Managing Multiple Roles: Development of the Work-Family Conciliation Strategies Scale

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Abstract. Juggling the demands of work and family is becoming increasingly difficult in today's world. As dual-earners are now a majority and men and women's roles in both the workplace and at home have changed, questions have been raised regarding how individuals and couples can balance family and work. Nevertheless, research addressing work-family conciliation strategies is limited to a conflict-driven approach and context-specific instruments are scarce. This study develops an instrument for assessing how dual-earners manage their multiple roles detaching from a conflict point of view highlighting the work-family conciliation strategies put forward by these couples. Through qualitative and quantitative procedures the Work-Family Conciliation Strategies Scales was developed and is composed by 5 factors: Couple Coping; Positive Attitude Towards Multiple Roles, Planning and Management Skills, Professional Adjustments and Institutional Support; with good adjustment [χ^2/df = 1.22; CFI = .90, RMSEA = .04, SRMR = .08.] and good reliability coefficients [from .67 to .87]. The developed scale contributes to research because of its specificity to the work-family framework and its focus on the proactive nature of balancing work and family roles. The results support further use of this instrument.

In most western countries, women have now a preponderant role in the labour market. On this regard Portuguese women constitute almost half of the employed population (46.9%) and the majority (84.5%) work full-time (INE, 2010). Despite the fact that motherhood tends to draw back women from the labour force, this is not the case in every European culture. For instance, in Eastern European countries, like Bulgaria (77.3% working women; 71.4% working mothers) or Lithuania (83% working women; 80% working mothers), in North-European countries like Finland (81.8% working women; 76.8% working mothers) and in Portugal there is a high percentage of working mothers (76.2% working women; 76.9% working mothers) (Eurostat, 2009). The aspect that seems to distinguish the European contexts is not women's labour force participation, as this is increasing in almost all countries, but the response by individuals, families, social organization and public services to this new social situation (Tobio, 2001). Moreover, the increase of dual-earners (couples where both members have work related income) challenges traditional gender allocation of responsibilities and asks for more effective work-family conciliation strategies. Despite in some countries women and men equally participate in the labour market, the assignment of responsibilities in the family sphere remains unequal (Amâncio, 2007) and follows a traditional division of work, with women performing more housework than men, even when both are working (Amâncio, 2007; Fontaine, Andrade, Matias, Gato, & Mendonça, 2007). Women and, in particular, mothers are still considered primarily responsible for childcare and housework, while in relation to their professional life they are usually the ones who restructure their career in order to cope with family demands (for a review see Matias, Andrade, & Fontaine, 2012). In this paper we will address the conciliation strategies in a context where public support and childcare facilities are scarce and families and individuals have to make use of their own resources to balance their multiple responsibilities. To fully understand this process, a reliable measure of work-family conciliation strategies is needed. Therefore, this study contributes to existent research as it presents the development of the Work-Family Conciliation Strategies Scale that can be used to assess dual-earners way of dealing with multiple responsibilities in a context of evolving gender role attitudes.

Work-family conciliation strategies

Research on work-family relations has focused almost exclusively on the negative aspects associated with

role performance – role conflict (Greenhaus & Beutell, 1985), therefore, researchers have been mainly focused on what people do in order to deal with the conflicting demands between work and family roles (Becker & Moen, 1999; Hall, 1972; Skinner & McCubbin, 1987). Viewing the work-family interface as merely a means of solving problems and difficulties seems, nevertheless, incomplete. On this regard, more recent and broader approaches have emphasized that there are also benefits and positive aspects associated with multiple role involvement –role expansion (Grzywacz & Marks, 2000). Despite the barriers that individuals face to conciliate, many dual-earner couples seem to develop skills to deal with the challenge of family and work balance and indicate satisfaction with this life style (Haddock, Ziemba, Zimmerman, & Current, 2001). The concept of work-family conciliation strategies, used in this paper, ties with this more positive and proactive view of the individual as an active agent on the work-family interface. It is therefore in line with the concept of family adaptive strategies developed by Moen and Wethington (1992), and with the more recent conceptualizations of coping which advocates the need to focus on proactive coping -the way individuals cope in advance to prevent or mute the impact of potential stressors- besides classic reactive coping (Folkman & Moskowitz, 2004). Conciliation is therefore distinct from conflict and it implies individual and family efforts to manage work and family responsibilities in an active way. Studies with this focus are scarcer, the exception being Haddock et al. (2001) who studied individuals that considered themselves successful in the balance of work and family.

Next, a brief review of studies focused on conciliation strategies used by individuals either to cope with conflict or to proactively adapt to work-family challenges are reviewed.

One of the first studies reporting conciliation strategies was Hall's (1972) study. The author has theoretically established three main strategies, which included 16 specific behaviours university women used to manage work and family: a) Structural role redefinition, which requires changing others' expectations about the appropriate behaviours for someone in that specific position, b) Personal role redefinition, which implies changing attitudes and personal perceptions about role expectations, and c) Reactive behaviour, which implies trying to accomplish all the requirements of a role without making any actual changes. Subsequently, Kirchmeyer (1993) based on this typology has empirically identified a single factor, instead of the three main factors theoretically derived. This single factor corresponded to good personal organization and a positive attitude.

In an empirical vein, Skinner and McCubbin (1987) have identified 48 specific behaviours assembled in four patterns of coping: a) Maintenance of the family system by using planning competencies, b) Support seeking, c) Changing roles and patterns by blending work and family commitments through compromises and amendments, and iv) Positive outlook towards life-style and reduction of tensions. Using qualitative methodologies, namely interviews, Becker and Moen (1999) identified three types of strategies that are used to manage work and family. First, establishing limits around the number of hours at work or work schedule. Second, job vs. career, which refers to a decision by one of the partners to invest in a more flexible job, and the other partner invests in a more demanding career. Finally, switching over these two strategies, across the life course. Also using qualitative methods, Haddock et al. (2001), identified other types of strategies, such as: focus on the relationship, make meaning of the profession, maintain professional boundaries, be productive at work, give priority to family leisure time, be proud of the condition of dual-employment, live modestly, make decisions in a proactive manner and value time.

Some similarities can be drawn among the cited studies: there are references to a strategy of personal perceptions by the Hall (1972), Haddock et al. (2001), Kirchmeyer (1993) and Skinner and McCubbin (1987)'s studies. Moreover, the use of planning competences is present both by Skinner and McCubbin (1987) and Kirchmeyer (1993). In addition, limiting job involvement (Becker & Moen, 1999) and changing roles and patterns (Skinner & McCubbin, 1987), refer to similar action types.

This similarities convey an individual approach to the work-family interface, however, Grzywacz and Marks (2000) propose that Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1987) may help expand the conceptualization of the work—family interface. The authors propose that both the role conflict and the role expansion perspective are individual and deterministic perspectives and those contextual factors from work and family microsystems should be considered. The work-family interface is therefore "a joint function of process, person, context, and time characteristics" (p. 112, Grzywacz & Marks, 2000). For instance, while Hall conducted his study in 1972 with women with university degrees, Kirchmeyer (1993), albeit using the same model, conducted her study more than 20 years later with both women and men managers. Moreover, Skinner and McCubbin's (1987) sample consisted of individuals from dual-earner couples and Haddock et al. (2001) middle class dual-earner couples who considered themselves successful. These studies illustrate how the relationship between the work and family domains is sensitive to environmental conditions, dissimilar populations and contexts.

Another important feature is that all these studies were undertaken with North-American samples, thus limiting our knowledge of how the process of conciliation of work and family is carried out in different cultural conditions. In fact, some of the strategies highlighted in these previous studies appear to be substantially related to the North American socio-cultural context (Becker & Moen, 1999; Haddock et al., 2001). For instance, the distinction between jobs and careers is not so pervasive in other contexts. Some occupations are more clearly career oriented than others, depending mainly of the education level. Moreover due to high rates of job insecurity the greater investment a partner has in his/her profession is commonly associated with the economic resources it provides and not necessarily with the career it implies. Thus the more one earns, the more one invests in his/her profession. Because women tend to earn less and tend to have more precarious job conditions (Casaca, 2010), they are mainly the ones who cut back on work investments. Thus, women are expected to use more work-family conciliation strategies and to compromise more than men on their professional role. In fact, traditional gender roles are still pervasive in Portugal as shown by the unbalanced division of family work (See Fontaine et al., 2007; Matias et al., 2012, for reviews). However, an interesting feature, not consistently addressed by previous studies, is the parental status of the respondents. In fact being a parent may directly influence the way individuals manage work and family and research on family tasks division has consistently shown that, when individuals become parents the amount of family tasks to be performed greatly increases and tend to be done by women (for a review see Coltrane, 2000). Therefore parental status seems to be intertwined with gender so that mothers, more than women without children, and fathers, more than men without children, will make a stronger use of conciliation strategies. However, through the persistence of traditional gender expectations regarding motherhood (women are still seen as the primary childcarer, Aboim, 2010), mothers will be more at stake to use conciliation strategies. Nevertheless, previous studies on conciliation strategies have not disentangled these two factors or consistently analysed them.

Our study aims to address some of the aforementioned concerns by focusing on both men and women from dual-earner couples who currently uphold work and family responsibilities, with and without children, and independent of their perception of success in balancing work and family. This way both gender perspectives will be considered and both remedial strategies to diminish conflict, as well as proactive adaptive strategies used to manage work and family will be assessed. Additionally, we intend to overcome methodological difficulties from previous studies by combining both qualitative and quantitative methods, by empirically deriving a model of conciliation strategies and, in line with Grzywacz and Marks (2000) claim, to consider individual as well as contextual factors. Finally, we are extending previous research by focusing on a European context, namely Portugal, highlighting the need to consider context on the analyses of work-family balance and addressing the issue of gender and parental status to better understand this process.

The aims of the study are to: a) collect and summarize a typology of strategies that individuals in dual-earner couples use to manage work and family, through a qualitative methodology (Study 1); b) draw from items in this typology to develop an instrument with good psychometric properties; c) analyse the factorial structure of the instrument in two independent samples (Study 2 and Study 3); and d) to assess any gender and parental status differences in the use of conciliation strategies (Study 3). All together these aims will allow us to develop a context-specific instrument that taps the proactive nature of men and women in their management of work and family life.

STUDY 1: ITEM DEVELOPMENT

Method

Participants

The sample of this first study is consisted of Portuguese dual-earner individuals that took part in the European Project *Famwork*. Participants have to be employed for at least 15 hours per week, live together with a partner and have at least one child. When a special population is intended, like a dual-earner population, purposive sampling may be used. This sampling is less costly and quicker while suitable for exploratory and field research (Neuman, 1997).

Individuals were, thus, recruited through phone contacts, internet mailing lists, in person when attending school meetings, through sport facilities for children, companies and post-graduated courses. Research assistants explained the research goals and delivered the questionnaires to those who are interested. The sample was composed of 217 individuals aged between 24 and 56 years ($M = 35$; $SD = 5$), with stable relationships (relationship duration mean = 12 years; $SD = 4$). Forty nine percent had one child and 47% had two children. The majority had a medium or high education (72% have completed at least the secondary school).

Procedure

Participants filled out a booklet containing several instruments regarding aspects of work and family balance.

For the purposes of this study we used the socio-demographic data and the responses obtained through an open-ended question about the personal recipes to balance work and family life. This question allowed for a contemporary understanding of the experiences of dual-earners in balancing work and family from their own points of view and in their own words. This qualitative procedure is in line with Haddock et al. (2001) study; however the question was posed to all individuals despite their sense of success on balancing work and family roles. It is therefore a broader question that asked participants to list all strategies they use in their daily lives to balance work and family. We obtained 721 short sentences describing specific strategies individuals have found to work well for their purpose of balancing work and family. The first step in the construction of the new instrument involved, content analyses of this qualitative information using NVIVO 7 software (QSR International, 2006). This analysis was oriented by the semantic content of individuals' responses (Vala, 1986).

Considering Grzywacz and Marks (2000) ecological perspective over the work-family interface, major domains tackling both individual and context based strategies should be defined: individual, familial and professional strategies. However, to fully embrace the ecological model we also added couple and community based strategies. Three independent judges, researchers in the family field, have read and categorized all sentences according to this classification. All references that did not show an explicit strategy for managing work and family were excluded from the analyses. Nevertheless, the exploratory nature of this study called for major category refinement. Therefore, the three researchers met with an expert on the work-family topic and a refined classification was proposed. Afterwards, the four researchers categorized again the sentences and, in the final categorization, there was a requisite for a minimum of 75% of inter-rate consistency. As can be seen in Table 1, the categorization process gave rise to eight key domains of conciliation subdivided into 20 categories of strategies.

The most relevant domains (comprising a higher number of strategies) were the Familial, the use of Support and Resources and the Daily Life Planning domains. The Familial domain included both relational strategies like promoting the wellbeing of the family by engaging in activities with all family members and dialogue, as well as instrumental strategies like dividing chores between family members. The Support and Resources domain comprised the use of institutional resources like schools; family and social support; resources available at the workplace and use of new technologies to facilitate the performance of tasks. The Daily Life Planning domain comprises

Table 1. *Categorization of the Conciliation Strategies and their Frequency.*

Domains and Category	N[1]
Individual	
Individual traits and characteristics	75
Time for self	12
Personal and Individual Renouncement's	8
Relationship	
Mutual emotional support	16
Family and work articulation	20
Familial	
Promoting family well-being	85
Management and division of family work	56
Communication	18
Work- Family interaction	
Role Segmentation	36
Role hierarchy	14
Family-work engagement	11
Professional	
Schedule flexibility	60
Professional management	32
Supports and Resources	
Familial and/ or social	65
Institutional	63
New technologies	2
Work	4
Planning	
Daily life planning	98
Geography	
Geographic location	21

[1]N refers to the number of strategies coded in each category.

a set of strategies related to planning ahead and having routines to manage multiple duties. Other domains included the Professional domain namely having a flexible work schedule and renouncing work responsibilities; the Individual domain comprising the use of personality characteristics and traits to better cope with multiple roles (e.g. being patient or understanding), the allocation of time and energy to individual activities and the renouncement of certain activities or goals (e.g. reduce one's social life). The Work-Family Interaction domain included mainly the use of strategies to segment work and family such as not letting work issues to interfere with family life, but also comprised prioritization of work over family or family over work and to involve family in work activities and vice-versa. The Relationship domain also included two types of strategies, one more relational and another more instrumental: partners conciliate work and family by giving each other emotional support and also by delegating/articulating the family chores. Finally, the less used strategies were Geographic related, namely the

choice of a particular location to live or work in order to facilitate the articulation of work and family tasks.

In the second step (item generation) items addressing these categories were developed and selected. In accordance to Clark and Watson (1995) recommendations about scale development procedures, this initial pool of items was overinclusive and encompassed an adequate sample of items within each major domain. Therefore, not only individual's original statements from the qualitative study were included but also items and strategies found in the literature. A total of 97 items were written and then attached to a six-point Likert scale response format ranging from 1 (*not applicable*) to 6 (*completely applicable*), where respondents had to rate the degree to which each strategy was applied to their particular case. In the third step (item evaluation) these items were reviewed by three researchers with a background on psychology and by a group of 14 individuals holding both work and family responsibilities. These individuals were asked to rate the relevance of each item, to suggest alternate wording for unclear items and to assess item semantic overlap. Following this process the authors have rewrote and deleted some items to finalize with a list of 70 items that comprised the first version of the Work-Family Conciliation Strategies Scale.

STUDY 2: ITEM REDUCTION

Method

Participants and Procedure

The 70-item scale along with several demographic variables was administered to 297 individuals holding both work and family responsibilities; therefore they should work at least 15 hours per week and be in a relationship. In order to guarantee independence of observations, when both members of the couples participated, only one member of each dyad was considered for the study. The sample mean age was 36 years, (SD = 7) the majority had at least one child (71%), were female (62%) and had a medium or high education level (61% had completed the secondary school). Individuals were recruited in training centres, postgraduated courses, companies and through mailing lists. The research assistant presented the research goals, ensured data confidentiality and agreed to return the main results to the participants.

Results

We began by assessing the item discrimination capacity, which reveals the extent to which an item accurately differentiates individuals (Urbina, 2004). Items gathering more than 90% of agreement or disagreement or more than 70% of responses in one of the six

alternatives were considered to have a low discriminative power of individual responses. Therefore, three items were excluded in this step. An exploratory factor analysis (EFA), applying a principal component analyses was then used to reduce the data.

Considering the eigenvalue criterion (>1), 21 factors were extracted, explaining 66.73% of total variance, while considering an eigenvalue > 1.5, 11 factors explaining 48.68% of the variance were extracted. Using parallel analyses, where eigenvalues from the actual data are compared to those from randomly generated data (Hayton, Allen, & Scarpello, 2004; O'Connor, 2000), up to 12 factors were suggested to be retained at the 99th percentile. Nevertheless, an analysis of the inflexion point on the screen plot pointed to a solution in four or five factors. Therefore, analyses were performed for a solution in four (29.25% of total variance explained) and five factors (32.63% of total variance explained). A comparison of these results showed that the solution with five factors provided the most meaningful interpretation of the data. Items were interpreted as part of a factor if their factor loading was more than .400 and with a medium difference of .100 in the loading from other factors (Costello & Osborne, 2005). Communalities higher than .400 were also expected (Field, 2005). Because factor 1 aggregated 19 items, an additional criterion was set forth, the maximum of 10 items (with the best loadings) for each factor were selected. Thirty-five items did not met these criteria and were discarded. Another analysis was performed to determine if dropping these items would improve the structure of the solution. This resulted in an improved structure of the data and in an increase of variance explained (Table 2)[1]. The first factor was labeled Partner Coping and comprised 10 items related to emotional and instrumental support of the partner regarding work-family balance and also assignment of specific time for the couple's relationship. The six items in the second factor deal with a positive outlook regarding the dual-earner situation of the family and individual engagement in several roles. It was labelled Positive Attitudes toward Multiple Roles. The third factor was associated with the use of personal characteristics to cope with work-family responsibilities, such as being flexible, planning and managing time and also segmenting work and family. It is composed of seven items and was labelled Planning and Management Skills. The fourth factor encompassed six items and implied cutting back on work investment, work hours or work responsibilities either by the individual or by

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[1]Oblique rotations with the 32 items using Promax as a rotation method and both Maximum Likelihood and Alpha Factoring as extraction methods suggested the same factor structure.

Table 2. *Factor Loadings for Exploratory Factor Analysis of Work-Family Conciliation Strategies Scale*

Items	Partner Coping	Positive Attitudes toward Multiple Roles	Planning and Management Skills	Professional Adjustments	Institutional Support
1. We talk with each other and share our feelings.	**.842**	.076	.065	−.034	.028
2. We deal with the problems together.	**.807**	.131	−.003	−.081	.123
3. My partner support and our way of dealing with stress is effective.	**.750**	.005	−.004	.001	−.005
4. The decisions about our family, personal and professional life are taken together.	**.735**	.150	.243	−.130	.061
5. We use to relax together.	**.667**	.061	.175	.090	−.126
6. When one of us has professional problems, we try to help each other.	**.652**	.058	.148	−.050	.009
7. We seek that both (me and my partner) are involved in the care for our children.	**.634**	.099	−.046	−.067	.124
8. On free time we dedicate intensely to family.	**.570**	.297	.165	−.091	.177
9. We coordinate the way we organize our daily lives.	**.570**	.301	.247	.086	.224
10. We often take time together to do family activities.	**.534**	.289	.071	.117	−.083
11. Having both work and family responsibilities gives a clearer idea of what is really important to me.	.223	**.677**	.249	−.175	.025
12. It is very positive for children to have access to a model where both parents are employed outside home.	.034	**.654**	.020	.007	.163
13. Having both work and family responsibilities is a way of achieving equality in our relationship.	.167	**.632**	.049	.172	.047
14. It is better for our relationship if we both are employed outside home.	.141	**.616**	.103	−.047	−.185
15. Having both work and family responsibilities makes me feel competent.	.268	**.591**	.340	−.164	.113
16. Having both work and family responsibilities makes me a more well-rounded person.	.339	**.515**	.310	−.264	.087
17. I do not take family problems into work.	−.019	−.075	**.649**	.046	−.130
18. I clearly separate work from my family/personal life.	.112	.174	**.613**	.005	.014
19. I am flexible in different family and work situations.	.236	.115	**.561**	−.086	.016
20. I adjust my working day schedule.	−.005	−.040	**.554**	.205	.066
21. I calculate, realistically, the time required for each activity.	.099	.135	**.523**	−.061	.092
22. When there are deviations from the original plan, I quickly adjust myself and respond appropriately.	.237	.251	**.475**	−.080	.096
23. I do not take work problems home.	.041	.143	**.432**	.060	−.018
24. My partner moved to a job with less responsibility.	−.222	−.013	−.200	**.647**	−.055
25. My partner moved to a job with more flexibility.	.024	.193	−.017	**.586**	−.186
26. I have moved to a job with more flexibility.	.042	−.130	.313	**.579**	.078
27. I have moved to a job with less responsibility.	.002	−.280	.069	**.565**	.146
28. My partner has reduced the number of working hours or the intensity of her/his professional work.	.039	.060	−.079	**.556**	−.087
29. I have reduced the number of working hours or the intensity of my professional work.	−.057	−.086	.147	**.546**	.127
30. I use childcare facilities.	.100	.143	−.061	.046	**.816**
31. The childcare institutions I use have a flexible schedule adjusted to my work schedule.	.064	.048	.078	.019	**.798**
32. My children have lunch at the childcare institutions	.055	−.036	.046	−.061	**.705**
% variance explained	16.14	9.41	8.71	7.26	6.72
Eigenvalue	7.07	2.40	2.25	2.03	1.61

Note: Factor loadings in bold indicate which factor the item loaded onto.

the partner. It was labelled Professional Adjustments. Finally, the fifth factor was composed of three items and was related to the use of Institutional Support to help cope with work-family responsibilities. It included using childcare and free time facilities or canteens. Together, these five factors explained 47.97% of the variance. The reliability coefficients can be found in Table 3.

STUDY 3: SCALE REFINEMENT

Method

When a factor structure has been derived empirically using an exploratory procedure such as that described above, it is desirable to confirm it in another sample. Using Amos 18.0 (Arbuckle, 2009) and employing maximum likelihood estimation procedures, we conducted a confirmatory factor analysis (CFA) to determine the fit of the five-factor solution in a validation sample. All analyses were based on covariance rather than correlation matrices as recommended by Byrne (2004). Following the recommendation of Schweizer (2010), several fit indices were used to evaluate the model. These included χ^2/df, the comparative fit index (CFI; Hu & Bentler, 1999), the standardized root mean squared residual (SRMR, Jöreskog & Sörbom, 1996) and the root mean square error of approximation (RMSEA)[2].

Participants and Procedure

The sample criteria for inclusion in this study and the recruitment procedures were the same as in study two. The sample was composed of 215 individuals with a mean age of 33 years ($SD = 6$). The majority had at least one child (62%), were female (57%) and had a medium or high education level (58% had completed the secondary school).

Results

The five-factor structure with all items loading on their respective factor (as indicated in the exploratory factor analyses) contained no cross-loadings and all measurement errors were presumed to be uncorrelated. The correlations among the five latent factors were freely estimated. This model fit the data well: $\chi^2/df = 1.22$; CFI = .90, RMSEA = .04, SRMR = .08. All freely estimated unstandardized parameters were statistically significant ($p < .05$) except for the covariances among factor 4 (Professional Adjustments) and all remaining factors. Factor 5 (Institutional Support) also had only

a statistically significant covariance with factor 3 (Management and Planning Skills) (Table 4). Factor loadings estimates were satisfactory (above .30) and statistically significant ($p < .05$). One item (item 12) had a loading of .26, nevertheless, it was kept because of its contribution to the reliability coefficients. Also, it did not severely impair the model. The Cronbach alpha coefficients for the scales in the confirmatory sample can be found in Table 3.

Gender and Parental Status Differences on the WFCSS

In order to test for differences between gender and parental status and each of the conciliation strategies scales, MANOVAs was conducted, using the follow-up ANOVAs to clarify the source of significant differences[3]. A non significant Box's M indicated that the homogeneity among the variance-covariance matrix assumption was not violated. The Pillai's trace criterion showed no significant gender main effect (Pillai's Trace = .35, $F(4, 172) = 1.58$, $p = .183$, $\eta_p^2 = .04$, power = 0.48) but a significant parental status main effect (Pillai's Trace = .06, $F(4, 172) = 3.01$, $p = .020$, $\eta_p^2 = .07$, power = 0.79), on the use of management and planning skills, $F(1, 179) = 8.11$, MSE = .65, $p = .005$, $\eta_p^2 = .04$, power = 0.81, and on the endorsement of positive attitudes toward multiple roles, $F(1, 179) = 4.85$; MSE = .50, $p = .029$, $\eta_p^2 = .03$, power = 0.59. Follow-up Anovas showed that parents ($M = 4.23$, $SD = 0.82$) use more than non-parents ($M = 3.91$, $SD = 0.81$) the Planning and Management Skills, $F(1, 202) = 7.48$, $p = .007$. Similarly, parents ($M = 4.77$, $SD = 0.72$) endorsed a more positive view regarding the multiple roles than non-parents ($M = 4.56$, $SD = 0.71$), $F(1, 196) = 3.81$, $p = .053$.

Regarding the interaction between gender and parental status a marginally significant interaction effect was found (Pillai's Trace = .46, $F(4, 172) = 2.06$, $p = .088$, $\eta_p^2 = .05$, power = 0.61), in particular on the use of management and planning skills, $F(1, 179) = 5.99$, MSE = .65, $p = .015$, $\eta_p^2 = .03$, power = 0.68. In order to better interpret this result, ANOVAs was performed for this conciliation strategy and mothers ($M = 4.27$, $SD = 0.85$) were found to use, more than non-mothers ($M = 3.66$, $SD = 0.82$), Planning and Management skills, $F(1, 115) = 14.20$, $p < .001$. Regarding men, there was no difference between fathers ($M = 4.19$, $SD = 0.77$) and non-fathers ($M = 4.22$, $SD = 0.69$) in the use of this strategy, $F(1, 88) = 0.67$, $p = .797$. Moreover, men from the non-parents group ($M = 4.22$, $SD = 0.69$) tend to use more this strategy, $F(1, 78) = 10.77$, $p = .002$, than women ($M = 3.66$, $SD = 0.82$).

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[2]Following Schweizer recomendations (2010) good fit is defined as χ^2/df less than 2 CFI values between .90 and .95 signify acceptable fit, SRMR is expected to stay below .10 and RMSEA values less than .05 indicate a good model fit.

[3]Items comprising the subscale of Institutional Support were only directed to parents therefore this subscale was not used in this analysis.

Table 3. *Means, Standard Deviations and Reliability (Internal Consistency) Values*

Factors		Exploratory Sample (n = 297)			Confirmatory Sample (n = 215)		
		M	SD	α	M	SD	α
1	Partner Coping	4.79	0.85	.88	4.82	0.83	.87
2	Positive Attitudes toward Multiple Roles	4.63	0.87	.77	4.68	0.77	.67
3	Planning and Management Skills	4.12	0.87	.67	4.11	0.84	.67
4	Professional Adjustments	1.91	0.75	.62	1.86	0.81	.71
5	Institutional Support	3.82	1.64	.72	4.25	1.78	.81

Table 4. *Interfactor Correlations for the Five Subscales (n = 215)*

Variables		1	2	3	4	5
1	Partner Coping	–				
2	Positive Attitudes toward Multiple Roles	.446***	–			
3	Planning and Management Skills	.290*	.556**	–		
4	Professional Adjustments	–.186	–.166	–.033	–	
5	Institutional Support	.135	.199	.277*	.028	–

*p < .05 **p < .01 ***p < .001.

Discussion

The study main aim was to develop an instrument with acceptable psychometric properties that allowed for an analysis of work-family conciliation strategies. In particular, we intended to empirically derive a model of conciliation strategies, suitable to individuals belonging to dual-earner couples. This study overcome some of the concerns from previous studies, namely by combining methodologies in order to define a typology, by deriving this typology empirically, by using a sample of both men and women, parents and non-parents, part of dual-earner couples and by focusing on both remedial and adaptive strategies in a non US context. Our studies with the Work-Family Conciliation Strategies Scale (WFCSS) are very encouraging; the scale, composed of 32 items, showed good global and specific fit in an independent sample (Study 3) and showed reasonable to good reliability coefficients.

The findings suggest that work-family conciliation strategies can be organized into five main dimensions: a) Partner Coping; bi) Positive Attitudes toward Multiple Roles; c) Planning and Management Skills; d) Professional Adjustments, and e) Institutional Support. This structure was replicated in another sample, showing very satisfactory adjustment indices. Indeed, all items loaded on the intended factor and the reliability of the scales was reasonable to good (>.65), the lower reliability was found on the Planning and Management Skills subscale which showed a

reliability of .67 on both samples. Moreover, without the need for making adjustments in errors a good fit was obtained, stating the stability of the factor structure of the WFCSS. The first three factors of the scale showed high correlations among them. Content analysis of the items on these factors showed a more relational approach to conciliation (e.g., promoting family well-being, family harmony, couple communication, use of relationship competences); while the other two factors (Professional Adjustments and Institutional Support) are essentially instrumental (e.g., childcare support, cutting back on work hours). The fact that the Planning and Management Skills scale showed a lower than expected reliability coefficient may be due to the fact that these skills relate to different dimensions, such as segmentation, planning ahead and flexibility, though related these are three types of competences the individual may put forward to balance.

Subgroup differences relative to gender and parental status added to previous studies by uncovering interaction effects, not yet addressed. Despite the absence of main gender effects, taking parental status into consideration shows that women and men behave differently. In fact, parents as a group and mother as a subgroup tend to use more conciliation strategies, in particular the ones related to the use of management and planning skills. Indeed these were the expected groups to be more burdened with the conciliation process. This differential results point out that beyond

gender differences, having a child can be determinant in analyzing the type of strategies men and women will engage in, revealing that the WFCSS can be discriminative of groups. To further establish the validity of the scale it could also be relevant to analyse the antecedents and outcomes of the identified factors.

The combination of methodologies and starting the process of scale development using a qualitative study proved to be an important approach, as it allowed for a more in-depth knowledge of the conciliation strategies used. Nevertheless, this information was drawn upon a questionnaire covering work-family related themes, which may give rise to carry over effects from filling previous items in the questionnaire. Despite the open-ended question be presented first in the work-family module, on previous modules respondents were confronted with the characterization of the work and workplace and with the division of tasks between the partners. This may, on the one hand, have heightened the role of partnership strategies on work-family balance; and, on the other hand, may have confronted individuals with the lack of organizational support, leading to a highlight of personal based competences. Another important point in this qualitative study is that the open ended answers were gathered with dual-earner couples with children. Therefore the typology of conciliation strategies found may have overlooked other strategies used by dual-earner couples without children, nevertheless on the item development phase items derived from literature review were integrated. In addition, the study concerning parental status differences showed that the WFCSS was discriminative between the group of parents and nonparents. Nonetheless, the question of conciliation seems to be posed with more relevance when families have children; as parenting seems to be the marker of a greater use of strategies. Moreover, concerning sampling, one limitation of this study is that its' sample is not representative, despite our attempt to diverse the sample concerning gender, parenting status, education level and type of occupation.

The dyadic nature of the conciliation process can also be explained by the fact that both men and women work fulltime and both need to make adjustments. In addition, due to the fact that organizational and public facilities are scarce and poorly adapted to family needs (Guerreiro & Abrantes, 2007), dyadic coping will help them better comply with work-family balance. Indeed, individuals avoid cutting back on their work investment as this may cause a significant draw back in their careers and in their financial security.

The factors comprising the more relational approach (Partner Coping, Planning and Management Skills and Positive Attitudes toward Multiple Roles) are quite similar to those found by Haddock et al. (2001); while

Professional Adjustments shows an association with the Establishing Limits dimension referred by Becker and Moen (1999). Institutional Support can also be related to what Skinner and McCubbin (1987) called support seeking. Nevertheless, our dimension excluded family support. In a context where formal support (public and organizational) to conciliation is scarce, extended family support could be expected to be high and therefore a referred strategy. However, this strategy ended up not being on the final version of the scale probably because it is a widespread practice that does not distinguish individuals in Portugal (Wall, 2005).

The five factors found are similar to previous studies in the extent to which individuals conciliate by using individual skills like planning, by setting forth a positive outlook regarding the dual-earner situation of the family and by conciliating through work compromises. However, our study introduced a new feature to the work-family conciliation: the dyadic nature of some strategies. Both Partner Coping and Professional Adjustment imply that both members of the couple engage in behaviors to conciliate. This distinctive feature is probably due to the evolving nature of the work-family context that it is now characterized by similar patterns of engagement in the labour market of both members of the couple. In fact, no gender or parental differences were found in these factors pointing to the dyadic nature of the conciliation process in dual-earner couples. However, the role of partner conciliation strategies in families where this use is not possible, for instance in single parent families, would be a challenge to this scale. Nevertheless, other variables may have an influence on the engagement of work-family conciliation strategies, such as parental or socio-economic status.

Another distinctive feature of our study is our finding that individuals rely more on the relational strategies than on instrumental, as shown by the high means for these three factors[4] and by the frequency of responses found in Study 1. Nevertheless, the effect of relational strategies on conciliation is not so explored in research, while the role of instrumental strategies is

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[4] A repeated measures ANOVA with the five subscales confirmed that conciliation strategies means varied between them [Study 2 - $F(2.59, 762.52) = 408.99$, $p < .001$; $\eta_p^2 = .58$; Study 3 - $F(2.99, 552.75) = 323.44$, $p < .001$; $\eta_p^2 = .64$]. As sphericity had been violated [study 2 - χ^2 (9) = 283.23, $p = .000$; study 3 - χ^2 (9) = 212.50, $p = .000$], degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ($\varepsilon = .65$ e .75, study 2 and 3 respectively). On study 2, post hoc tests using Bonferroni correction revealed that all pairs of strategies differed between them. On study 3, two pairwise comparisons were found to be non-significant: the Partner Coping and Positive Attitudes toward Multiple Roles subscales did not differed between them ($p = .752$) and the Management and Planning Skills also did not differed from the Institutional Support subscale ($p > .999$). All other pairs of subscales differed between them.

well established (Wall, 2005). Strategies associated with the promotion and exchange of positive emotions in the family and creating harmonious environments may motivate individuals to strive to balance work and family life and may also protect them from the adversities and difficulties of this balance. Given the extent to which the relational strategies are used, it would be important to explore the reasons behind this endorsement. Moreover, results from this study suggest that a more positive perspective regarding work and family balance is gaining a place consistent with more recent approaches in work-family issues (Grzywacz & Marks, 2000).

This study has highlighted the broad range of strategies that individuals in dual-earner couples use to manage their multiple responsibilities and our findings lend empirical support for the use of the WFCSS as a tool for assessing individual and couple strategies. It is expected that further studies add confidence in the use of this multidimensional scale.

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