father's SWFoL ( $\gamma=-0.014, p=.813$ ) nor with the mother's SWFoL ( $\gamma=-0.003, p=.969$ ), and thus H7 was not supported.

Most of the control variables did not affect the model significantly (Supplementary information). The father's age positively affected their own SWFoL ( $\gamma=0.138,\ p<.05$ ), while the father's working hours negatively affected their own SWFoL ( $\gamma=-0.092,\ p<.05$ ). The father's type of employment (employee vs self-employee) negatively affected the mother's perception of the AFM ( $\gamma=-0.137,\ p<.05$ ). The mother's age negatively affected the adolescent's perception of the AFM ( $\gamma=-0.149,\ p<.05$ ), while a similar result was found for family SES ( $\gamma=-0.195,\ p<.01$ ).

## 3.3. Testing mediating roles of the perception of the atmosphere of family meals

The last hypothesis of this study tested the mediating role of the three family members' perception of the AFM between both parents' WtoFE and SWFoL (H8). The mediating role of the AFM was only tested for the significant relationships previously found (Table 3). The role of mother's perception of the AFM as mediator in the relationship between her own WtoFE and SWFoL was supported by a significant indirect effect obtained with the bootstrapping confidence interval procedure (standardized indirect effect = 0.066, 95% CI = 0.015, 0.117). Likewise, the role of the father's perception of the AFM as mediator in the relationship between his own WtoFE and SWFoL was supported (standardized indirect effect = 0.145, 95% CI = 0.071, 0.220). The indirect effect of the adolescent's perception of the AFM as mediator in the relationship between the mother's WtoFE and the adolescent's SWFoL was supported (standardized indirect effect = 0.043, 95% CI = 0.003, 0.082). Likewise, the indirect effect of the adolescent's perception of the AFM as mediator in the relationship between the father's WtoFE and the adolescent's SWFoL was supported (standardized indirect effect = 0.059, 95% CI = 0.014, 0.104). By contrast, the indirect effect of the mother's perception of the AFM as mediator in the relationship between her own WtoFE and

**Table 3**Bias-corrected confidence intervals of specific mediation effects of the three family members' perception of the atmosphere of family meals (AFM).

Effects	Lower 2.5%	Estimate	Upper 2.5%	
From mothers' WtoFE to mothers' SWFoL				
Specific Indirect				
Mothers' SWFoL				
Mothers' AFM				
Mothers' WtoFE	0.015	0.066	0.117	
From fathers' WtoFE to fathers' SWFoL				
Specific Indirect				
Fathers' SWFoL				
Fathers' AFM				
Fathers' WtoFE	0.071	0.145	0.220	
From mothers' WtoFE to adolescents' SWFoL				
Specific Indirect				
Adolescents' SWFoL				
Mothers' AFM				
Mothers' WtoFE	-0.003	0.025	0.053	
Adolescents' SWFoL				
0.082				
Mothers' WtoFE	0.003	0.043	0.082	
From fathers' WtoFE to adolescents'				
SWFoL				
Specific Indirect				
Adolescents' SWFoL				
Adolescents' AFM				
Fathers' WtoFE	0.014	0.059	0.104	

WtoFE: Work-to-family enrichment. SWFoL: Satisfaction with Food-related life.

the adolescent's SWFoL was not supported (standardized indirect effect  $=0.025,\,95\%$  CI  $=-0.003,\,0.03).$  These findings partially supported the mediating role of the perception of the AFM between both parents' WtoFE and the three family members' SWFoL, as stated in H8.

#### 4. Discussion

This study provides new insights in the work-home interface, beyond the work and family domains, showing that work-to-family enrichment (WtoFE) is positively associated with outcomes in the food domain. These outcomes are a positive atmosphere of family meals (AFM) and satisfaction with food-related life (SWFoL), which have been related to healthier eating habits and to higher levels of life satisfaction and emotional well-being in adults and adolescents (Schnettler et al., 2018c, 2021b; Berge et al., 2018; Giray & Ferguson, 2018; Jones, 2018; Liu & Grunert, 2020; Robson et al., 2020; Schnettler et al., 2017; Utter et al., 2018; White et al., 2015). Using the actor-partner interdependence model (APIM), our results showed that higher WtoFE can have a positive influence on the perception of the AFM and SWFoL in dual-earner parents and their adolescent children. This study used self-report measures of well-being that were answered by parents and by the adolescent children, a necessary approach given the differences between child and adult perceptions of child well-being (Kinkead, Saracostti, Grau, & Caro, 2017). Eight hypotheses tested these actor and partner effects, with

The first hypothesis was supported, as positive associations were found between WtoFE to SWFoL in both parents (direct actor effects, according to the APIM language). In agreement with the "work-home enrichment" concept proposed in the W-HR model (ten Brummelhuis & Bakker, 2012), our results showed that resources that individuals generate in the work domain may lead to the development of personal resources, which can be transferred to the food domain, improving their SWFoL. These findings align with evidence showing that greater work-life balance is linked to higher SWFoL in working individuals, regardless of gender (Schnettler et al., 2020b); and that women with higher balance between their work and home-related tasks show healthier eating habits and provide better diet quality to their families (Agrawal

et al., 2018; Pagnan et al., 2017). These factors have been shown to increase SWFoL (Schnettler et al., 2020c, 2021a; Schnettler et al., 2018c). Moreover, our results expand on this knowledge by suggesting a positive relationship between work, home, and food domains for men, showing that a higher WtoFE can positively influence food-related life for fathers.

Path coefficients between WtoFE and SWFoL were of similar strength in mothers and fathers, while these groups did not differ in their WtoFE scores. The latter finding was contrary to expectations related to the gender gap in WtoFE (Beham et al., 2020; Powell et al., 2009). This finding suggests that the gender gap in WtoFE is low in lower genderegalitarian societies, such as in Latin American countries, where men and women are more similar in terms of employment arrangements and job demands than in more gender-egalitarian countries (Beham et al., 2020). On the other hand, resources transferred from the work to the food domain seemed to differ according to the parent's gender, in agreement with the two pathways of enrichment (Chan et al., 2016): Fathers transferred more resources related to positive emotions (affective pathway) while mothers transferred more resources associated with efficient time management (instrumental pathway). It can be thus suggested that different work resources allow each parent to achieve similar levels of WtoFE, which may then transfer to their SWFoL in distinct ways. Specifically, the positive relationship WtoFE → SWFoL may be explained by affective reasons in fathers (e.g., managing food-related tasks with positive moods), and by practical reasons in mothers (e.g., managing food-related tasks efficiently, regardless of mood).

Crossover associations between WtoFE and SWFoL (direct partner effects, according to the APIM) were tested in a second set of hypotheses (H2a and H2b), which were not supported. There were no direct relationships between one parent's WtoFE to the other parent's SWFoL, nor from each parent's WtoFE to their adolescent child's SWFoL. Further research is needed to explore other possible underlying causes, as previous studies have suggested that the association between WtoFE and domain satisfaction is found indirectly. In this sense, Lo Presti et al. (2020) found that one member of a dual-earner couple's WtoFE positively influenced their partner's satisfaction with family life through work-life balance, while Matias and Recharte (2020) found that mother's WtoFE influenced their adolescent children' well-being through the quality of the mother–child relationship.

The third hypothesis proposed positive associations between each parent's WtoFE and their own perception of the AFM (direct actor effects), following the work-home enrichment concept (ten Brummelhuis & Bakker, 2012). Our results show that, for both parents, WtoFE is positively associated to a pleasant perception of the AFM. As stated above, fathers and mothers did not differ in their WtoFE scores, but the association between WtoFE and the perception of the AFM was, according to Cohen (1988), of medium strength in fathers and of low strength in mothers. This distinction may be explained by the previous enrichment pathways, affective and instrumental, transferred in this case from the parents' work-home interface to their perception of the AFM. In this regard, positive emotions after work, which were reported more by fathers than mothers, may contribute to a pleasant atmosphere during family meals more than efficient time management. However, as mothers and fathers did not differ in their perception of the AFM scores, it is possible to suggest that mothers acquire resources from other sources besides work that allow them to also achieve a pleasant atmosphere during meals.

One possible source of resources for mothers may be instrumental family support, which can facilitate daily functions for the worker, such as sharing household tasks (Leung, Mukerjee, & Thurik, 2020). Although mothers in this sample spent significantly more hours per day cooking during the entire week, the hours dedicated to cooking and other food-related tasks by fathers, adolescent children, and other relatives (mainly grandmothers), may alleviate the mother's food-related responsibilities. This type of support, in turn, may allow mothers to experience a positive perception of the AFM. This hypothesis should be tested in future

studies, as evidence suggests that overall family support is an antecedent of WtoFE (Jain & Nair, 2017), and that instrumental family support may explain other characteristics of food consumption reported by these families, such as the higher frequency of consumption of home-made foods, and the low frequency of consumptions of ready-made meals. These patterns of consumption have been associated with a healthy diet, and with a higher balance between work and home obligations in working individuals (Fan et al., 2015; Pagnan et al., 2017).

Positive associations between WtoFE and the perception of the AFM were proposed in Hypothesis 4, which was twofold (direct partner effects). First, contrary to expectations, no association was found between one parent's WtoFE and the other parent's perception of the AFM (H4a). The lack of association may be due to the documented time constraints in dual-earner parents (Jones, 2018; Schnettler et al., 2017), which may prevent that the resources one parent gains from WtoFE cross over to the other parent's perception of the AFM, as they cannot share family meals frequently (Giray & Ferguson, 2018; Jones, 2018; Robson et al., 2020; Schnettler et al., 2021b; Utter et al., 2018; White et al., 2015). On the other hand, each parent's WtoFE was associated with their adolescent children's perception of the AFM (H4b), although both associations were of low strength (Cohen, 1988). This finding suggests that individuals' WtoFE can have distinct influence on the experience of family meals of different family members.

Results for H4b showed that parents' work resources thus cross over to their adolescent children's perception of the AFM, regardless of the parent's gender, and even when frequency of family meals is low. These results are consistent with the W-HR model (ten Brummelhuis & Bakker, 2012), which states that parents may use resources acquired in the work domain, through WtoFE, to promote better parents-child interactions (Matias & Recharte, 2020; Vieira et al., 2016). Various authors have highlighted that family meals provide opportunities for preserving relationship closeness, resolving conflicts, expressing affection, sharing of values, family bonding, communication and providing emotional support among parents and their children (Berge et al., 2018; Robson et al., 2020; Utter et al., 2018). The present study shows that this type of enrichment in parents can contribute to more pleasant family meals for their adolescent children.

Hypotheses 5, as expected, showed positive association between the perception of the AFM and the SWFoL for each family member (direct actor effects). The findings that parents' and adolescents' pleasant perception of the AFM are related to higher levels of SWFoL is consistent with studies that associate family meals and pleasant mealtime atmosphere with positive well-being outcomes for parents and their children (Berge et al., 2018; Giray & Ferguson, 2018; Jones, 2018; Robson et al., 2020; Utter et al., 2018; White et al., 2015), as well as with higher SWFoL (Schnettler et al., 2020c,d; Schnettler et al., 2021b; Schnettler et al., 2018b). These associations were of medium strength for the three family members, suggesting a similar relationship between family meals and SWFoL for parents and adolescents. This finding supports a previous qualitative study which reported that mothers, fathers, and adolescents made similar associations between their SWFoL and sharing family meals (Schnettler et al., 2020d).

The twofold Hypothesis 6 proposed positive crossover associations (direct partner effects) and it was partially supported. Contrary to expectations, no significant associations were found from one parent's perception of the AFM to the other parent's SWFoL (H6a). On the other hand, the association between each parents' perception of the AFM to their adolescent children's SWFoL was not found from fathers, but it was found between mothers and adolescents, although this was a low strength association (H6b). This result means that one parent's experience of family meals with a pleasant atmosphere (including the exchange of resources such as emotional support and positive emotions) does not cross over to the other parent's SWFoL, but it crosses over to their adolescent children's SWFoL.

Two factors related to gender roles might help explain the association between the mother's perception of the AFM and their adolescent child's SWFoL in this sample. The first factor is the traditionally higher affective involvement of mothers with their children, compared to fathers (Kinkead et al., 2017); these expressions of care and affection characterize positive family interactions during meals (Berge et al., 2018; Robson et al., 2020; Utter et al., 2018). A second explanation for these mother-child partner effects can be found in the differing mealtime experiences between men and women, given the amount of responsibility women have in coordinating and performing meal-related tasks, organizing and monitoring dinnertime talk, and monitoring and controlling children's behaviour during mealtime (Schnettler et al., 2021a). These possibilities may increase as a higher proportion of mothers in the sample had part-time jobs (40.8%), which may allow them to spend more time with family members (Beham et al., 2020), thus increasing the likelihood of sharing meals with their adolescent children and positively influencing their children's SWFoL, as it was observed in previous studies (Schnettler et al., 2021b; Schnettler et al.,

On the other hand, the lack of association between fathers and their adolescent children may have a similar explanation as the lack of partner effects between parents. Most fathers in the sample had full-time jobs (72.3%), which has been associated with less frequent family meals (Jones, 2018; Schnettler et al., 2017). Fathers may have fewer opportunities to engage in family meals during the week, but also, when they can be present, fathers' involvement in their children feeding is still low in countries with a traditional family structure, as it has been documented in Latin American countries (Schnettler et al., 2021a). Therefore, although both parents may be present during family meals, the leading role of mothers during these mealtimes affords them greater interaction with their adolescent children, which would result in a positive influence on their child's SWFoL.

Positive associations between adolescent children's perception of the AFM and their parent's SWFoL were proposed in Hypothesis 7 (direct partner effects). H7 was not supported as no significant associations were found. Positive associations were expected on the grounds that adolescents can be a source of support for their parents, mostly for their mothers as the adolescents help them with food-related tasks (Vaughn et al., 2013), which has been associated with higher levels of SWFoL in mothers (Schnettler et al., 2018b, 2021b). Notwithstanding, these results suggest instead that the adolescent child's experience of a pleasant AFM is not a factor in the parents' evaluation of their own food-related life

The last hypothesis of this study (H8) tested the mediating role (indirect actor and partner effects) of the perception of the AFM between the parent's WtoFE and the three family members' SWFoL. This hypothesis was partially supported as positive indirect associations were found for both parents, while crossover positive indirect associations were only found between each parent's WtoFE and their adolescent children's SWFoL. WtoFE and SWFoL were associated indirectly via the perception of the AFM in the same parent regardless of gender (indirect actor effects). These results contribute to previous studies suggesting the existence of intra-individual mediators between WtoFE and well-being outcomes in workers (Kalliath et al., 2020).

Regarding the crossover positive indirect associations (indirect partner effects), mothers' and father's WtoFE and their adolescent children' SWFoL were associated indirectly through the adolescent's perception of the AFM. These findings are in line with results showing that mother's WtoFE is indirectly related to the adolescents' well-being through the adolescents' perception of their mothers' quality of relationship with them (Matias & Recharte, 2020). Our study expands on this knowledge by showing that the father's WtoFE may also indirectly influence his adolescent child's food-related well-being by partaking in family meals with a pleasant atmosphere. These actor (for each parent) and partner (between both parents and their children) associations suggest that a pleasant AFM can help channel the parents' resources generated by their WtoFE to enhance the three family members' SWFoL.

The limitations of this study must be acknowledged. First, although

the APIM language speaks of actor and partner effects, the crosssectional design of this study does not allow to establish causal relationships between variables. A second limitation relates to the use of a non-probabilistic sample. These families were representative of socioeconomic status in Chilean population (de Investigadores (AIM), 2016), but the average of members (four) and children (two) per family was higher than that average for Chilean population (three family members and one child per family, Nacional, 2018). A third limitation is that all data were self-reported, and participants' responses might have been affected by social desirability. Fourth, the relationships under study may reflect a specific gendered division of labour that may differ between countries with varying degrees of gender equality. Fifth, the questionnaire used in this study did not ask how often working parents speak about work during family meals. Future research should account for these conditions, and therefore include longitudinal designs and probabilistic sampling, cross-cultural comparisons, and thorough questions about the characteristics of family meals.

Despite these limitations, this is a novel study that analyses actor and partner effects for the relationships between WtoFE, the perception of the AFM, and SWFoL life in different-sex dual-earner parents with adolescent children. Results show positive relationships between these constructs regardless of the parent's gender: WtoFE in mothers and fathers promotes a pleasant atmosphere during family meals that can facilitate functioning in the food domain, which in turn is linked to higher SWFoL for both parents and their adolescent children. Notwithstanding, one gender difference emerged among parents; while both parents' WtoFE was indirectly associated with their adolescent children' SWFoL via the adolescent's perception of the AFM, only the mother's perception of the AFM was directly associated with the adolescent's SWFoL. This difference underscores the predominant role that mothers have during family meals.

These results have research implications. First, these findings show that both parents' WtoFE provides resources to achieve a positive perception of the AFM and higher levels of SWFoL in all family members. Therefore, further research should assess the relationship between both parents' WtoFE and family members' diet quality, and whether this enrichment may be linked to healthy food-related parenting practices to avoid overweight and obesity in their adolescent children. Future research should also explore possible moderators of the associations found in this study. For instance, both parents' age, father's working hours and type of employment, and the family socioeconomic status, may act as control variables that significantly affect the perception of the AFM or WtoFE.

Our results also entail practical implications. Both parents should be encouraged to use the resources acquired in the work domain to improve their involvement in family meals to promote a pleasant atmosphere and SWFoL (e.g., enhancing positive moods, promoting positive communication and enjoyment during family meals). The habit of having family meals has shown positive effects in the future well-being of adolescents, with evidence of an intergenerational transmission of this habit and the associated physical and psychological benefits (Berge et al., 2018). As higher levels of WtoFE have been also linked to greater job performance and satisfaction (Chan et al., 2016; De Simone et al., 2014; Xu et al., 2018; Zhang et al., 2018), better mental and physical health, and higher overall life satisfaction in workers (Liu & Cheung, 2015; Xu et al., 2018; Zhang et al., 2018), these findings also underscore the need for policymakers and organizations to promote WtoFE in working parents, with emphasis on working mothers. In other words, WtoFE is beneficial for several life domains, and ultimately for individuals' well-being. From the work domain, this enrichment can be promoted (Lo Presti et al., 2020) by creating a supportive work-home culture, considering flexible work designs, and training managers and supervisors to create a fulfilling work environment for their employees.

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#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at  $\frac{\text{https:}}{\text{doi.}}$  org/10.1016/j.foodqual.2021.104471.

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