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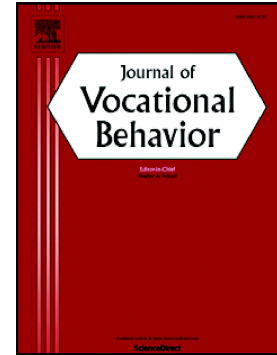
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Cultural Value Orientations and Work–Family Conflict: The Mediating Role of Work
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Cultural Value Orientations and Work-Family Conflict: The Mediating Role of Work
and Family Demands

Abstract

The current paper examined the associations between Schwartz's (2006) cultural value orientations and individuals' work-family conflict. Results of multilevel analyses across 19 European countries ($N = 16,145$) showed that the cultural value orientation of embeddedness vs. autonomy, hierarchy vs. egalitarianism, and mastery vs. harmony were related to individuals' higher levels of family-to-work conflict (FWC). Embeddedness vs. autonomy was positively related with work-to-family conflict (WFC). These results hold after controlling for both individual-level predictors of WFC and the GLOBE cultural values of in-group collectivism, gender egalitarianism, performance orientation, and power distance. Whereas gender egalitarianism was negatively related to WFC, in-group collectivism was not related to any form of work-family conflict. Also, performance orientation (PO) related to lower FWC and WFC. Further, our analysis yielded significant indirect effects of embeddedness vs. autonomy and hierarchy vs. egalitarianism on FWC via family demands (household size) and on WFC via working demands (total working hours). Implications for theory and practice are discussed.

Keywords: Cultural value orientations, work-family conflict, work demands, family demands

Cultural Value Orientations and Work–Family Conflict: The Mediating Role of Work and Family Demands

Research has documented the ubiquitous presence of work–family conflict across countries (Allen, French, Dumani, & Shockley, 2015). Work–family conflict is defined as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible” (Greenhaus & Beutell, 1985, p. 77). Work–family conflict is bi-directional with work interfering with family (i.e., work-to-family conflict, WFC), and family interfering with work (i.e., family-to-work conflict, FWC). The negative consequences of work–family conflict on employees’ attitudes and well-being are well documented in the literature and raised concerns for practitioners and academics alike (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Allen, Herst, Bruck, & Sutton, M. 2000; French, Dumani, Allen, & Shockley, 2018).

For years, scholars have called for a better understanding of the effects of country-level variables on the experience of work–family conflict (Allen et al., 2015; Ollier-Malaterre, Valcour, Den Dulk, & Kossek, 2013; Olliere-Malaterre & Foucrealt, 2016; Powell, Francesco, & Ling, 2009; Shockley, Douek, Smith, Yu, Dumani, & French, 2017). A recent review of the literature has shown progress in this area with a growing number of studies considering the cultural context when predicting work–family conflict (Shockley et al., 2017; Allen et al., 2015; French et al., 2018). Most of these studies have used the cultural dimensions of in-group collectivism and gender egalitarianism defined by the GLOBE study (House, Hanges, Javidan, Dorfman, & Gupta, 2004) to predict work–family conflict (see Spector et al., 2004, 2007; Masuda et al., 2012; Lyness & Kropf, 2005; Haar, Russo, Suñe, & Ollier-Malaterre, 2014). Although the use of these cultural dimensions has been fruitful to understand work–family conflict in a global perspective (Shockley et al., 2017), a meta-analysis

summarizing previous studies (which included country as a proxy for collectivism) showed null effects of collectivism and gender egalitarianism on WFC; instead, only collectivism was positively related to FWC (Allen et al., 2015). Given this weak effect of cultural values on work-family conflict, researchers noted the need to move beyond collectivism and gender egalitarianism to explain work–family conflict and expand our knowledge in this area (see Shockley et al., 2017; Powel et al., 2009).

In this paper, we argue that Schwartz’s (2006) cultural value orientations, a framework which has not been used in previous work–family research, can be useful in explaining differences in the experience of work–family conflict across cultures above and beyond previously studied cultural values. Cultural values are “shared conceptions of what is good and desirable in the culture” (Schwartz, 2006, p.139). Since cultural value orientations influence attitudes, behaviors, and thoughts of individuals in a society (Schwartz, 2006), we argue that they will also influence individuals’ experiences of work–family conflict.

By applying the Schwartz framework to the study of work–family conflict across cultures, this study contributes to the literature in multiple ways. First, this study moves beyond the cultural value dimensions of collectivism and gender egalitarianism by testing the relationships of different cultural value orientations, namely embeddedness vs. autonomy, mastery vs. harmony, and hierarchy vs. egalitarianism (Schwartz, 2006). We do so by drawing on data from the European Social Survey (ESS) and using multi-level modeling to account for country-level effects on individuals’ work–family conflict. Second, we test the effects of the Schwartz cultural value orientations on work–family conflict above and beyond the GLOBE cultural dimensions that have been shown to relate to WFC (House et al., 2004; Shockley et al., 2017). In this sense, we are able to identify the unique effects of these two types of cultural

taxonomies on work–family conflict. Third, based on Schwartz’s (2006) theory of cultural value orientations and role theory (Katz & Kahn 1978), we examine two mediators (i.e., working hours and household size) to explain the relationships between cultural values and both directions of work–family conflict. By testing mediators of the cultural value and work–family conflict relationships, we respond to a recent call for testing more mediation models in cross-cultural work–family research (Shockley et al., 2007), and we also contribute towards a refinement of the culture-sensitive theory of the work–family interface (Powell et al., 2009).

Schwartz’s and GLOBE’s Cultural Value Dimensions

Schwartz’s theory of cultural value dimensions provides a comprehensive set of cultural values based on a well-validated psychological assessment of individuals’ values, the Schwartz Value Survey (SVS) (Schwartz, 1992, 2003, 2006). The value structure has been empirically derived from samples of over 80 countries around the world (Fontaine et al., 2008; Schwartz & Bardi, 2001) and emphasizes the universality of the proposed value structure.

Schwartz (2006) identified three cultural value orientations within societies: 1) embeddedness vs. autonomy, 2) hierarchy vs. egalitarianism and 3) mastery vs. harmony. Societies high in embeddedness vs. autonomy place relatively more emphasis on values such as respecting traditions and family (e.g., respecting and caring for the elderly), obedience, security, and maintenance of the status quo (e.g., Eastern Europe). Autonomous societies, on the other hand, value variety, excitement, pleasure, and intellectual freedom (e.g., Northern Europe). Societies high in hierarchy vs. egalitarianism (e.g., South East Asia) place a relatively higher emphasis on values such as power, authority, and wealth over values such as social justice, equality, and helping others, the latter of which are characteristics of societies high on egalitarianism (e.g.,

Sweden). Societies high in mastery (e.g., U.S.) emphasize values such as success, self-sufficiency, ambition, and competence over a world of peace and conserving the environment, the latter of which are dominant values in societies high on harmony such as the Scandinavian countries (Schwartz, 2006).

These cultural value orientations are interrelated with each other so that compatible values are positively related and incompatible values are negatively related. Compatible cultural value orientations share common assumptions. For example, egalitarianism and autonomy correlate positively (e.g., in Western Europe) because both share the assumption that people should take individual responsibility for their actions and make decisions based on their understanding of situations (Schwarz, 2006). Hierarchy and embeddedness correlate positively (e.g., South East Asia) because they share assumptions that individuals should obey certain rules such as respecting the elderly. Hierarchy also overlaps with mastery since both to some extent prioritize values related to success (e.g., ambition, wealth). Egalitarianism and harmony also share some assumptions such as individuals should care for people in general. In the case of harmony, specifically, individuals should care for nature and the environment (e.g., Scandinavian countries).

The cultural value orientations of Schwartz conceptually overlap, at least to some extent, with some of the cultural dimensions identified by the GLOBE study (House et al., 2004) (See Table 1 for how the items measuring the concepts overlap). More specifically, embeddedness, which “emphasizes maintaining the status quo, propriety, and restraint of actions or inclinations that might disrupt the solidarity of the group or the traditional order in which people are embedded” (Smith, Peterson, & Schwartz 2002, p. 193), is conceptually related to House et al.’s (2004) concept of in-group collectivism. In-group collectivism, as defined by GLOBE, is the degree to which

people manifest pride, loyalty, and cohesiveness to their families or organizations (House et al., 2004). Conceptually, these two constructs are similar in that they both emphasize in-group solidarity. However, unlike in-group collectivism, embeddedness also encompasses the conservative values of restraining actions which might change the social order and the status quo. Further, embedded societies are characterized by a desire for national security, obedience and the importance of following traditions and customs. These later values emphasize the role of duty and following norms which are not captured to a similar extent by the cultural dimension of in-group collectivism.

Hierarchy vs. egalitarianism conceptually overlaps to some extent with GLOBE's gender egalitarianism. Schwartz (2001) defined egalitarianism as "the belief that all people are of equal worth and should be treated equally in society" (p. 65). The GLOBE Project defines gender egalitarianism as "the degree to which a collective minimizes gender inequality" (House et al., 2004, p. 30). That is, both values emphasize the equal treatment of individuals in a society. Nonetheless, Schwartz's concept of egalitarianism does not only focus on gender equality but also encompasses the extent to which everyone in society should have equal rights (e.g., immigrants). Schwartz's egalitarianism includes honesty and responsibility and reflects the extent to which people are freely interested in caring for the well-being of others. In this sense, Masuda (2018) explains that the norm in gender-egalitarian countries is that men and women should contribute equally to caretaking responsibilities, while the norm in egalitarian societies is that all citizens regardless of gender, race, and socio-economical background should be able to provide for the well-being of their children, have basic education, and healthcare. Further, the values opposite to egalitarianism (i.e., hierarchy), do not only emphasize inequality in the distribution of power and resources but also stress the value of material wealth. That is, besides living in a normative context of

inequality, individuals in hierarchical societies may experience normative pressures to seek power and material wealth. In this sense, Schwartz's (2006) cultural value orientation of hierarchy vs. egalitarianism may also partially overlap with GLOBE's power distance which refers to the extent to which people in a society accept that power is concentrated in the hands of a few people at the top (House et al., 2004).

Last, mastery vs. harmony may partially overlap with GLOBE's performance orientation (PO) (House et al., 2004). Like mastery vs. harmony, PO also focuses on the extent to which performance and excellence are rewarded in society. However, unlike PO, mastery orientation also includes other values such as self-assertion and self-sufficiency in order to master and change the natural and social environment (Schwartz, 2006) (see Table 1). Further, mastery (vs. harmony) is a bipolar dimension that prioritizes values of competence, ambition, and influence, over values such as fitting nature, enjoying peace and art. Hence, performance orientation is a dimension that overlaps with mastery orientation.

Insert Table 1 here

Despite some conceptual overlap as outlined above, and consistent with previous scholars (see Masuda, 2018), we argue that the Schwartz cultural value orientations can make a unique contribution in explaining work–family conflict across cultures beyond the GLOBE cultural value dimensions. According to the theory of cultural value orientations (Schwartz, 2006), cultural values create normative pressures that shape behaviors in social groups. In line with this reasoning, we examine whether Schwartz's

cultural value orientations can predict work–family conflict above and beyond the previously discussed GLOBE cultural value dimensions.

Role Theory and Work–Family Conflict

Role theory (Katz & Kahn, 1978) is often used to explain the occurrence of work–family conflict (Greenhaus & Beutell, 1985). One core assumption is that people have a finite amount of energy and time (Marks, 1977). Hence, demands and pressures from participating in work and family roles may impede the fulfillment of responsibilities of both roles involved, thereby leading to strain that can spill over from work-to-family and vice versa (Greenhaus & Beutell, 1985). According to Byron (2005), typical work demands are job stressors (e.g., working overtime, night shift or low schedule flexibility). Further, having children (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011; Byron, 2005), and the number of children living in the household (Kinnunen & Mauno, 1998) has been identified as family demands that contribute to work–family conflict at the individual level. Thus, in this paper, we focus on working hours and household size as potential work and family demands that predict work–family conflict.

Schwartz's (2006) cultural value orientations may, directly and indirectly, influence work–family conflict by accentuating work and family demands. This is because cultural values create normative pressures which influence individuals' choices to have a larger family or a specific work ethic (Schwartz, 2006). Family size and specific working behaviors, such as working long hours, have been shown to directly and uniquely influence FWC and WFC, respectively (Michel et al., 2011; Shockley et al., 2017). Below we outline in more detail how each of the Schwartz's cultural value orientations is linked to work–family conflict and hypothesize on the indirect effects of cultural values on WFC and FWC via elevated levels of work and family demands.

Study Hypotheses

Embeddedness vs. autonomy. As previously stated, embeddedness, like in-group collectivism, emphasizes in-group ties. However, embeddedness also emphasizes obedience, working hard, meeting obligations, preserving the social image and showing respect to the elderly. Consistent with these values, individuals in embedded societies may be more likely to have larger families compared with those in autonomous societies (Eurostat, 2017; Schwartz, 2006) for several reasons. First, individuals in these countries may only leave their parents' houses when they get married in order to maintain family traditions. Second, they are less likely to get divorced (Schwartz, 2006). Third, people in these societies may also feel pressure to have more children in order to maintain family continuity. Fourth, because this society values respect to the elderly, people may feel the pressure to care for their elder parents themselves. For example, in more embedded European countries there is less formal care for the elderly which increases informal caregiving and, in many cases, the elderly live in the same household with their children (Crespo, 2006). Based on these reasons, individuals in embedded (vs. autonomous) societies may experience more family demands and thus higher levels of FWC.

We also argue that individuals in embedded vs. autonomous societies may experience more WFC for two reasons. First, because high embeddedness oriented societies place more importance on values such as restraint and obedience instead of values such as excitement and pleasure, individuals in these societies may feel the social pressure to work harder and invest more time and effort in their jobs. Research has indeed shown that individuals in these societies report working hard as a desirable quality to have for in their children (Schwartz, 2006). Additionally, comparative research on China (high on embeddedness) and the U.S. (high on autonomy) provides

evidence that individuals in China are more likely to experience higher work demands compared to individuals in the U.S. In more autonomous societies, individuals are more likely to cherish their free and leisure time (Yang, Chen, Choi, & Zou, 2000).

To summarize, we argue that individuals in highly embedded societies experience more WFC and FWC as compared to individuals in autonomous oriented societies due to elevated work and family demands. This reasoning is consistent with role theory and previous research on the antecedents of work–family conflict, showing that work demands (such as long working hours) are more likely to predict WFC, whereas family demands (such as having children living in the household) are more likely to predict FWC (Byron, 2005; Michel et al., 2011). Further, we expect that embeddedness vs. autonomy will be positively related with WFC and FWC not only because of the values they place on in-group social ties (e.g., in-group collectivism), but also because of the emphases this society places on restraint, obedience, and maintenance of family traditions. For this reason, we expect these relationships to hold after controlling for in-group collectivism.

Hypothesis 1. Embeddedness vs. autonomy cultural values are positively related to individuals' WFC (1a) and FWC (1b) controlling for in-group collectivism.

Hypothesis 2: Work demands (working hours) mediate the relationship between embeddedness (versus autonomy) and WFC controlling for in-group collectivism.

Hypothesis 3: Family demands (household size) mediate the relationship between embeddedness vs. autonomy with FWC controlling for in-group collectivism.

Mastery orientation versus harmony. Mastery (vs. harmony) orientation, like performance orientation, emphasizes achievement, which is defined as working to be

the best in what one does (Smith et al., 2002) (see Table 1). However, mastery orientation is a broader concept that goes beyond performance and achievement. Individuals in mastery vs. harmony-oriented societies may not only experience social pressure to perform and achieve success at work, but they may also feel the pressure to be self-sufficient, daring, and influential rather than seeking peace and contact with nature, beauty, and art. Consistent with these values, individuals in mastery vs. harmony-oriented societies may spend more time working than enjoying nature or art. Further, they may not only work longer hours due to normative pressure for performance and success at work but also because they are expected to be self-sufficient (e.g., achieve success without relying on support from others) and become influential in the organization and society in general. In line with this reasoning and the empirical evidence showing that working long hours is a predictor of work–family conflict (Michel et al., 2011; Shockley et al., 2017), we expect individuals in mastery-oriented societies to experience higher WFC than individuals in harmony-oriented societies above and beyond PO. This link may at least be partially mediated by working hours.

Individuals in mastery (vs. harmony) oriented societies may also experience more FWC for two reasons. First, because individuals in high mastery-oriented societies are expected to perform, be self-reliant, daring, and independent, they may be more sensitive to intrusions of family demands into the workplace (e.g., distraction from becoming successful and influential) and accept less support to cope with such demands than individuals in harmony-oriented societies. Further, individuals in mastery-oriented societies may be expected to independently care for their families without relying on formal governmental or company support. In fact, Kasser (2011), showed that mastery (vs. harmony oriented) societies had less generous laws regarding maternal leave and lower levels of child well-being. Second, Schwartz (2006) provided some evidence that

families tend to be larger in mastery than in harmony oriented societies. Individuals in harmony oriented societies care more for the environment and in general have smaller households. A larger household size typically comes with greater family demands. Given these reasons, we expect employees to experience higher levels of FWC in mastery (vs. harmony) oriented societies and this may be partially due to larger family sizes. We also expect to find these effects after controlling for PO.

Hypothesis 4: Mastery (vs. harmony) cultural values are positively related to individuals' WFC (4a) and FWC (4b) controlling for performance orientation.

Hypothesis 5: Work demands (working hours) partially mediate the relationship between mastery (vs. harmony) orientation and WFC controlling for performance orientation.

Hypothesis 6: Family demands (household size) partially mediate the relationship between mastery (vs. harmony) orientation and FWC controlling for performance orientation.

Hierarchy versus egalitarianism. Similar to societies that are low in gender egalitarianism and high in power distance, societies oriented towards hierarchy (vs. egalitarianism) are characterized by high levels of inequality. However, Schwartz's bipolar cultural dimension differs from the GLOBE dimensions as it goes beyond gender inequality (the main focus of gender egalitarianism) and also captures the prioritization of wealth and social power over loyalty to friends, being responsible, or helping others (see Table 1). Consistent with the emphasis of hierarchical societies (vs. egalitarian) on obtaining wealth and higher social status, individuals may be more likely to work longer hours as compared to individuals in egalitarian societies to achieve these goals. Research shows that citizens of hierarchical societies believe that working hard is a positive quality in children (Schwartz, 2006). Consistent with role theory, by working

more hours, individuals in hierarchical societies may experience more work demands that spill over into the family domain. Consequently, these individuals will experience higher levels of WFC as compared to individuals in more egalitarian societies. Hence, we expect individuals in high hierarchical (vs. egalitarian societies) to experience more WFC due to longer working hours above and beyond controlling for gender egalitarianism and power distance.

Further, compared to individuals in egalitarian societies, individuals in hierarchical societies may experience more FWC for two reasons. First, individuals in these societies may be more sensitive to family demands (e.g., having to spend leisure time with family members instead of working to acquire wealth) which may lead to higher levels of FWC, as compared to those living in more egalitarian societies. Further, this effect will occur after controlling for household income because all individuals in these societies irrespective of their income have social pressure to continuously prioritize the creation and maintenance of wealth and power over caring for others. This argument is consistent with previous empirical research showing that individuals who value work over family are more sensitive to family demands, thereby experiencing more negative family-to-work interference (Carlson & Kacmar, 2000). Second, individuals in hierarchical (vs. egalitarian) societies may also experience more family demands due to larger households. There is empirical evidence that households in hierarchical societies are larger because women in these societies tend to feel more social pressure to have children as compared to women living in more egalitarian societies (Schwartz, 2006). Higher levels of family demands and FWC of both men and women living in these societies (as opposed to those living in more egalitarian societies) may be the consequence. Thus, we expect employees in hierarchical societies to experience more WFC and FWC after controlling for gender egalitarianism and power

distance. These associations can at least be partially explained by longer working hours and larger households.

Hypothesis 7: Hierarchy (vs. egalitarianism) cultural values are positively related to (a) WFC and (b) FWC controlling for gender egalitarianism and power distance.

Hypothesis 8: Work demands (working hours) partially mediate the relationship between hierarchy (vs. egalitarianism) orientation and WFC controlling for gender egalitarianism and power distance.

Hypothesis 9: Family demands (household size) partially mediate the relationship between hierarchy (vs. egalitarianism) orientation and FWC controlling for gender egalitarianism and power distance.

Methodology

Participants

The data were drawn from the European Social Survey (ESS) Round 5, which was collected in 2010. We included those 19 countries for which information on Schwartz cultural value orientations and the GLOBE dimensions were available (see measures below). The ESS dataset is comprised of strict probability samples that are representative of the national population aged 15 years and older. Detailed information is available online at www.ess.nsd.uib.no. As we were interested in the interrelations between work and family domains, our statistical analyses included workers 18 years of age or older in paid employment for more than 20 hours per week. This resulted in a total sample size of $N = 16,145$. Note that for FWC there were many missing values. Hence, when testing the model predicting FWC, our sample size was $N = 14,220$. Sample sizes per country, mean scores for WFC and FWC and the country scores for all cultural values are reported in Table 2.

Insert Table 2 here

Measures

Work-to-family conflict (WFC). Four items were designed to measure WFC in the ESS (see Gallie & Russel, 2009). Participants were asked how often they: “Keep worrying about work problems when you are not working?”, “Feel too tired after work to enjoy the things you would like to do at home?”, “Job prevents you from giving time to partner/family,” “Partner/family is fed up with the pressure of your job.” Responses were given on a 5-point scale (1—*never*, 5—*always*) and averaged into a single score. Consistent with Gallie and Russell (2009), Cronbach’s alpha for the scale was .75 in the pooled sample and ranged from .68 to .84 in the different countries.

Family-to-work conflict (FWC). Two items in the ESS were adapted from Netmeyer, Boles, and McMurrian (1996) to assess FWC. This scale has also been used in previous studies (see McGinnity & Russel, 2013). The items asked how often: “find it difficult to concentrate on work because of family responsibilities” and “family responsibilities prevent you from giving the time you should to your job.” Responses on a 5 point scales (1—*never*, 5—*always*) were averaged into a single score. Average Cronbach’s alpha was .75, ranging from .61 to .87 in the different countries.

Work demands. Work demands were assessed by actual working hours per week in the main job including overtime.

Family demands. Household size was used as a proxy for family demands and was assessed by respondents' reports on the number of people regularly living as members of the same household.

Individual-level controls. Demographic variables, such as gender and having a partner play a major role in work-family conflict (Michel et al., 2011). Gender, for example, may predict work-family conflict indirectly via working hours (see Shockley et al., 2017). Having a partner may be both a source of support when dealing with work-family conflict and also a demand (e.g., increased levels of communication in the relationship, conflicting needs) which ultimately could even further increase work-family conflict. Consequently, both variables were included as controls in our statistical models. In addition, we controlled for household income and educational level. Not only do developed countries (which account for a large share in our sample) tend to have more individuals with higher incomes, household income was also found to predict work-family conflict in past studies (see Michel et al., 2011). Educational level was found to be highly related to the Schwartz values orientations (Schwartz, 2009). Furthermore, both higher income and higher education may be related to smaller household sizes, our second mediator (Schwartz, 2006).

Country-level cultural values.

Schwartz cultural values. We used the cultural value orientation scores from Schwartz's (2008a) external country data (which is freely available online). The Schwartz data compiles cultural value scores from 80 countries collected from teachers' and students' samples using the Schwartz Value Survey (SVS). The SVS is the most widely used scale to assess individuals' values and has shown to be nearly equivalent in meaning in cross-national studies (Fontaine et al., 2008). This scale is used and recommended by Schwartz (2006; 2008b) to measure cultural values as it is more

reliable than shorter measures of values such as the Portrait Value questionnaire (PVQ21) included in the ESS.

In the SVS, individuals are asked to indicate on a 9-point scale how much each of the 56 values is a guiding principle in their life. Examples include “freedom (freedom of action and thought)” for intellectual autonomy and “obedient (dutiful, meeting obligations)” for embeddedness. Participants rate each value on a nine-point scale with the following labels: 7 (of supreme importance), 6 (very important), 5, 4 (unlabeled), 3 (important), 2, 1 (unlabeled), 0 (not important), –1 (opposed to my values). The 45 items that, according to Schwartz (2006), are cross-culturally equivalent in their meaning we used to calculate each cultural value. Since conceptually two cultural value types (e.g., autonomy and embeddedness) form the opposite end of a dimension, the single cultural value types were transformed into *dimensions*, consistent with Schwartz theory (2006) and used in past studies (see Vauclair & Fischer, 2011). This was done by subtracting the score of *embeddedness* (positive pole) minus affective and intellectual *autonomy* (negative pole), *hierarchy* (positive pole) minus *egalitarianism* (negative pole), and *mastery* (positive pole) minus *harmony* (negative pole).

GLOBE cultural values. The country scores for the cultural dimensions of in-group collectivism, gender egalitarianism, performance orientation, and power distance were taken from the GLOBE which is based on a sample of 17,300 middle managers in 951 organizations across 62 countries. The country scores used in this study are based on items reflecting how society “should be” (ideals) (House et al., 2004). The response scales range from strongly disagree to strongly agree (unless otherwise indicated). A sample item for *in-group collectivism* is “In this society, children should take pride in the individual accomplishments of their parents.” A sample item for *gender egalitarianism* is: “I believe that this society would be more effectively managed if

there were: many more women in positions of authority than there are now – about the same number of women in positions of authority as there are now – many fewer women in positions of authority than there are now.” A sample item for *power distance* is: “When in disagreement with adults, young people should defer to elders.” A sample item for *performance orientation* is: “I believe that people should set challenging goals for themselves.” This scale has been validated and shown equivalence across cultures (See Hanges & Dickson, 2004).

Analyses

Analyses were performed using Mplus 7 software (Muthén & Muthén, 2014). After filtering the dataset to obtain the sample relevant to our study, the percentage of missing responses was very low 2.5%, and were kept in the analyses using ML estimator (maximum likelihood estimator). Our analyses proceeded in two steps. First, we tested for measurement equivalence of both directions of work–family conflict. Following Davidov et al.’s (2014) top-down strategy to test equivalence across countries, we started with the most restrictive model which imposes equality across groups on the thresholds, intercepts, and factor loadings (strong or scalar invariance). Then, if the model does not fit the data well, one can gradually release some of the equality constraints on the thresholds for the indicators which show higher misfit in the model. To decide whether the data supported a model or not, we followed the cut-off criteria suggested by Hu and Bentler (1999) and Marsh, Hau, and Wen (2004). A minimum value of .90 for CFI and TLI fit indexes and a maximum value of 0.08 for SRMR and RMSEA were deemed to indicate adequate model fit.

Second, we tested our hypotheses using multilevel random intercept models to account for the interdependence of respondents in each country. We followed Preacher, Zhang, and Zyphur (2011) 2-1-1 model to test the multilevel mediation hypotheses. The

intra-class correlation coefficients (ICC) were as follows: WFC (.05), FWC (.03), total work hours (.04) and household size (.07). Even though the ICCs were small, multi-level analysis is appropriate to account for the hierarchical nature of the data and to test the effects of contextual variables (Gelman & Hill, 2007). We tested models predicting WFC and FWC separately and used observed indicators rather than latent variables to simplify our models. We tested four models where WFC, FWC, total work hours, and household size were dependent variables. In all models, we included all level-1 control variables mentioned above and the corresponding GLOBE cultural value dimensions as level-2 control variables. Finally, separate models testing each hypothesis were conducted. For each model a pseudo R^2 was reported (Xu, 2003).

Results

Measurement invariant model of WFC and FWC

First, we tested a measurement model of two correlated latent variables WFC (4 items) and FWC (2 items) using confirmatory factor analysis. The fit of the model was adequate with the exception of the RMSEA value being slightly above .08 ($\chi^2(8) = 1006.37$; $p < .001$; CFI = .95; TLI = .90, RMSEA = .088, 90% C. I. = .084 to .093, SRMR = .038). While not ideal, we deemed the fit adequate enough to proceed with this measure for several reasons. First, the measures demonstrate good content validity. Specifically, the items from this scale capture interference, pressures, and incompatibility between work and family domains, which are key aspect of the definition of work-family conflict (Greenhaus & Beutell, 1985) (e.g., the items “keep worrying about work problems when you are not working” and “difficult to concentrate on work because of family responsibility”). The items also capture the bi-directional nature of the concept (e.g., “job prevents you from giving time to partner/family” and “family responsibilities prevent you from giving the time you should to your job”).

Second, this measure demonstrated adequate convergent and discriminant validity as evident in the pattern of individual level correlations. Specifically, WFC was significantly more strongly related to total work hours than household size ($r = .23$ vs $r = -.06$, $Z = 26.44$, $p < .0001$) and FWC was significantly more strongly related to household size than total work hours ($r = .12$ vs $r = .08$, $Z = 3.63$, $p < .0003$). Fisher's r to Z transformation was used to compute these significance tests (Fisher, 1915).

Third, consistent with previous literature (Amstad et al., 2011), both WFC and FWC scales related in expected ways with other theoretically relevant measures available in the dataset, providing additional evidence of convergent validity. Specifically, the WFC and FWC scales were associated with measures of job satisfaction ($r = -.19$, $p < .01$ for WFC, and $r = -.17$, $p < .01$ for FWC), life satisfaction ($r = -.21$, $p < .01$ for WFC and $r = -.16$, $p < .01$ for FWC), subjective general health ($r = -.15$, $p < .01$ for WFC, $r = -.09$, $p < .01$ for FWC), and satisfaction with work-life balance ($r = -.40$, $p < .01$ for WFC, $r = -.26$, $p < .01$ for FWC). Further, the WFC measure was used in previous research, showing positive associations with poor working conditions and job pressure (e.g., Gallie & Russel, 2009; McGinnity & Calvert, 2009). These findings are consistent with meta-analytic findings for work-family conflict (Michel et al., 2011).

Then, we examined the cross-country invariance of the measures of WFC and FWC using multi-group confirmatory factor analysis (MGCFA) (Cheung & Rensvold, 2002; Davidov et al., 2014). We started from the most restrictive model which imposes within each country, strong measurement invariance (i.e., factor loadings and intercepts, but not residual variances, fixed to be equal across countries), a prerequisite for comparing means and correlations between countries (Davidov et al., 2014). The strong (scalar) invariant model did not fit the data adequately across the 19 countries (χ^2 (296)

= 2597.16; $p < .001$; CFI = .876; TLI = .881, RMSEA = .096, 90% C.I. = .093 to .099, SRMR = .070). Hence, we released some of the equality constraints indicated to increase model fit (Chen, 2007). Specifically, we released the constraints of equal intercept for the item “Partner/family is fed up with the pressure of your job” in Ireland, Greece, Germany, Spain, Denmark, Switzerland, Finland, and for the item “Keep worrying about work problems when you are not working” in Spain, France, Slovenia, and Finland. The partial scalar invariant model which requires that configural and metric invariance holds and that at least two items per latent variable have the same intercepts across countries was supported. With these modifications the model fit was adequate again with the exception of RMSEA ($\chi^2(285) = 2134.69$; $p < .001$; CFI = .90; TLI = .90, RMSEA = .088, 90% C.I. = .084 to .091, SRMR = .062). Again, while the fit is not ideal, it suggests that configural (structure), factors (loadings), and means/intercepts (scalar) in WFC and FWC can be meaningfully compared across these nineteen countries, allowing us to proceed to the tests of our hypotheses.

The correlations among the individual-level variables and WFC and FWC are presented in Table 3. Table 4 presents correlations among country-level variables and the aggregated WFC and FWC means at the country-level. Country-level correlations show that the cultural value dimensions were largely correlated as expected. Embeddedness vs. autonomy correlated positively with hierarchy vs. egalitarianism. Hierarchy vs. egalitarianism was positively related to power distance and negatively related to gender egalitarianism. However, embeddedness vs. autonomy was negatively related to in-group collectivism. Mastery vs. harmony was not related to performance orientation, contrary to what we expected (Table 1).

Insert Tables 3 and 4 here

The results of the multilevel analyses predicting WFC and FWC are presented in Tables 5 and 6, respectively. As can be seen from Tables 5 and 6, most individual level control variables had rather small effects on WFC and FWC (albeit often statistically significant ones due to the large sample size). Two notable exceptions were gender and partner, in which females and those living with their partners reported higher WFC and FWC than males and those living without a partner. The GLOBE cultural value dimensions were generally unrelated to both dependent variables except gender egalitarianism which was significantly negatively related to WFC. Overall, these control-variables-only models accounted for 1% (WFC), 0.7% (FWC), 10% (total work hours), and 20% (household size) of the variance in our outcomes. Since the power to detect indirect effects is low in multilevel analyses with samples with few countries and consistent with previous studies testing multilevel hypotheses in samples with few level 2 units (see Beham et al., 2017), a critical p value of .10 was adopted.

Tests of Hypotheses

Hypothesis 1 proposed that embeddedness (vs. autonomy) would be positively related to (a) WFC and (b) FWC, above and beyond in-group collectivism. As shown in column 2 of Tables 5 and 6, embeddedness versus autonomy was significantly positively related to WFC ($B = .16, p = .089, \text{pseudo } R^2 = .012^1$) and FWC ($B = .18, p = .002, \text{pseudo } R^2 = .007$). Hence, Hypothesis 1(a) and 1(b) were supported.

¹ The formula for pseudo $R^2 = 1 - \sigma^2/\sigma_0^2$ where σ^2 is the full model within level residual variance and σ_0^2 is the null model within level residual variance (Xu, 2003)

Insert Tables 5 and 6 here

Hypothesis 2 proposed that work demands (total work hours) mediate the relationship between embeddedness (vs. autonomy) and WFC. The mediation effect is depicted in Figure 1. The indirect effect of embeddedness (vs. autonomy) on WFC via total work hours was significant ($B = .03, p = .056, \text{pseudo } R^2 = .075$). Hence, Hypothesis 2 was supported. Hypothesis 3 proposed that family demands (household size) mediate the relationship between embeddedness (vs. autonomy) and FWC. The mediation effect is depicted in Figure 2. The indirect effect was significant ($B = .02, p = .027, \text{pseudo } R^2 = .024$), thereby providing support for Hypothesis 3.

Insert Figure 1 and 2 here

Hypothesis 4 proposed that mastery (vs. harmony) is positively related to individuals' (a) WFC and (b) FWC above and beyond performance orientation. As shown in column 4 of Tables 5 and 6, mastery (vs. harmony) was unrelated to WFC ($B = -.09, p = .262, \text{pseudo } R^2 = .012$) but was significantly positively related to FWC ($B = .11, p = .059, \text{pseudo } R^2 = .007$). Therefore, support was found for Hypothesis 4b but not for 4a. Note that in these models performance orientation was significantly negatively related to both WFC ($B = -.08, p = .092$) and FWC ($B = -.08, p = .011$).

Hypothesis 5 proposed that work demands (total work hours) partially mediate the relationship between mastery (vs. harmony) and WFC. The indirect effect was not significant ($B = .00, p = .864$). Consequently, Hypothesis 5 was not supported.

Hypothesis 6 proposed that family demands (household size) partially mediate the relationship between mastery versus harmony and FWC. The indirect effect again was not significant ($B = .02, p = .182$). Hence, Hypothesis 6 was not supported.

Hypothesis 7 suggested that hierarchy (vs. egalitarianism) is positively related to (a) WFC and (b) FWC, above and beyond gender egalitarianism and power distance. Hierarchy (vs. Egalitarianism) was unrelated to WFC ($B = .00, p = .964, \text{pseudo } R^2 = .012$) but was significantly and positively related to FWC ($B = .13, p = .027, \text{pseudo } R^2 = .010$). Therefore, Hypothesis 7b was supported but Hypothesis 7a was not. In these analyses, gender egalitarianism was significantly negatively related to WFC ($B = -.28, p = .016$) but did not relate to FWC ($B = -.10, p = .202$). Power distance was unrelated to both WFC ($B = -.01, p = .887$) and FWC ($B = .04, p = .536$).

Hypothesis 8 stated that work demands (total work hours) partially mediate the relationship between hierarchy (vs. egalitarianism) and WFC. In support of Hypotheses 8, the indirect effect was significant ($B = .04, p = .018, \text{pseudo } R^2 = .075$). The mediation effect is shown in Figure 3.

Insert Figure 3 here

According to Hypothesis 9, family demands (household size) partially mediate the relationship between hierarchy (vs. egalitarianism) and FWC. As shown in the

rightmost column of Table 6 the indirect effect was significant ($B = .02, p = .057$, pseudo $R^2 = .019$), therefore support was found for Hypothesis 9. This effect is depicted in Figure 4.

 Insert Figure 4 here

Discussion

In this paper, we extended the cross-cultural literature on work–family conflict by testing the effects of Schwartz’s cultural value orientations (2006) on both directions of work–family conflict above and beyond the GLOBE cultural value dimensions of in-group collectivism, gender egalitarianism, power distance, and performance orientation. Consistent with previous suggestions from scholars emphasizing the value of testing convergence between different cultural frameworks (see Nardon & Steers, 2009), our findings suggest that both the Schwartz and the GLOBE cultural framework are useful concepts to explain work–family conflict across cultures, but that they relate differently to both directions of work–family conflict. Overall, we found that all of the Schwartz cultural value orientations were significantly related to FWC: individuals in countries high on embeddedness (vs. autonomy), hierarchy (vs. egalitarianism) and mastery (vs. harmony) societies reported higher FWC above and beyond the corresponding GLOBE dimensions. In turn, high GLOBE performance orientation was related to lower levels of FWC. There were three cultural value dimensions that were significantly related to WFC: embeddedness vs. autonomy dimension (Schwartz) was positively related to WFC, whereas GLOBE gender egalitarianism and performance orientation was

negatively associated with WFC. In line with recent meta-analytic findings (Allen et al., 2017), our results indicated that macro-level contextual variables such as cultural values seem to be better predictors of FWC than WFC. It is important to note that, Allen et al., (2017) classified most Asian and Latin American countries as collectivistic and the Anglo Saxon countries as individualistic societies and found FWC (but not WFC) to be higher in the collectivist country cluster than in the individualistic countries. In our study, the GLOBE cultural value dimension of in-group collectivism was neither significantly related to FWC nor to WFC. However, the Schwartz cultural value orientation of embeddedness (vs. autonomy) was significantly related to higher levels of FWC.

One possible explanation for the stronger effects of cultural values on FWC, as compared to WFC, is that the relationship between cultural values and WFC is rather interactive. That is, cultural value orientations may moderate the relationships between work resources and demands and WFC. This is in line with a meta-analysis showing that the cultural context better explained the relationship between social support and WFC as compared to the relationship between social support and FWC (French et al., 2018). In this sense, unlike FWC, WFC may more heavily depend on organizational factors which were not measured in our study. As such, it is possible that cultural values may interact with organizational variables such as organizational support or family supportive organizational perceptions and conjointly influence WFC (Allen, 2001). Consequently, we encourage future studies to examine potential interaction effects of cultural values and organizational support variables on WFC.

It is also worth noting that the broader Schwartz cultural value orientations were more consistently related to FWC than the GLOBE cultural value dimensions. This might be because the Schwartz items are broader and less work focused than the

GLOBE items. Research on the antecedents of work–family conflict has consistently shown that within-domain demands and resources are the strongest predictors of WFC and FWC respectively. In fact, the strongest association in our study was the one between the GLOBE dimension of gender egalitarianism and WFC which is contrary to the results of a recent meta-analysis that neither reported a significant link between gender egalitarianism and WFC nor FWC (Allen et al., 2015). Our finding, however, is consistent with Lyness and Kropf (2005) who sampled across 20 European countries and showed that individuals in gender-egalitarian societies enjoyed more supportive work–family cultures and flexible working arrangements, which consequently leads to higher experience of work–family balance (and thus, lower conflict).

Our study also showed that individuals in high-performance orientation cultures experienced lower FWC and WFC, which was in the opposite direction than expected based on previous theoretical arguments. For example, Ollier-Malaterre et al., (2013) argued that people might experience greater work–life balance due to lower levels of work–family conflict in low-performance orientation cultures. People in high-performance oriented societies may experience the pressure to be competitive, leading to higher levels of conflict between work and private life (Ollier-Malaterre et al., 2013). However, our results rather seem to suggest the opposite: individuals living in high performance oriented societies report lower levels of WFC and FWC. A possible explanation for this unexpected finding is that because individuals in these societies experience the pressure to excel and focus on competence and performance they may also be less likely to expect to have work-family balance, thereby being less likely to perceive the negative interference between work and family demands (Ruppanner & Maume, 2016).

Our results further provide evidence that embeddedness (vs. autonomy) and in-group collectivism are distinct concepts². Our analysis revealed a negative relationship between embeddedness (vs. autonomy) and in-group collectivism (see Table 2). Embeddedness (vs. autonomy) captures the extent to which a society emphasizes conservative values, such as obedience and hard work over pleasure and novelty-seeking, while in-group collectivism comprises the expectation of feeling pride towards family achievements³. Hence, although both concepts emphasize the importance of and devotion to family and in-group ties, they seem to differ in the motivation of caring for their in-group relationships. Whereas in-group collectivism captures a devotion to the family out of free will and positive affect (e.g., being proud of family achievement), embeddedness (vs. autonomy) seems to capture a sense of care that is based on an obligation (e.g., keeping family traditions) and does not necessarily involve positive affect.

Consistent with our theorizing and hypotheses, significant indirect effects of embeddedness (vs. autonomy) and hierarchy (vs. egalitarianism) on FWC via household size were found. We argued that because individuals in embedded (vs. autonomous) cultures tend to maintain family traditions and care for the elderly themselves, they live in larger households, and experience more family demands and ultimately more FWC. In a similar vein, individuals in hierarchical societies also may experience higher family demands and consequently more FWC due to their relatively larger families. Further,

² We also decided to examine the relationship between embeddedness vs. autonomy and institutional collectivism (House et al., 2004), which is another form of collectivism defined by the extent to which people in a society are encouraged to distribute resources and act collectively instead of individually. We found that institutional collectivism was not significantly related to Schwartz's embeddedness vs. autonomy. Multilevel analyses controlling for both types of collectivism showed that the associations between embeddedness and our outcomes were still present (results not reported here). We did not include institutional collectivism in the main analyses because this construct has not been used in the previous literature to predict work-family conflict (see Ollier-Malaterre & Foucreault, 2018).

³ Pos-hoc analyses showed that the correlation of embeddedness as a single cultural value (not the bipolar dimension) with in-group collectivism was small but positive ($r = .09$) supporting our finding that these are different constructs.

we also expected family demands to partially mediate the association between mastery (vs. harmony) and FWC. Nevertheless, we found no support for this mediation effect. It is possible that other mediators may explain the effects of mastery on FWC. For example, individuals in mastery oriented societies may be more sensitive to family demands because of the importance they place on work in relation to family. In this sense, work centrality could be a mediator explaining the relationship between mastery (vs. harmony) and FWC. Hence, we encourage future studies to explore other mediators between the relationship of mastery (vs. harmony) and FWC.

Consistent with our hypotheses, working hours partially mediated the relationships between embeddedness (vs. autonomy), and hierarchy (vs. egalitarianism), with WFC. We reasoned that in the case of hierarchy (vs. egalitarianism) the cultural context creates social pressures to acquire power and wealth to progress up the social ladder. Further, in the case of embeddedness (vs. autonomy) the social pressure to be dutiful instead of pursuing pleasure, seeking novelty, and choosing one's own goals (autonomy) could lead to pressure to work longer hours.

However, contrary to our expectations, working hours did not mediate the relationship between mastery (vs. harmony) and WFC. We expected that in societies that value self-sufficiency and capability (mastery) over nature, art, and beauty (harmony), individuals may experience more social pressure to work longer hours instead of spending time in nature and doing hobbies, which would result in higher levels of WFC. An explanation for this unexpected finding may be that the measure of mastery (vs. harmony) was bipolar and included items such as world of peace (harmony values) which may not directly influence work demands (See Table 1).

Practical Implications

Although the effects were relatively small, our research provides evidence that the cultural context, directly and indirectly, influences employees' work–family conflict. Consequently, cultural values should be taken into consideration when designing work–family policies at the country and the organizational level. We recommend that multi-national companies planning to roll out work–family programs to different regions across the globe acknowledge cultural differences, be aware of the barriers to implementing such programs, and tailor their programs to the unique country characteristics in order to successfully support their multi-cultural workforce in reducing work–family conflict and increasing work–family balance. For example, organizations operating in countries high on embeddedness (vs. autonomy) and hierarchy (vs. egalitarianism) may benefit from understanding that individuals in these countries may experience normative pressures to work longer hours compared to those in countries low on these values. Hence, introducing a reduction of working hours in a company, for example, should be accompanied by a careful revision of the norms and expectations of employers and employees (e.g., assumptions such as the longer one works, the more committed one is to work). Flexible working options and support services which assist employees in managing their extensive family demands (such as childcare services, cleaning services, family meals) may be particularly effective in this specific context.

Limitations and Future Research

Balancing its unique contributions, the current research has limitations which need to be addressed. First, our study was cross-sectional and nonexperimental, and thus we cannot infer causality. However, research has shown that cultural values are rather stable and thus more likely to influence work outcomes rather than the other way around (Hofstede, 1980; Schwartz, 2006), supporting the causal direction assumed in

our model. Similarly, because our data were drawn largely from the ESS, the study could suffer from common method bias. However, the scores for cultural values came from an independent dataset provided by Schwartz (2008a) which reduces this concern.

Our research only examined one type each of work and family demands as mediators of relationships between cultural value orientations and work–family conflict due to a limited number of variables available in the ESS dataset. For example, the ESS data, unfortunately, did not include reliable social support variables which have been suggested as potential mediators in the work–family literature (Powell et al., 2009). Social support variables at the country level in the forms of supportive family policies, and family supportive organizational policies at the organizational level could be higher in egalitarian countries and may explain the relationship between gender egalitarianism and WFC. Further, research on work-family conflict has shown that boundary management (Ashforth, Kreiner, & Fugate, 2000) influences the amount of demand that individuals experience and their experience of work-family conflict. In this sense, country values may influence individual differences related to boundary management. Accordingly, it is possible that individuals in performance orientated societies may more efficiently manage the boundaries between work and family and this may explain why individuals in high-performance societies experienced low FWC.

We did not control for the age of the children living in the household or whether there were mono-parental families. In some countries, children leave the household earlier than in others, and also in some countries, there might be more single parents than in other countries. However, we believe that rather than controlling for these, perhaps these are explanatory variables that should be used in the future as mediators of the relationship between culture and work-family conflict. In this study, we used household size as a mediator because it is a broader variable which takes into account

all of the members of the family living in the household (i.e., children, grandchildren, grandparents, and partners – husband and wives). We encourage future researchers to test the ages of children and assess personality variables such as boundary management style as explanatory variables for the relationship between culture and work-family conflict.

Further, we suggested that cultural values create normative pressures which influence individuals' choices to have a larger family or a specific work ethic (Schwartz, 2006). However, the effect of cultural values on WFC may also go through their influence on managers' decisions and organizational practices which vary across cultures (Arieli & Tenne-Gazit, 2018). Hence, further research could explore the role of culture on WFC via leaders' attitudes and organizational practices.

We did not control for socio-economic development at the country level for several reasons. Specifically, previous meta-analyses showed that GDP does not predict work-family conflict (see Allen et al., 2015). Further, the economic indexes were highly correlated with most of our cultural value dimensions causing problems of multicollinearity in statistical models. In this sense, it was not possible to assess the main effects of cultural values above and beyond socio-economic development (assessed by the Human Development Index, HDI), as neither HDI nor cultural values predicted WFC/FWC when included simultaneously in the models in almost every case. Future research could examine whether economic development or cultural value orientation influences work-family conflict more strongly by focusing on the macro-level predictors of WFC and using a more diverse and larger sample of countries than in the current study. However, the independent effects of economic development and cultural values may be difficult to separate. Economy, politics and cultural values develop together: as prosperity grows, people shift their emphasis toward self-

expression values (linked to autonomy and egalitarianism) (Inglehart, 2015; Schwartz, 2015). We did, however, control for household income, a proxy for economic measures at the individual level showing that cultural value effects were robust holding income constant.

The CFA testing WFC and FWC measures had less than ideal fit, as did the models testing measurement invariance across cultures. Specifically, the RMSEA fit statistic exceeded the cutoff in both analyses. Further, constraints requiring identical intercepts had to be relaxed for two items across several countries to obtain adequate fit. In a similar vein, the work-family measure did not include other aspects of work-family conflict such as time-based and strain-based and behavior-based work-family which are included in other more comprehensive measures of WFC (Carlson, Kacmar, & Williams, 2000). However, the WFC measure we used was developed by sociologists for the ESS and has shown criterion-related validity (see Gallie & Russel, 2009), as well as content, convergent, and discriminant validity, as we argued earlier. The FWC items were adapted from Netemeyer et al. (1996) by researchers from the ESS. We also reported partial measurement equivalence across countries, which has not heretofore been done. Regardless, our results suggest that the measurement of WFC and FWC using ESS items is less than ideal. Our results also suggest that cultural values influence how participants perceive survey items and interpret scales across countries. We consider these deficiencies as unfortunate but tolerable given the practical challenges of independently collecting as large and cross-culturally diverse a sample as the ESS. Nonetheless, we encourage future studies that test the associations of cultural value orientations with different forms of work-family conflict, particularly where the validity evidence for measures of such forms is strong, to corroborate (or challenge) our findings. We also encourage qualitative studies to explore further how cultural values

influence not only differences in work–family conflict but also common understanding and definition of this construct.

Last, our study showed that the variance in WFC across countries was relatively small. Most of the variance was explained at the individual-level, which may seem at first to give lower practical significance to the country-context, but is itself an interesting and important finding. Our results are in line with Allen et al.'s (2015) meta-analysis showing that macro-level variables have a relatively small direct effect on work–family conflict. These findings may indicate that the country level may be too distal to explain a lot of variance in work-family conflict. Perhaps other lower level groups could explain more variance in work-family conflict than country-level variables. For example, organizational values, work values or team values may explain variance in work-family conflict more than country-level variables. Further, country-level variables may indirectly predict work-family conflict by influencing organizational level variables such as adoptions of work-life policies. We encourage more studies examining these other contextual variables to explain work-family conflict.

Conclusion

Our paper tested the effects of Schwartz cultural value orientations on work-family conflict controlling for previous dimensions identified by the GLOBE study. We found that both Schwartz cultural value orientations and the GLOBE dimensions are useful to predict work-family conflict. Our study also identified working hours and household size as two intervening variables that explained why different cultural contexts increase (or decrease) individuals' perceptions of WFC and FWC. Despite its limitations, the paper contributes to the ongoing development of culture-sensitive work–

family research and theory and hopefully triggers additional research on direct and indirect effects of cultural values on the work–family interface.

ACCEPTED MANUSCRIPT

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Table 1.

Schwartz Value Survey 45 Items to Measure Cultural Values and the GLOBE's Cultural Dimensions' Items

Schwartz Cultural Values items	GLOBE Cultural Values items	Overlaps and Differences between Values
1. Embeddedness vs. Autonomy	1. In-Group Collectivism	1. Embeddedness vs. Autonomy with In-Group Collectivism
<p>a) Embeddedness</p> <ul style="list-style-type: none"> • Social Order (stability of society) • Politeness (courtesy, good manners) • National Security (protection of my nation from enemies) • Reciprocation of favors (avoidance of indebtedness) • Respect for Traditions (preservation of time-honored customs) • Self-discipline (self-restraint, resistance to temptation), • Wisdom (a mature understanding of life) • Moderate (avoiding extremes of feeling & action), • Honoring parents and elderly (showing respect) • Preserving public image (protecting my "face") • Obedience (dutiful, meeting obligations) • Devout (holding to religious faith & belief) • Forgiving (willing to pardon others) • Clean (neat, tidy) <p>b) Autonomy (Intellectual and Affective)</p> <ul style="list-style-type: none"> • Pleasure (gratification of desires), A • Exciting life (stimulating experiences) • A varied life (filled with challenge, novelty and change), • Enjoying life (enjoying food, sex, leisure, etc.) 	<ul style="list-style-type: none"> • Members of this society should: take no pride in being a member of the society – take a great deal of pride in being a member of the society. • In this society, children should take pride in the individual accomplishments of their parents. • In this society, parents should take pride in the individual accomplishments of their children. • How important should it be to members of your society that your society is viewed positively by persons in other societies? 	<p>Similarities Both concepts include valuing and respecting family and also preserving a positive image of one's society.</p> <p>Differences The embeddedness vs. autonomy dimension includes values of self-discipline, being moderate, devout, and dutiful to maintain the status quo. The bi-polar nature of the concept captures the priority of embeddedness relative to autonomy, emphasized by values such as pleasure, having an exciting life, and self-indulgence among others in this list.</p>

<ul style="list-style-type: none"> • Self-indulgent (doing pleasant things) • Freedom (freedom of action and thought) • Creativity (uniqueness, imagination) • Broadmindedness (tolerant of different ideas and beliefs), • Curious (interested in everything, exploring) 		
2. Mastery vs. Harmony	2. Performance Orientation	2. Harmony vs. Mastery with Performance orientation
<p>a) Mastery</p> <ul style="list-style-type: none"> • Social recognition (respect, approval by others) • Successful (achieving goals) • Ambitious (hard working, aspiring) • Independent (self reliant, self sufficient) • Daring (seeking adventure, risk) • Choosing own goals (selecting own purposes) • Capable (competent, effective, efficient) • Influential (having an impact on people and events) <p>b) Harmony</p> <ul style="list-style-type: none"> • A world at peace (free of war and conflict) • Unity with nature (fitting into nature) • A world of beauty (beauty of nature and the arts) • Protecting the environment (preserving nature) 	<ul style="list-style-type: none"> • I believe that teen-aged students should be encouraged to strive for continuously improved performance. • I believe that major rewards should be based on: only performance effectiveness – performance effectiveness and other factors – only factors other than performance (for example, seniority or political connections). • I believe that being innovative to improve performance should be: substantially rewarded- not rewarded. • I believe that people should set challenging goals for themselves. 	<p>Similarities Both concepts include recognition and achievement.</p> <p>Differences The dimension of mastery vs. harmony refers to the importance of values such as being independent and choosing own goals relative to the importance a society gives to peace, fitting into nature, and preserving the environment.</p>
3. Hierarchy vs. Egalitarianism	3. Gender Egalitarianism	3. Egalitarianism vs. Hierarchy with Gender Egalitarianism

<p>a) Hierarchy</p> <ul style="list-style-type: none"> • Social power (control over others) • Wealth (material possessions, money) • Authority (the right to lead and command) • Humble (modest) <p>b) Egalitarianism</p> <ul style="list-style-type: none"> • Equality (equal opportunity for all) • Social justice (correcting injustice, care for the weak) • Loyal (faithful to my friends, group) • Honest (genuine, sincere) • Helpful (working for the welfare of others) • Responsible (dependable, reliable) 	<ul style="list-style-type: none"> • I believe that boys should be encouraged to attain a higher education more than girls. • I believe that there should be more emphasis on athletic programs for: boys – girls. • I believe that this society would be more effectively managed if there were: many more women in positions of authority than there are now – about the same number of women in positions of authority as there are now – many less women in positions of authority than here are now. • I believe that it should be worse for a boy to fail in school than for a girl to fail in school. • I believe that opportunities for leadership positions should be: more available for men than for women – equally available for men and women – more available for women than for men. 	<p>Similarities</p> <p>Both concepts include equality or opportunity to all.</p> <p>Differences</p> <p>Hierarchy vs. egalitarianism pertains to prioritizing wealth and power values over equality, social justice, being faithful and honest to friends and the group members (Egalitarianism), with no specific items assessing equality between genders.</p>
	<p>4. Power Distance</p>	<p>4. Egalitarianism vs. Hierarchy with and Power Distance</p>

- I believe that a person's influence should be based primarily on: one's ability and contribution to the society – the authority of one's person.
- I believe that followers should: obey their leader without question – question their leader when in disagreement.
- I believe that people in positions with power should try to: increase their social distance from less powerful individuals – decrease their social distance from less powerful people.
- When in disagreement with adults, young people should defer to elders. (strongly agree – strongly disagree)
- I believe that power should be: concentrated at the top – shared throughout the society.

Similarities:

Both concepts emphasize unequal distribution of power.

Differences:

Hierarchy vs. egalitarianism also pertains to prioritizing wealth and power over being faithful to friends and the group, being honest and helpful.

Note: The key difference between the two frameworks is that the Schwartz cultural values were operationalized as bipolar concepts where individuals prioritize one set of values over another.

Table 2.

Descriptive Statistics per Country

	N	WFC	FWC	Emb_Aut	Hier_Egal	Mast_Har	Collect	PO	PD	GE	HS	WH
Austria	945	2.49	1.70	-1.73	-3.22	-.55	4.73	6.10	2.44	4.83	2.38	42.14
Switzerland	734	2.55	1.62	-2.03	-3.09	-.62	4.64	5.82	2.44	4.92	2.78	43.84
CZ	1085	3.02	2.11	-.67	-2.31	-.39	3.85	2.35	4.35	3.78	2.66	45.47
Germany	1325	2.80	1.71	-1.69	-3.18	-.70	4.75	6.05	2.60	4.90	2.73	43.05
Denmark	764	2.56	1.67	-1.49	-3.26	-.39	4.19	5.61	2.76	5.08	2.89	40.73
Spain	837	2.60	1.54	-1.63	-3.30	-.67	5.20	5.80	3.19	4.82	3.19	43.45
Finland	830	2.87	1.97	-.99	-3.02	-.74	4.11	6.11	2.19	4.24	2.68	40.92
France	804	2.92	1.67	-.98	-3.12	-1.16	4.86	5.65	2.76	4.40	2.61	40.5
UK	979	2.71	1.86	-1.38	-2.60	.09	4.31	5.90	2.80	5.17	2.59	41.01
Greece	872	3.17	1.97	-1.20	-2.98	-.09	5.40	5.81	2.76	4.89	2.70	45.75
Hungary	680	2.62	1.77	-.94	-2.58	-.62	4.50	5.96	2.49	4.63	3.14	43.46
Ireland	799	2.33	1.69	-1.34	-2.71	.37	4.59	5.98	2.71	5.14	2.68	40.40
Israel	846	2.68	1.97	-.33	-1.93	.81	4.27	5.75	2.72	4.71	3.89	43.69
Netherlands	814	2.64	1.76	-1.56	-3.15	-.13	4.55	5.59	2.45	4.99	2.58	39.08
Poland	763	2.76	1.87	-.44	-1.96	-.31	4.22	6.12	3.12	4.52	3.39	45.60
Portugal	659	2.33	1.82	-1.32	-3.20	-.29	5.30	6.40	2.38	5.13	2.89	42.08
Russian	1064	3.03	1.98	-.28	-1.81	-.20	3.89	5.54	2.62	4.18	2.70	44.29
Sweden	775	2.69	1.82	-1.10	-2.96	-.78	3.94	5.80	5.15	2.70	2.70	41.35
Slovenia	570	2.61	1.70	-.99	-2.93	-.73	4.38	6.41	2.57	4.83	3.54	44.52

Note. UK= United Kingdom, CZ= Czech Republic, WFC = work-to-family conflict, FWC = family-to-work conflict, Emb vs. Aut = Embeddedness vs. Autonomy, Hier_Egal = Hierarchy vs. Egalitarianism, Mast_Har = Mastery vs. Harmony, Collect = Collectivism, PO = Performance Orientation, PD = Power Distance, GE = Gender Egalitarianism, HS = household size, WH = total work hours; The lower the score, the stronger the country's orientation towards embeddedness, hierarchy or mastery.

Table 3.

Individual-level Correlations with the Outcome Variables (N = 16,145)

	1	2	3	4	5	6	7
1. WFC	--						
2. FWC	.48**	--					
3. Total working hours	.23**	.08**	--				
4. Household Income	-.06**	.12**	.02**	--			
5. Gender	-.01	-.02*	.28**	.04**	--		
6. Partner	-.09**	.08**	.02**	.40**	.07**	--	
7. Education	.08**	.04**	-.02*	-.02**	-.07**	.01	--

Note. * $p < .05$, ** $p < .01$; WFC = work-to-family conflict, FWC = family-to-work conflict

Table 4.
Country Level Correlations with the Aggregated Variables (N = 19)

	1	2	3	4	5	6	7	8	9	10	11
1. WFC	--										
2. FWC	.61**	--									
3. WH	.43	.35	--								
4. Household Size	-.14	-.01	.44	--							
5. PO	-.43	-.50*	-.25	.20	--						
6. Collect	-.21	-.44	.00	-.06	.39	--					
7. PD	.32	.49*	.33	-.01	-.86**	-.51*	--				
8. GE	-.64**	-.56*	-.43	-.02	.62**	.42	-.53*	--			
9. Emb_Auto	.47*	.69**	.40	.46*	-.25	-.52*	.41	-.61**	--		
10. Hier_Ega	.35	.64**	.48*	.40	-.28	-.57*	.47*	-.49*	.85**	--	
11. Mast_Harm	-.14	.37	.04	.29	-.04	-.08	.11	.21	.28	.52*	--

Note. * $p < .05$, ** $p < .01$; WFC = work-to-family conflict, WH = working hours, FWC = family-to-work conflict, PO = Performance Orientation, Emb vs. Aut = Embeddedness vs. Autonomy, Hier_Egal = Hierarchy vs. Egalitarianism, Mast_Har = Mastery vs. Harmony, Collect = Collectivism.

Table 5. Results of Multilevel Models Predicting WFC.

	Control variables	H1a	H2	H4a	H5	H7a	H8
<i>Individual level</i>							
Gender	-.03 (.01)*	-.03 (.01)*	-.14 (.01)**	-.03 (.01)*	-.14 (.01)**	-.03 (.01)*	-.14 (.01)**
Partner	.11 (.01)**	.11 (.01)**	.12 (.01)**	.11 (.01)**	.12 (.01)**	.11 (.01)**	.12 (.01)**
Education	.02 (.00)**	.02 (.00)**	.02 (.00)**	.02 (.00)**	.02 (.00)**	.02 (.00)**	.02 (.00)**
Household income	-.01 (.00) [†]	-.01 (.00) [†]	-.02 (.00)**	-.01 (.00) [†]	-.02 (.00)**	-.01 (.00) [†]	-.02 (.00)**
Total work hours			.02 (.00)**		.02 (.00)**		.02 (.00)**
<i>Country level</i>							
Total work hours			.02 (.00)**		.02 (.00)**		.02 (.00)**
Performance	-.01 (.09)			-.08 (.05) [†]	-.06 (.04)		
Collectivism	.02 (.09)	.01 (.10)	-.02 (.10)				
Gender Eg.	-.28 (.12)*					-.28 (.11)*	-.25 (.11)*
Power-dist.	-.02 (.16)					-.01 (.09)	-.02 (.09)
Emb_Auto		.16 (.09) [†]	.11 (.09)				
Hier_Ega						.00 (.09)	-.03 (.09)
Mast_Harm				-.09 (.08)	-.10 (.08)		
Total WH (ind)			.03 (.02) [†]		.00 (.02)		.04 (.02)*
Pseudo R^2	.012	.012	.075	.012	.075	.012	.075

Note. * $p < .05$, ** $p < .01$, [†] $p < .10$; Standard errors are presented in parentheses. Gender: males = 1, females = 0; Partner: lives with partner = 1, does not live with partner = 0; Gender Eg. = Gender Egalitarianism, Power-dist. = Power-Distance, Emb_Aut = Embeddedness vs. Autonomy, Hier_Ega = Hierarchy vs. Egalitarianism, Mast_Har = Mastery vs. Harmony, Total WH (ind) = indirect effect via total work hours.

Table 6.

Results of Multilevel Models Predicting FWC.

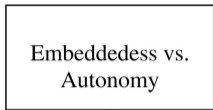
	Control variables	H1b	H3	H4b	H6	H7b	H9
<i>Individual level</i>							
Gender	-.03 (.01)*	-.03 (.01)*	-.03 (.01)*	-.03 (.01)*	-.03 (.01)*	-.03 (.01)*	-.03 (.01)*
Partner	.13 (.02)**	.13 (.02)**	.07 (.02)**	.13 (.02)**	.07 (.02)**	.13 (.02)**	.07 (.02)**
Education	.01 (.00)**	.01 (.00)**	.01 (.00)**	.01 (.00)**	.01 (.00)**	.01 (.00)**	.01 (.00)**
Household income	-.01 (.00) [†]	-.01 (.00) [†]	-.01 (.00)**	-.01 (.00) [†]	-.01 (.00)**	-.01 (.00) [†]	-.01 (.00)**
Household size			.07 (.01)**		.07 (.01)**		.07 (.01)**
<i>Country level</i>							
Household size			.07 (.01)**		.07 (.01)**		.07 (.01)**
Performance	-.02 (.07)			-.08 (.03)*	-.08 (.03)**		
Collectivism	-.07 (.07)	-.04 (.06)	-.06 (.07)				
Gender Eg.	-.13 (.09)					-.10 (.08)	-.10 (.08)
Power-dist.	.02 (.12)					.04 (.06)	.05 (.07)
Emb_Auto		.18 (.06)**	.15 (.06)*				
Hier_Ega						.13 (.06)*	.10 (.06)
Mast_Harm				.11 (.06) [†]	.09 (.06)		
HH size (ind)			.02 (.01)*		.02 (.01)		.02 (.01) [†]
Pseudo R^2	.007	.007	.024	.007	.019	.010	.019

Note. * $p < .05$, ** $p < .01$; [†] $p < .10$; Standard errors are presented in parentheses. Gender: males = 1, females = 0; Partner: lives with partner = 1, does not live with partner = 0; CWH = contractual work hours, PHI = Percentage of household income, Gender Eg. = Gender Egalitarianism, Power-dist. = Power-Distance, Emb_Aut = Embeddedness vs. Autonomy, Hier_Egal = Hierarchy vs. Egalitarianism, Mast_Har = Mastery vs. Harmony, HH size (ind) = indirect effect via household size.

Highlights

- We tested the effects of Schwartz' cultural values on work-family conflict.
- Embeddedness vs. autonomy related to higher family-to-work conflict.
- Hierarchy vs. egalitarianism related to higher family-to-work conflict.
- Embeddedness and hierarchy indirectly related to work-to-family conflict via working hours
- Embeddedness and hierarchy indirectly related to family-to-work conflict via household size

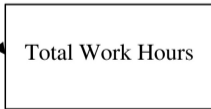
Level 2



.11

Level 1

1.62[†]



.02**

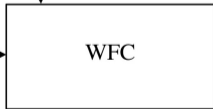
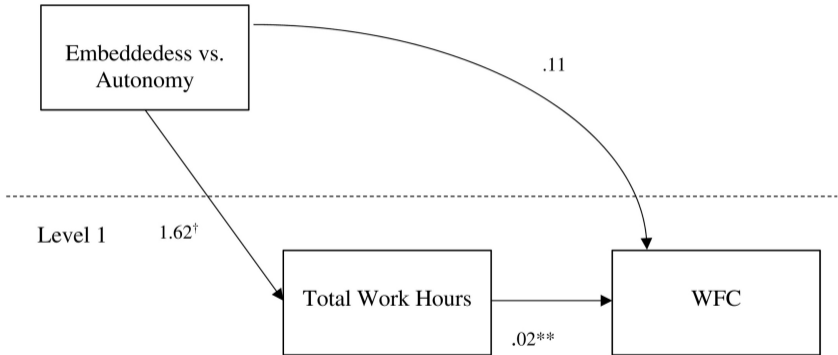


Figure 1



Level 2

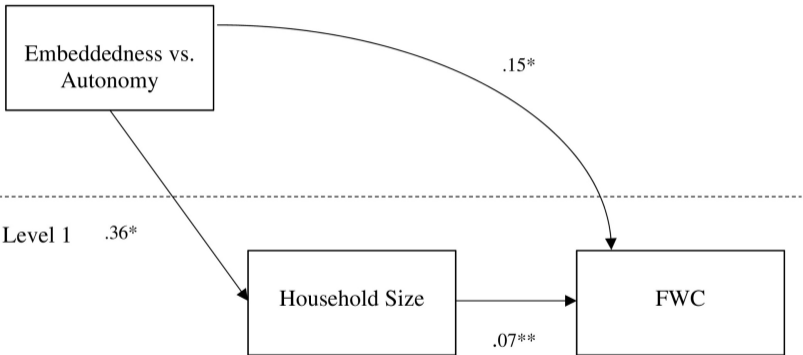


Figure 2

Level 2

Hierarchy vs.
Egalitarianism

-.03

Level 1

1.97*

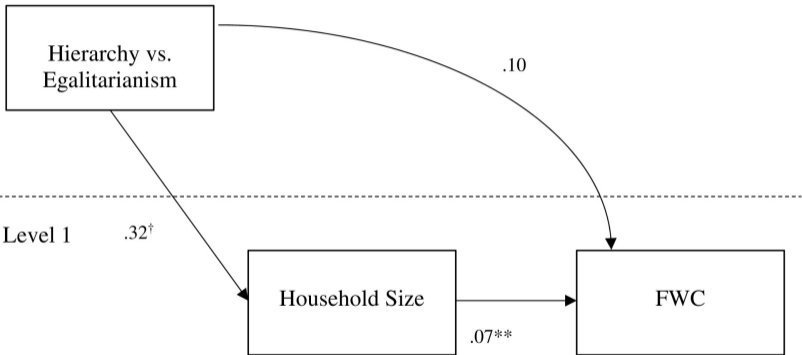
Total Work Hours

.02**

WFC

Figure 3

Level 2



Level 1

.32[†]

Household Size

.07**

FWC

Figure 4