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# Humane Orientation, Work–Family Conflict, and Positive Spillover Across Cultures

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Although cross-national work–family research has made great strides in recent decades, knowledge accumulation on the impact of culture on the work–family interface has been hampered by a limited geographical and cultural scope that has excluded countries where cultural expectations regarding work, family, and support may differ. We advance this literature by investigating work–family relationships in a broad range of cultures, including understudied regions of the world (i.e., Sub-Saharan Africa, Southern Asia). We focus on humane orientation (HO), an overlooked cultural dimension that is however central to the study of social support and higher in those regions. We explore its moderating effect on relationships between work and family social support, work–family conflict, and work–family positive spillover. Building on the congruence and compensation perspectives of fit theory, we test alternative hypotheses on

a sample of 10,307 participants from 30 countries/territories. We find HO has mostly a compensatory role in the relationships between workplace support and work-to-family conflict. Specifically, supervisor and coworker supports were most strongly and negatively related to conflict in cultures in which support is most needed (i.e., lower HO cultures). Regarding positive spillover, HO has mostly an amplifying role. Coworker (but not supervisor) support was most strongly and positively related to work-to-family positive spillover in higher HO cultures, where providing social support at work is consistent with the societal practice of providing support to one another. Likewise, instrumental (but not emotional) family support was most strongly and positively related to family-to-work positive spillover in higher HO cultures.

*Keywords:* humane orientation, work–family conflict, work–family positive spillover, social support, culture

National culture, defined as the set of beliefs, values, and norms shared by individuals with a common historical experience (Hofstede, 2005; Schooler, 1996), greatly influences the way people experience the work–family interface. Deep-seated social norms shape the meanings associated with “work” and “family” roles in different cultural contexts as well as expectations for support in the work and the family domains (Allen et al., 2015; Powell et al., 2009; Shaffer et al., 2011; Spector et al., 2007). Recognizing the need to better situate work–family experiences in their distinct cultural contexts, there has been a rapid increase in cross-national work–family research that incorporates cultural values over the past decade (for recent reviews, see Ollier-Malaterre & Foucreault, 2017; Shockley et al., 2017).

Despite recent advancements, the limited geographical and cultural scopes of cross-national work–family research undermine the systematic theorizing of the impacts of culture on the work–family interface because the cultural beliefs that shape work and life roles vary greatly across the globe. Thus, the omission of regions that hold different cultural beliefs, as well as the omission of cultural dimensions on which regions differ, introduces important biases in the conceptualization of work–family relationships. Regarding geography, the most recent empirical work–family conflict/positive spillover research that included more than 10 countries was based on data collected over a decade ago (e.g., Ollo-López & Goñi-Legaz, 2017; Spector et al., 2004, 2007). Most cross-national work–family studies have compared two to seven countries and have focused on the United States, China, and Europe (Ollier-Malaterre & Foucreault, 2018; Shockley et al., 2017). Meta-analytic research (Allen et al., 2015, 2020; French et al., 2018) includes a wider range of countries. Yet, there are few primary studies on Southern Asia and Sub-Saharan Africa and even if there were more, metanalytic research relies on the assumption that the variables of interest are perceived and understood by participants from different countries similarly (Dumani et al., 2018). The limited geographical scope thus results in limited variance in cultural dimensions, which can undermine detection of their moderating role.

Regarding cultural dimensions, work–family studies have followed the general cross-cultural literature lead in choosing collectivism, that is, inclusion of one’s in-group in the definition of self and everyday behaviors (Markus & Kitayama, 1991) and to a lesser extent gender egalitarianism, that is, fluidity in how gender roles are defined (House et al., 2004) as the key cultural values of interest (e.g., Korabik et al., 2017; Lyness & Brumit Kropf, 2005; Spector et al., 2007; Yang et al., 2000). This approach has missed the impact of other important cultural dimensions, such as humane orientation, as moderators of established relationships between constructs (Allen et al., 2020; Gelfand et al., 2007; Ollier-Malaterre & Foucreault, 2017, 2018; Shockley et al., 2017). Humane orientation refers to the extent a society encourages and rewards individuals for being altruistic, generous, caring, and kind to one another (House et al., 2004). Including humane orientation is essential to adequately theorize work–family relationships because humane orientation reflects the degree of expected social support within a culture (Kabasakal & Bodur, 2004; Ollo-López & Goñi-Legaz, 2017; Powell et al., 2009) and social support predicts work–family conflict (French et al., 2018) and positive spillover (Wayne et al., 2013).

Expanding the regions represented in cross-national studies is important for increasing generalizability. The constraints induced by the limited geographical and cultural scopes associated with past research conflate as Southern Asia and Sub-Saharan Africa remain very underrepresented, and they are the only two regions identified in the Global Leadership and Organizational Behavior Effectiveness Study (GLOBE) as part of the high humane orientation cluster (Gupta & Hanges, 2004). These high humane orientation cultures are characterized by unique work–family features such as communal living, stringent religious duties, and ethnicity-based customs (Mokomane, 2018; Shahani-Denning & Shyamsunder, 2018). For example, in Ethiopia, hundreds of people who are members of extended families and communities, neighbors, and colleagues have to leave work over several days and sometimes weeks for multiple family events.

In addition to this critical omission, most work–family studies have relied on preexisting country scores rather than measuring cultures directly from their respondents (Korabik et al., 2017 is an exception, but they did not assess humane orientation and include only 10 countries), in part because the small number of countries also does not allow for the direct measurement and modeling of cultural dimensions (Yu, 2015). This approach assumes that cultural scores are homogenous within countries and stable over time (Kirkman et al., 2006; Taras et al., 2011). However, the sampling used for the culture score may be skewed compared with the study sample, or the values may evolve

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between the latest score computation and the time of the study (Spector et al., 2015).

We designed the present study to help address the above limitations. Specifically, we test hypotheses based on data from 30 countries/territories that include Southern Asia and Sub-Saharan Africa. Based on fit theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977), we focus on humane orientation as a moderator of the relationships between role domain supports (work-related and family-related) and work–family outcomes. We include both work–family conflict and positive spillover to determine if culture modifies relationships between supports and positive spillover differently than it modifies relationships between supports and conflict. Fit theory suggests that cultural values can be conceptualized as having different moderating effects depending on the relationships that are theorized. That is, in the relationships between supports, conflict, and positive spillover, humane orientation may have either an amplifying or a compensatory effect.

This research contributes to the cross-national work–family literature in several ways. First, the large geographical and cultural scope, with 30 countries/territories including those from under-represented regions of the world and the measurement of humane orientation, fosters a more systematic theorizing of the role of culture in the work–family interface (Shockley et al., 2017; Spector et al., 2015) and of the context in which social support is useful. This is important because social support has been identified as a key resource to improve work–family outcomes, and it is a resource that is actionable by organizations through policies, training, and cultural change (French & Shockley, 2020). Moreover, assessing humane orientation directly from participants addresses several methodological shortcomings of the existing literature.

Second, our application of fit theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977) to the cross-national work–family literature expands theoretical insights beyond previous research that has relied primarily on theory associated with specific cultural values. This unique theoretical lens suggests that cultural values such as humane orientation may have either an amplifying or a compensatory moderation effect on work–family relationships.

## Literature Review

### Humane Orientation

Humane orientation is a cultural dimension put forth by the GLOBE project (House et al., 2004; Javidan et al., 2006). Reflecting earlier work by Kluckhohn and Strodtbeck (1961) and Schwartz (1994), it captures the extent to which people view human nature as good and transcend their self-interest to consider the interests of others such as family, friends, people in their community, and even strangers (Kabasakal & Bodur, 2004). People in high humane orientation cultures such as Indonesia, Ecuador, and India are expected to be compassionate, altruistic, and kind; to promote the well-being of others; and to provide material support for others. By contrast, people in lower humane orientation cultures such as France, Poland, and Singapore tend to emphasize self-reliance, the pursuit of one's own comfort and pleasure, and personal enjoyment of material possessions and power (Kabasakal & Bodur, 2004).

Humane orientation reflects broad societal factors. Countries with high (vs. low) humane orientation tend to be poorer, less educated,

and less urbanized (Kabasakal & Bodur, 2004). Humane orientation correlates with agreeableness (Schlösser et al., 2013), need for affiliation (Van Emmerik et al., 2010), institutional and in-group collectivism (Kabasakal & Bodur, 2004), religiosity (Bond et al., 2004), and right-wing orientation (Kabasakal & Bodur, 2004). In high (vs. low) humane orientation cultures, relationships between supervisors and subordinates tend to be more informal, personal, and holistic rather than strictly focused on work tasks (Kabasakal & Bodur, 2004).

## Hypotheses Development

### Fit Theory and the Competing Congruence Versus Compensation Hypotheses

In this section, we draw on fit theory to consider the role of humane orientation as a moderator of the relationships between social support, work–family conflict, and work–family positive spillover. Fit theory, also referred to as congruence theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977), examines the consistency between different internal (e.g., structure, processes) and external components (e.g., cultural values, technology) of a system. Consistent with the inferences paradigm approach that emphasizes the need to develop and test alternative hypotheses (Platt, 1964) and with the person–environment fit literature, fit theory articulates two competing types of fit: supplementary fit and complementary fit (Beus et al., 2021; Edwards, 2008; Muchinsky & Monahan, 1987). Congruence states that alignment between different components facilitates resource utilization and goal attainment by making the layers of context consistent and easy to work with (Lawrence & Lorsch, 1967; Nightingale & Toulouse, 1977). The alternative, compensation, highlights the benefits of complementarity whereby one component of a system compensates for a deficit or lack in another component.

Although framed at the organizational level (e.g., alignment of human resources policies with societal culture), fit theory has proven relevant to examine the alignment between lower-level units such as teams' work climates and societal culture (Beus et al., 2021). We extend this reasoning to examine the fit between social support at work and at home and the cultural dimension of humane orientation. We reason that the congruence and compensation mechanisms can help theorize the relationships between social support and work–family conflict/positive spillover.

We first examine the relationships between social support and conflict and then turn to the relationships between social support and positive spillover. Previous work–family research findings have been consistent with the domain specificity hypotheses, which suggests that support from a given role domain should most strongly be associated with conflict/spillover that originates in that domain (French et al., 2018; Frone et al., 1992, 1997). For example, social support from the work domain is more strongly associated with conflict and positive spillover that originates in the work domain (e.g., work-to-family conflict/positive spillover) relative to support from the family domain. In line with this evidence, we focus the direction of our theorizing on the relationships between social support received in a domain (e.g., work) and conflict/positive spillover originating in that domain (e.g., work-to-family conflict/positive spillover).

## Humane Orientation, Work Social Support, and Work-to-Family Conflict

Social support from work, in particular informal support (French & Shockley, 2020), is negatively associated with work-to-family conflict, because social support is a resource that helps meet role domain demands (e.g., Ten Brummelhuis & Bakker, 2012). Two important aspects of informal support are family-supportive supervisor behaviors and coworker support (Hammer et al., 2011; Kossek et al., 2011; Mesmer-Magnus & Glew, 2012; Mesmer-Magnus & Viswesvaran, 2006; Michel et al., 2011). Family-supportive supervisor behaviors encompass emotional support, instrumental support, role-modeling behaviors, and creative work–family management (Hammer et al., 2009). Coworker support consists of instrumental, emotional, and informational aid from peers or coworkers (Michel et al., 2011).

Building on fit theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977), and consistent with a strong inference paradigm that uses alternative hypotheses to think logically and systematically about a research problem (Platt, 1964), we articulate two alternative hypotheses. Following the congruence argument, social support at work should be more effective in reducing work-to-family conflict when it fits with the practices occurring in the broader culture that is in higher rather than lower humane orientation cultures. Congruence between the different elements of a system, such as values at different levels, makes the system more efficient because it is easier to understand employees and other stakeholders of organizations such as the supervisors and coworkers who provide social support (Cable & Edwards, 2004; Lawrence & Lorsch, 1967; Nightingale & Toulouse, 1977). In this congruent configuration, fit theory predicts that resources are better used and goals are more likely to be attained (Beus et al., 2021). Thus, the alignment between social support at work and at the societal level (i.e., high humane orientation culture) provides a context where the resource of social support can be better used to reduce work-to-family conflict. In other words, humane orientation amplifies the buffering effect of social support at work on work-to-family conflict.

However, the compensation perspective suggests the opposite. Specifically, a context-incongruent element of a system can provide compensatory value when it offsets something missing in the broader external environment; in other words, the context-incongruent practice gives a competitive advantage relative to other organizations (Beus et al., 2021; Fry & Smith, 1987). This is consistent with the complementary perspective in the person–environment fit literature (Cable & Edwards, 2004; Edwards, 1991). The compensation perspective suggests that social support at work should be more effective in reducing work-to-family conflict when it makes up for lack of social support in the broader culture, that is, in lower relative to higher HO cultures. Therefore, we propose competing hypotheses:

*Hypothesis 1a:* The negative relationships between (a) family-supportive supervisor behaviors and (b) coworker support and work-to-family conflict are stronger in higher humane orientation cultures than in lower humane orientation cultures.

*Hypothesis 1b:* The negative relationships between (a) family-supportive supervisor behaviors and (b) coworker support and work-to-family conflict are weaker in higher humane orientation cultures than in lower humane orientation cultures.

## Humane Orientation, Family Social Support, and Family-to-Work Conflict

Turning to social support received from the family, resource theories also suggest that the resources provided by significant others such as the family mitigate family interference with work (Byron, 2005; Michel et al., 2011) because such support helps individuals to manage role demands (Ten Brummelhuis & Bakker, 2012). As noted by King et al. (1995), family members can provide two forms of support: instrumental and emotional. Instrumental support involves the provision of resources such as relieving the employee of family demands (e.g., cooking meals, caring for children). For example, a spouse or a grandparent can take responsibility for childcare and household chores on a regular basis or during more demanding periods at work, which enables the employee to dedicate more time and energy to work. Emotional support consists of providing psychological resources such as encouragement and understanding. For example, family members can take the time to listen to employee concerns and provide encouragement, helping to alleviate employee strain (Lapierre & Allen, 2006).

The congruence perspective suggests that social support from family should be more helpful to decrease family-to-work conflict when it fits with the culture, that is, family social support will be most beneficial in higher relative to lower humane orientation cultures. However, the compensation perspective suggests that social support at home should decrease family-to-work conflict more when it represents a rare resource in the environment, that is, in lower rather than higher humane orientation cultures. Therefore, we propose competing hypotheses:

*Hypothesis 2a:* The negative relationships between (a) emotional and (b) instrumental family-support and family-to-work conflict are stronger in higher humane orientation cultures than in lower humane orientation cultures.

*Hypothesis 2b:* The negative relationships between (a) emotional and (b) instrumental family-support and family-to-work conflict are weaker in higher humane orientation cultures than in lower humane orientation cultures.

## Humane Orientation, Work Social Support, and Work-to-Family Positive Spillover

Similar to how cultural context may alter relationships between social support and work–family conflict, we also predict that cultural context may alter relationships between social support and positive spillover. The work–family literature has theorized and documented the positive relationship between social support received at work and work-to-family positive spillover (Frone et al., 1997; Greenhaus & Powell, 2006; Russo et al., 2018; Voydanoff, 2001; Wayne et al., 2013). As noted by Lapierre et al. (2018), a supportive work context can provide a broad array of instrumental and affective resources, such as knowledge, skills, and perspectives that could enhance the employee’s family life. Spillover occurs through instrumental as well as affective mechanisms by which people transfer resources from one domain to the other (Greenhaus & Powell, 2006). Instrumental support received, for instance, in the form of a supervisor agreeing to a flexible schedule, directly facilitates an employee’s family role

(i.e., instrumental path). Emotional support received, for instance, when a coworker empathizes with an employee's family concerns, bolsters their positive affect, which also helps with the family role (i.e., affective path).

With regard to the role of humane orientation, on the one hand, the congruence hypothesis predicts that social support, as a resource, may make skills and experience gained at work easier to transfer to the family domain when practices in the workplace and in the broader context are aligned. On the other hand, the compensation perspective suggests that social support at work will be more beneficial to employees, motivating them to transfer these skills and experiences to their family life, when it makes up for low support in the environment that is in low humane orientation cultures. From this follows:

*Hypothesis 3a:* The positive relationships between (a) family-supportive supervisor behaviors and (b) coworker support and work-to-family positive spillover are stronger in higher humane orientation cultures than in lower humane orientation cultures.

*Hypothesis 3b:* The positive relationships between (a) family-supportive supervisor behaviors and (b) coworker support and work-to-family positive spillover are weaker in higher humane orientation cultures than in lower humane orientation cultures.

### Humane Orientation, Family Social Support, and Family-to-Work Positive Spillover

Family members can also provide resources that enhance work experiences. The positive relationships between social support received in the family and family-to-work positive spillover also occur through instrumental and affective mechanisms (Greenhaus & Powell, 2006). Instrumental support received, for instance, in the form of childcare, directly facilitates an employee's work performance (i.e., instrumental path). Emotional support received, for instance, when a spouse listens to an employee's work issues, fosters the employee's positive affect, which also helps with work performance (i.e., affective path). These positive relationships have been well documented (Friedman & Greenhaus, 2000; Frone et al., 1997; Lapierre et al., 2018). Here again, from a fit perspective, the cultural context may strengthen or weaken this established relationship. The congruence perspective suggests that humane orientation amplifies the positive relationship between family-related supports and family-to-work positive spillover, while the compensation perspective predicts the opposite:

*Hypothesis 4a:* The positive relationships between (a) emotional and (b) instrumental family-support and family-to-work positive spillover are stronger in higher humane orientation cultures than in lower humane orientation cultures.

*Hypothesis 4b:* The positive relationships between (a) emotional and (b) instrumental family-support and family-to-work positive spillover are weaker in higher humane orientation cultures than in lower humane orientation cultures.

## Method

### Sample and Procedure

The data reported in this article are part of the International Study of Work and Family, initiated by an international project team of three work–family scholars. No previous articles have been published based on this data. Online surveys and paper and pencil questionnaires were used to collect data in 30 countries/territories spread across five continents, resulting in a total sample size of  $N = 10,307$  employees. To be included, participants were required to work at least 20 hr a week in an organization (i.e., not self-employed) and to have at least one dependent child under the age of 20 living in the same household. Table 1 gives an overview of the sample composition with respect to age, gender, supervisor status, working hours, and humane orientation. Average organization tenure for the entire sample was 9.1 years, and 60% of the study participants have a university degree. Study participants came from a broad range of industries: 16% manufacturing; 36.3% services; 13.5% education, 10.6% medical and social services; 9.9% public administration/government; 5.5% hospitality and entertainment; 2.4% security/protection/military; 5.8% other.

Data was collected from 2018 to 2020. The aim was to generate a culturally diverse sample, including regions that were under-represented in previous cross-cultural work–family studies such as Sub-Saharan Africa and Southern Asia. The central research team enrolled emic expertise in each country/territory culture by inviting a local collaborator with expertise in work–family and cross-cultural research to participate in the study. The central research team generated a common set of data collection guidelines that applied to each country. In addition, each local collaborator was provided with a data collection checklist and a predefined excel file for data submission. Each local collaborator determined the best method for data collection within their country within the standardized set of guidelines (e.g., use of a paper and pencil survey or online survey). To again meet the needs of each local context, compensation was not standardized. With the means of a common survey and data collection guidelines, a heterogeneous sample with regard to gender, supervisory responsibility, occupation, and employer was generated.

In non-English speaking countries/territories, the survey items were translated by the local scholar, back-translated by another bilingual person, and checked by the central team. If there was disagreement on a translation, the translation was modified by the local collaborator. In total, the survey was translated into 22 languages. After each collaborator submitted data for their country, the data sets were screened by the central team for missing and/or unreliable data. Incomplete and/or unreliable data were removed.

### Transparency and Openness

We describe our sampling plan, data inclusion criteria, and all measures in the study. We adhered to the *Journal of Applied Psychology* methodological checklist. Relevant data and code can be made available upon request. Data were analyzed using Mplus 7.1 and SPSS Statistics 27. The study's design and analyses were not preregistered. The study was granted institutional review board approval by the University of Quebec in Montreal (Comité d'éthique de la recherche avec des êtres humains, Certificate No. 2017-1518, study title "Étude internationale sur l'équilibre travail-famille

**Table 1**  
*Sociodemographic Information*

Samples	N	Age (M)	Female (%)	Supervisor (%)	Whour (M)	HO (M)
Australia	363	40.2	47.7	38.0	38.3	3.82
Austria	333	42.6	73.0	27.3	34.5	3.56
Brazil	237	41.1	49.8	44.3	47.0	4.26
Bulgaria	311	33.7	53.4	16.4	41.4	3.63
Canada <sup>a</sup>	507	43.2	56.8	31.8	39.8	4.44
Chile	340	38.6	50.3	25.9	45.5	3.53
China	300	34.1	62.3	35.3	47.9	4.33
Ecuador	300	42.3	43.7	54.7	45.9	4.01
Ethiopia	337	39.0	53.4	31.2	43.1	5.00
Finland	310	43.3	69.0	17.1	38.8	3.87
France	564	42.6	62.9	27.7	39.3	3.58
Germany	386	39.9	70.2	26.4	36.5	3.60
India	338	33.8	47.3	35.8	49.4	4.23
Indonesia	301	39.8	59.1	40.9	42.9	5.06
Israel	483	40.7	50.9	34.8	42.1	4.25
Italy	422	43.1	43.1	48.6	44.4	4.03
Netherlands	376	43.0	54.8	34.3	36.9	3.94
Nigeria	297	38.5	41.1	47.5	46.6	3.87
Norway	294	45.4	44.2	43.2	37.9	4.39
Poland	376	36.3	59.6	22.6	43.1	3.60
Portugal	298	43.8	52.7	25.2	43.3	3.73
Singapore	305	48.0	54.8	52.8	46.5	3.96
South Africa <sup>b</sup>	362	39.4	59.4	22.4	44.0	4.10
South Korea	309	38.6	46.3	38.8	45.7	4.22
Switzerland <sup>c</sup>	318	40.6	70.4	30.2	31.7	4.07
Taiwan	301	47.2	62.1	37.2	44.7	4.38
Tunisia	322	40.6	49.4	30.7	40.6	4.13
United Kingdom	314	38.9	62.1	30.6	36.1	3.94
United States	306	38.3	50.3	53.9	41.0	4.15
Vietnam	297	40.0	59.6	35.4	45.8	4.48
Total	10,307	40.6	55.5	34.2	41.8	4.06

Note. Whours = actual working hours; HO = humane orientation (Scale 1–7).

<sup>a</sup>English- and French- speaking sample. <sup>b</sup>Black and White sample. <sup>c</sup>German- and French- speaking sample.

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## Measures

### Work–Family Conflict

Work-to-family conflict and family-to-work conflict were measured with six items each on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*) taken from Carlson et al. (2000), overall sample coefficient  $\alpha$  for both work-to-family conflict and family-to-work conflict is  $\alpha = .87$ .

### Positive Work–Family Spillover

Positive work-to-family spillover and family-to-work spillover were assessed with four items each on a 5-point scale that ranged from 1 = *never* to 5 = *very often* (Grzywacz & Marks, 2000),  $\alpha = .75$  for positive work-to-family spillover and  $\alpha = .68$  for positive family-to-work spillover.

### Family-Supportive Supervisor Behavior

The four-item short form of the Family Supportive Supervisor Behavior Scale by Hammer et al. (2013) was used to measure supervisor support. Responses were made on a 5-point Likert scale that ranged from 1 = *strongly agree* and 5 = *strongly disagree*,  $\alpha = .88$ .

### Coworker Support

To assess coworker support we adapted Clark’s (2001) three-item supervisor support measure by referring to “my coworkers” instead of “my supervisor.” Participants responded on a 5-point Likert scale (1 = *strongly agree* and 5 = *strongly disagree*),  $\alpha = .83$ .

### Family Support

Emotional and instrumental family support was measured with four items each on a Likert scale that ranged from 1 = *strongly agree* to 5 = *strongly disagree* (Shockley & Allen, 2013),  $\alpha = .76$  for emotional support and  $\alpha = .80$  for instrumental support.

### Humane Orientation

Humane orientation was assessed with four items from the GLOBE study’s societal practices (as-is) measure (House et al., 2004). We removed one item from the original five-item scale. The response anchors for the removed item were worded differently than the four other items and may have contributed to the measure failing initial configural measurement invariance tests. Responses for the remaining four items were made on a 7-point scale that ranged from for example, 1 = *not at all concerned* to 7 = *very concerned*,  $\alpha = .81$ . For further analysis, humane orientation was aggregated to the country level.

**Table 2**  
*Results Measurement Invariance Tests*

Measures	Configural MI			Configural → Metric MI		Metric → Scalar MI	
	$\chi^2$	RMSEA	CFI	$\Delta$ RMSEA	$\Delta$ CFI	$\Delta$ RMSEA	$\Delta$ CFI
WtFC	593.47	.065	.984	.001	.009	.043	.054
FtWC	580.87	.064	.980	.002	.009	.024	.042
WFPS <sup>a</sup>	301.93	.113	.961	.017	.026	.037	.138
FWPS <sup>a</sup>	275.80	.107	.951	.019	.031	.055	.263
HO	157.36	.069	.986	.014	.031	.048	.139
FSSB	205.24	.084	.988	.001	.016	.034	.060
Family support	542.54	.061	.979	.001	.011	.032	.069

*Note.* MI = measurement invariance; CFI = comparative fit index; RMSEA = root-mean-square error of approximation. WtFC = work-to-family conflict; FtWC = family-to-work conflict; WFPS = work-to-family positive spillover; FWPS = family-to-work positive spillover; HO = humane orientation; FSSB = family-supportive supervisor behavior.

<sup>a</sup> *N* = 28 countries.

## Controls

As is common in work-family research (e.g., Hammer et al., 2013; Wayne et al., 2013), the following control variables were included in all multilevel analyses: gender (dummy-coded; 0 = male and 1 = female), age, marital status (dummy-coded 0 = single/separated and 1 = married/cohabiting), educational level, supervisor status (dummy-coded; 0 = yes and 1 = no), and number of children.

## Measurement Invariance

For this study, we selected measures that have largely been used in previous cross-cultural research. Nevertheless, it is necessary to establish measurement invariance across samples to ensure that the items were interpreted and responded to similarly by respondents across different countries/territories (Vandenberg & Lance, 2000). Measurement invariance is usually examined with multigroup confirmatory factor analysis (MG CFA) at three levels: configural, metric, and scalar invariance (Milfont & Fischer, 2010). Configural invariance indicates an equivalent latent structure across groups/countries. Metric invariance is prerequisite of meaningful comparisons of structural relationships between variables and factor variances across countries (Asparouhov & Muthén, 2014). It indicates equivalent factor loadings of items across countries. Finally, scalar invariance indicates equivalent item intercepts across groups and is a prerequisite for comparisons of latent factor variances, latent factor means, and covariances between groups (Milfont & Fischer, 2010; Vandenberg & Lance, 2000).

To establish measurement invariance, we conducted MG CFA in Mplus for all measures with more than three items. We used two indicators to assess invariance: comparative fit index (CFI) and root-mean-square error of approximation (RMSEA). These indicators are considered more rigorous than  $\chi^2$ , which is likely to be significant in large samples (Rutkowski & Svetina, 2014). These indicators also tend to become larger when many groups are involved. Following Rutkowski and Svetina's suggestions based on a simulation study with 10 and 20 groups, more liberal cutoff criteria for CFI and RMSEA as well as for changes in both indicators when testing for metric invariance seem appropriate in this 30-country study. For the configural model, we consider a CFI  $\geq$  0.95 and RMSEA  $\leq$  0.15 as evidence of invariance. As for model fit comparison indices,  $\Delta$ CFI  $\leq$  .030 and  $\Delta$ RMSEA  $\leq$  .030 are used as cutoff criteria in evaluating

metric invariance, and  $\Delta$ CFI  $\leq$  .010 and  $\Delta$ RMSEA  $\leq$  .015 for evaluating scalar invariance (Jang et al., 2017; Rutkowski & Svetina, 2014). The results of measurement invariance tests are presented in Table 2.

Evidence for configural invariance across 30 countries/territories was found for all measures except positive spillover. Configural models for both positive spillover measures only converged and displayed satisfying fit indices when Bulgaria and Switzerland were excluded from the MG CFA. In both samples, the positive spillover measures also had poor  $\alpha$ s. Consequently, all models that involve positive spillover measures are based on 28 countries/territories. We calculated the  $\alpha$ s for both positive spillover measures for 28 and 30 countries. Alphas slightly improved when eliminating the two countries for both directions of spillover: work-to-family  $\alpha = .75$  for 28 countries versus  $\alpha = .74$  for 30 countries; family-to-work  $\alpha = .68$  for 28 countries versus  $\alpha = .66$  for 30 countries. Other measures remained the same (supervisor support, coworker support, humane orientation) or changed marginally for 28 countries: instrumental family support:  $\alpha = .81$  versus  $\alpha = .80$  for 30 countries; emotional family support:  $\alpha = .74$  versus  $\alpha = .76$  for 30 countries.

When constraining factor loadings to be the same across countries, model comparison tests revealed metric invariance for all measures. However, further model comparison tests showed that the data did not meet the threshold for scalar invariance of any measure in the study. Given that the purpose of the study is to investigate structural relationships, satisfying metric invariance across cultures is sufficient to proceed to our main statistical analyses (Jang et al., 2018).

## CFA

CFA was conducted to examine whether our study variables were conceptually distinct. The CFA including all dependent and independent variables (12 factors) demonstrated a good fit with our data:  $\chi^2(463) = 7,032.29$ ,  $p < .01$ , CFI = 0.95, RMSEA = 0.037.

## Results

### Descriptive and Correlational Analysis

Table 3 presents means, standard deviations, and correlations for individual-level measures and humane orientation (country level).



**Table 3**  
Means, Standard Deviations, and Correlations Among Measures

Measures	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Gender	.56	.50	—														
2. Age	40.62	8.31	-.10**	—													
3. Marital status	.88	.33	-.10*	-.01	—												
4. Education	4.45	1.55	.00	.03**	.08**	—											
5. Supervisor	.66	.48	-.15**	.13**	.04**	.16**	—										
6. No of children	1.83	.09	-.04**	.19**	.08**	-.02	-.04**	—									
7. FSSB	3.25	.95	-.04**	-.02*	.01	.00	-.04**	.01	—								
8. COWS	3.67	.81	.05**	-.01	.02*	.04**	.02*	.00	.43**	—							
9. FS_e	3.55	.83	.03**	-.08**	.12**	.05**	-.03**	.00	.22**	.23**	—						
10. FS_j	3.62	.93	-.15**	.20**	.20**	.04**	-.06**	.01	.17**	.16**	.47**	—					
11. WtFC	2.95	.89	-.02*	-.07**	.00	-.01	-.05**	.00	-.24**	-.08**	-.06**	-.06**	—				
12. FWFC	2.39	.82	-.01	-.09**	.00	.00	.01	.00	-.05**	-.09**	-.11**	-.12**	.43**	—			
13. WFPS <sup>a</sup>	3.14	.77	.00	-.06**	.02*	.08**	-.09**	.01	-.29**	.23**	.31**	.19**	-.06**	.08**	—		
14. FWPS <sup>a</sup>	3.57	.72	.00	-.09**	.05**	.04**	-.07**	.00	.19**	.15**	.48**	.35**	-.25**	-.09**	.46**	—	
15. HO	4.06	.38	-.03**	.01	.01	.06**	-.07**	.06**	.06**	-.05**	.06**	.09**	-.08**	-.01	.12**	.15**	—

Note.  $N = 10,307$  (30 countries); FSSB = family-supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_j = instrumental family support; WtFC = work-to-family conflict; FWFC = family-to-work conflict; WFPS = work-to-family positive spillover; FWPS = family-to-work positive spillover; HO = humane orientation.  
<sup>a</sup>  $N = 9,687$  (28 countries).  
 \*  $p < .05$ . \*\*  $p < .01$ .

**Multilevel Analysis**

Hierarchical linear modeling was used to account for the nested data structure (Raudenbush & Bryk, 2002). Intraclass correlation coefficients (ICCs) for our dependent variables were .05 for work-to-family conflict ( $N = 30$ ), .09 for family-to-work conflict ( $N = 30$ ), .08 for work-to-family positive spillover ( $N = 28$ ), and .12 for family-to-work positive spillover ( $N = 28$ ). For individual-level predictors ICCs ranged between .04 and .07. The ICC for humane orientation was .13 and .12 for  $N = 30$  and 28 countries, respectively.

To enhance model fit and the interpretation of cross-level interaction effects, individual-level predictors (Level 1) were group mean-centered, and country-level predictors (Level 2) were grand mean-centered in all models (Enders & Tofghi, 2007). Tables 4 and 5 present the results of random intercept models predicting work-to-family conflict and family-to-work conflict, Tables 6 and 7 display the results for positive work-to-family spillover and positive family-to-work spillover. Model 1 includes control variables at Level 1 only. Model 2 adds the support variables at Level 1 as predictors. To test the hypotheses, Model 3 adds the moderator humane orientation and the respective interaction term.

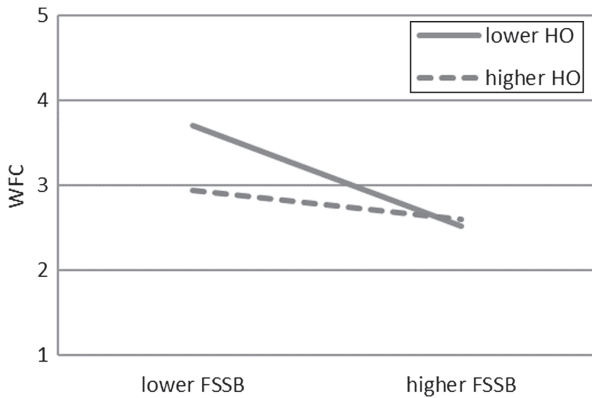
Hypothesis 1 proposed competing arguments, congruence (Hypothesis 1a) versus compensation (Hypothesis 1b) for the moderating effect of humane orientation on the relationship between (a) family-supportive supervisor behaviors and (b) coworker support and work-to-family conflict. Model 2 (Table 4) reveals significant negative relationships with work-to-family conflict for family-supportive supervisor behaviors ( $b = -.19, p < .01$ ) and for coworker support ( $b = -.13, p < .01$ ). In line with Hypothesis 1b, Model 3 yielded significant cross-level interactions for both Family-Supportive Supervisor Behaviors  $\times$  Humane Orientation ( $b = .11$ ,

**Table 4**  
Results of Multilevel Analyses for Work-to-Family Conflict

Variable	Model 1	Model 2	Model 3
Intercept	2.95**	2.95**	2.95**
Level 1			
Gender	-.02	-.03	-.03
Age	-.01*	-.01**	.00
Marital status	-.06*	-.04	-.03
Education	-.01	-.01	.00
Supervisor	.10**	.11**	.11**
No children	.04**	.05**	.05**
FSSB		-.19**	-.18**
COWS		-.13**	-.15**
Level 2			
HO			-.20
Cross-level interactions			
FSSB $\times$ HO			.11**
COWS $\times$ HO			.08**
Deviance	26,042.19	25,248.22	25,209.36
ICC	.06	.07	.06
Var (within)	.74**	.68**	.68**
Var (between)	.05**	.05**	.04**
$\Delta$ MVP explained variance <sup>a</sup>	.007	.078	.090

Note.  $N = 10,307$  (30 countries); FSSB = family-supportive supervisor behavior; COWS = coworker support; HO = humane orientation; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.  
<sup>a</sup> Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).  
 \*  $p < .05$ . \*\*  $p < .01$ .

**Figure 1**  
*Humane Orientation × Family Supportive Supervisory Behaviors Predicting Work-to-Family Conflict*



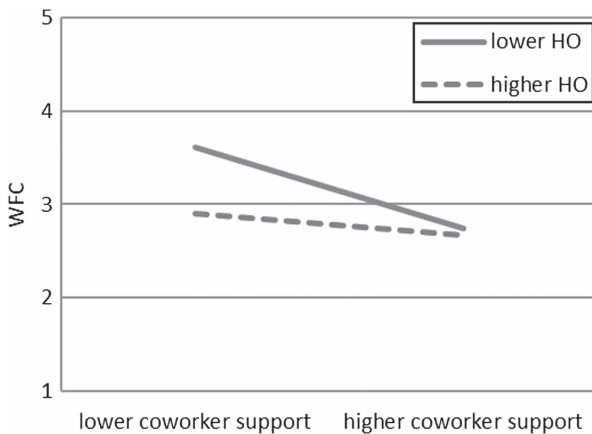
Note. HO = humane orientation; WFC = work-to-family conflict; FSSB = family-supportive supervisory behaviors.

$p < .01$ ) and Coworker Support × Humane Orientation ( $b = .08, p < .01$ ). Figures 1 and 2 depict the direction of the interaction effects. Both figures show weaker negative associations between the support and work-to-family conflict in higher humane orientation countries, thereby supporting the compensation argument in Hypothesis 1b.

Hypotheses 2a and 2b proposed moderating effects of humane orientation on the relationships between (a) emotional and (b) instrumental family support and family-to-work conflict. Table 5 displays the results of the multilevel analysis for family-to-work conflict. Model 2 reveals significant negative relationships for emotional ( $b = -.07, p < .01$ ) and instrumental family support ( $b = -.09, p < .01$ ). However, none of the cross-level interactions were significant in Model 3. Consequently, neither the congruence (2a) nor the compensation (2b) argument in Hypothesis 2 was supported by our data.

In line with fit theory, we also suggested competing moderating effects of humane orientation, congruence (Hypothesis 3a) versus

**Figure 2**  
*Humane Orientation × Coworker Support Predicting Work-to-Family Conflict*



Note. HO = humane orientation; WFC = work-to-family conflict.

**Table 5**  
*Results of Multilevel Analyses for Family-to-Work Conflict*

Variable	Model 1	Model 2	Model 3
Intercept	2.40**	2.40**	2.40**
Level 1			
Gender	-.04*	-.05**	-.05**
Age	-.01*	-.01**	-.01**
Marital status	-.05*	.01	.02
Education	.00	.00	.01
Supervisor	.00	.01	.01
No children	.04**	.04**	.04**
FS_e		-.07**	-.07**
FS_i		-.09**	-.09**
Level 2			
HO			-.03
Cross-level interactions			
FS_e × HO			.05
FS_i × HO			-.01
Deviance	23,965.92	23,753.29	23,763.33
ICC	.10	.09	.11
Var (within)	.60**	.59**	.59**
Var (between)	.07**	.06**	.07**
ΔMVP explained variance <sup>a</sup>	.004	.025	.025

Note.  $N = 10,307$  (30 countries); FS\_e = emotional family support; FS\_i = instrumental family support; HO = humane orientation; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup> Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

compensation (Hypothesis 3b), on the relationships between (a) family-supportive supervisor behaviors and (b) coworker support and positive work-to-family spillover. Model 2 in Table 6 reports significant positive main effects of family-supportive supervisor

**Table 6**  
*Results of Multilevel Analyses for Work-to-Family Positive Spillover*

Variable	Model 1	Model 2	Model 3
Intercept	3.14**	3.14**	3.15**
Level 1			
Gender	.05**	.05**	.05**
Age	.00	.00	.00
Marital status	.04	.01	.01
Education	.03**	.03**	.03**
Supervisor	.13**	.12**	.12**
No children	.02*	.02*	.02**
FSSB		.19**	.19**
COWS		.13**	.13**
Level 2			
HO			.17
Cross-level interactions			
FSSB × HO			.04
COWS × HO			.07*
Deviance	18,068.56	17,218.10	17,219.01
ICC	.08	.09	.10
Var (within)	.55**	.50**	.50**
Var (between)	.05**	.05**	.05**
ΔMVP explained variance <sup>a</sup>	.012	.097	.107

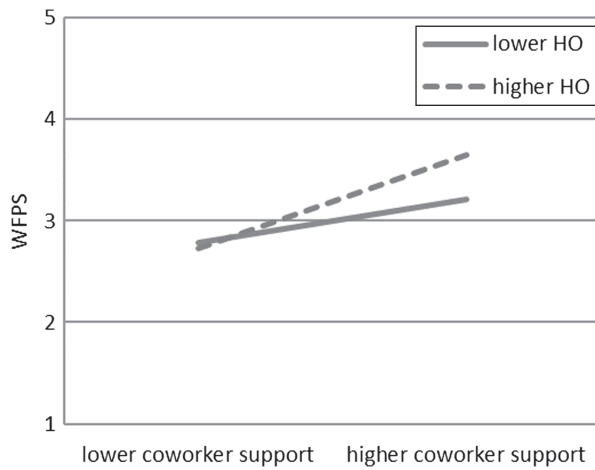
Note.  $N = 9,687$  (28 countries); FSSB = family-supportive supervisor behavior; COWS = coworker support; HO = humane orientation; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup> Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

**Figure 3**

*Humane Orientation × Coworker Support Predicting Work-to-Family Positive Spillover*



*Note.* HO = humane orientation; WFPS = work-to-family positive spillover.

behaviors ( $b = .19, p < .01$ ) and coworker support ( $b = .13, p < .01$ ) on positive work-to-family spillover. However, Model 3 only shows a significant cross-level interaction term for coworker support ( $b = .07, p < .05$ ). Figure 3 depicts a steeper slope in higher humane orientation as opposed to lower humane orientation countries, indicating that coworker support seems to enhance positive work-to-family spillover more strongly in higher humane orientation cultures. Humane orientation did not significantly alter the positive relationship between family-supportive supervisor behaviors and positive work-to-family spillover. Thus, findings support the congruence argument in Hypothesis 3a for coworker support, but not for supervisor support.

Hypotheses 4a and 4b proposed competing effects of humane orientation on the relationships between emotional (a) and instrumental (b) family support and positive family-to-work spillover. Both forms of family support were positively related with positive family-to-work spillover:  $b = .36, p < .01$  for emotional and  $b = .08, p < .01$  for instrumental family support (Model 2). Model 3 (Table 7) yielded a significant cross-level interaction for instrumental support ( $b = .07, p < .05$ ) but not for emotional support. Figure 4 shows a steeper slope in higher humane orientation cultures indicating a stronger enhancing effect of instrumental family support on positive family-to-work spillover in these cultures relative to lower humane orientation cultures. Again, these findings provide support for the congruence argument (Hypothesis 4a) rather than the compensation argument (Hypothesis 4b). Because we did not detect a significant cross-level interaction for emotional family support, Hypothesis 4a was only partially supported.

### Supplemental Analyses

We conducted several additional analyses intended to yield further insight into the data and to examine the robustness of our findings.

**Table 7**

*Results of Multilevel Analyses for Family-to-Work Positive Spillover*

Variable	Model 1	Model 2	Model 3
Intercept	3.57**	3.57**	3.58**
Level 1			
Gender	.03*	.03	.03
Age	-.01*	.00	.00
Marital status	.11**	-.03	-.03
Education	.01**	.01*	.01*
Supervisor	.07**	.05**	.05**
No children	.01	.01	.01
FS_e		.36**	.36**
FS_i		.08**	.09**
Level 2			
HO			.32*
Cross-level interactions			
FS_e × HO			-.02
FS_i × HO			.06*
Deviance	16,723.96	14,537.71	14,539.90
ICC	.11	.15	.13
Var (within)	.47**	.35**	.35**
Var (between)	.06**	.06**	.05**
ΔMVP explained variance <sup>a</sup>	.009	.213	.237

*Note.*  $N = 9,687$  (28 countries); FS\_e = emotional family support; FS\_i = instrumental family support; HO = humane orientation; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup> Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij}) / (\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

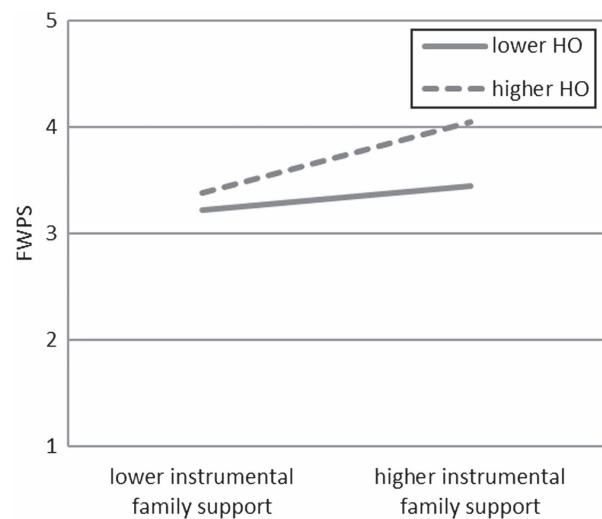
\*  $p < .05$ . \*\*  $p < .01$ .

### Substitution of GLOBE Scores

As a robustness check of our moderator analyses, we estimated all models using the humane orientation “as is” score from the GLOBE project (House et al., 2004). Of the 30 countries/territories included in our data, 24 were included in the GLOBE study. The two humane orientation measures are highly correlated ( $r = .69, p < .00$ ).

**Figure 4**

*Humane Orientation × Instrumental Family Support Predicting Family-to-Work Positive Spillover*



*Note.* HO = humane orientation; FWPS = family-to-work positive spillover.

**Table 8**  
*Robustness Checks Using GLOBE Humane Orientation Scores*

Variable	DV = WtFC	DV = WFPS <sup>a</sup>	DV = FtWC	DV = FWPS <sup>a</sup>
Intercept	2.95**	3.14**	2.39**	3.56**
Level 1				
Gender	-.04*	.04**	-.07**	.02
Age	-.01**	.00	-.01**	.00
Marital status	-.03	-.04	-.01	-.03
Education	-.01	.03**	.01	.01*
Supervisor	.11**	.11**	.01	.05**
No children	-.04**	.02*	.04**	.00
FSSB	-.21**	.17**	.01	.04
COWS	-.13**	.08**	-.09**	.03**
FS_e	-.02	.20**	-.04**	.35**
FS_i	.00	.00	-.10**	.08**
Level 2—GLOBE scores				
HO_G	-.10	.26*	-.06	.36**
Cross-level interactions				
FSSB × HO_G	.09**	.00		
COWS × HO_G	.07*	.10**		
FS_e × HO_G			.10**	-.02
FS_i × HO_G			.00	.05*
Deviance	20,839.69	16,979.55	19,541.22	14,653.98
ICC	.07	.10	.12	.10
Var (within)	.69**	.47**	.59**	.35**
Var (between)	.05**	.05**	.08**	.04**
ΔMVP explained variance <sup>b</sup>	.100	.159	.037	.26

*Note.*  $N = 8,406$  (24 countries); DV = dependent variable; WtFC = work-to-family conflict; FtWC = family-to-work conflict; WFPS = work-to-family positive spillover; FWPS = family-to-work positive spillover; FSSB = family-supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_i = instrumental family support; HO\_G = humane orientation “as is” GLOBE; ICC = intraclass correlation coefficient; GLOBE = Global Leadership and Organizational Behavior Effectiveness Study; MVP = multilevel variance partitioning.

<sup>a</sup> $N = 7,993$  (23 countries). <sup>b</sup>Explained variances were computed using the following formula,  $\text{var}(\hat{Y}_{ij}) / (\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019). \*  $p < .05$ . \*\*  $p < .01$ .

Table 8 summarizes the results of the robustness checks. The robustness tests using the humane orientation GLOBE scores are consistent with our findings with one exception: The family-to-work conflict model using the GLOBE humane orientation score yields a significant interaction term for emotional family support ( $b = .10, p < .01$ ) whereas our data based on measured humane orientation yielded a nonsignificant interaction (Model 3, Table 5). Repeating the analysis with our data and limiting the sample to the 24 countries/territories included in the GLOBE study also yielded a nonsignificant interaction term. Consequently, the different finding is likely to be due to the different countries/territories analyzed.

### Controlling for Additional Cultural Variables

We ran a series of models in which we imputed GLOBE “as is” scores data for in-group collectivism, institutional collectivism, and gender egalitarianism as controls (House et al., 2004). We chose these cultural values because they have received the most attention in the work–family research literature (Allen et al., 2020; Gelfand et al., 2007; Ollier-Malaterre & Foucreault, 2017, 2018; Shockley et al., 2017). The findings were primarily the same (see Table 9). Specifically, all cross-level interactions that involved humane orientation remained significant. Moreover, we note that the three GLOBE variables demonstrated only one significant main effect across the models (in-group collectivism was positively associated with positive family-to-work spillover).

### Examining Nonsignificant Cross-Level Interactions

Appendix A reports further examinations of all nonsignificant cross-level interactions to rule out the possibility that compensation and congruence effects occur simultaneously and thus prevent the detection of moderation. Findings indicate that compensation and congruence mechanisms seem to be mutually exclusive rather than active at the same time.

### Controlling for Nonoriginating Role Support

Appendix B documents that our significant findings overall were robust when controlling for nonoriginating domain forms of social support.

### Humane Orientation at the Individual Level

Appendix C reports results that include individual-level humane orientation and individual-level interactions in the models. The pattern of results indicates that individual-level moderating effects operate similarly to those observed at the country level.

## Discussion

Significant advancements in cross-national work–family research have been made in recent years. The primary purpose of the present study was to further advance this literature by investigating humane

**Table 9**  
*Robustness Checks Adding GLOBE Cultural Value Scores*

Variable	DV = WtFC	DV = WFPS <sup>a</sup>	DV = FtWC	DV = FWPS <sup>a</sup>
Intercept	2.95**	3.14**	2.38**	3.55**
Level 1				
Gender	-.04*	.04**	-.07**	.02
Age	-.01*	.00	-.01**	.00
Marital status	-.03	-.04	-.01	-.03
Education	-.01	.03**	.01	.01*
Supervisor	.10**	.11**	.01	.05**
No children	-.04**	.02*	.04**	.00
FSSB	-.21**	.17**	.01	.04
COWS	-.13**	.08**	-.09**	.03**
FS_e	-.02	.20**	-.04**	.35**
FS_i	.00	.00	-.10**	.08**
Level 2—GLOBE scores				
GE	-.17	-.18	-.30	-.01
COL_Institutional	-.04	-.16	.26	-.15
COL_Ingroup	.00	.01	-.09	.18**
HO	-.13	.24	-.11	.29**
Cross-level interactions				
FSSB × HO	.09**	.00		
COWS × HO	.07*	.10**		
FS_e × HO			.10**	-.02
FS_i × HO			.00	.05*
Deviance	20,845.82	16,984.31	19,541.77	14,653.61
ICC	.07	.08	.09	.08
Var (within)	.69**	.47**	.59**	.35**
Var (between)	.05**	.04**	.06**	.03**
ΔMVP explained variance <sup>b</sup>	.100	.168	.062	.29

*Note.*  $N = 8,406$  (24 countries); DV = dependent variable; WtFC = work-to-family conflict; FtWC = family-to-work conflict; WFPS = work-to-family positive spillover; FWPS = family-to-work positive spillover; FSSB = family-supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_i = instrumental family support; HO = humane orientation “as is” GLOBE; GE = gender egalitarianism “as is” GLOBE; COL\_institutional = institutional collectivism “as is” GLOBE; COL\_ingroup = ingroup collectivism “as is” GLOBE; GLOBE = Global Leadership and Organizational Behavior Effectiveness Study.

<sup>a</sup> $N = 7,993$  (23 countries). <sup>b</sup>Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

orientation as a moderator of support and work–family relationships. Based on a sample of 10,307 participants from 30 countries/territories spread across the globe, several key findings emerged.

We found that humane orientation moderated the relationship between family-supportive supervisor behaviors, as well as coworker support, and work-to-family conflict. As would be expected, the relationship between work supports and work-to-family conflict is negative overall. That is, the main effect relationships between support and work–family conflict are robust across cultures. However, the negative relationship is stronger in magnitude within lower humane orientation cultures than within higher humane orientation cultures. In line with the compensation perspective, we found that supervisor and coworker support are most strongly related to work-to-family conflict in cultures in which support is most needed, that is, in lower humane orientation cultures. This finding was robust in that it was also found when tested based on imputed GLOBE humane orientation scores, as well as when other cultural values (in-group and institutional collectivism and gender egalitarianism) were controlled.

With regard to family supports, we investigated both instrumental and emotional supports in relation to family-to-work conflict. We found the main effect relationships for both such that greater support was associated with less family-to-work conflict. However, we did

not find a moderating relationship for humane orientation in relation to either form of family support. Our robustness check using imputed GLOBE scores differed in that a significant moderating effect was found for emotional support. The nature of the moderation was such that the relationship between emotional support and family-to-work conflict was stronger within lower humane orientation cultures than higher humane orientation cultures. This finding is also in line with the compensation perspective. It is unclear why different findings emerged when using humane orientation data from participants versus imputed humane orientation scores from GLOBE with regard to this one particular relationship. One factor may be that the GLOBE scores are based on a sample of middle managers while our sample also includes nonsupervisory employees, in an effort to include a more diverse section of the workforce. Moreover, GLOBE focused on three industries (i.e., food processing, financial services, and telecommunication services) whereas our sample encompasses a broad range of industries. However, our observed correlation of  $-.07$  between supervisor status and humane orientation scores (Table 3) suggests that supervisory status does not have much bearing on reports of humane orientation. In general, our findings suggest that the relationships between family-to-work conflict and support from family members are not readily modified by humane orientation.

The lack of moderation of the relationship between instrumental support and family-to-work conflict was contrary to prediction. Our findings suggest that supportive cultures, as represented by humane orientation, cannot compensate for, nor augment, lack of support from family members. These findings are consistent with the meta-analytic findings reported by French et al. (2018). French et al. (2018) tested imputed scores of in-group collectivism, humane orientation, assertiveness, gross domestic product, and unemployment as cultural moderators of the relationship between family support and family-to-work conflict and found no significant moderation. As noted by French et al., work support and work-to-family conflict relationships appear to be more susceptible to cultural influences than do family support and family-to-work conflict relationships. Other forms of support at the national and/or cultural level such as universal childcare may be more synergistic with support from family members in reducing family-to-work conflict.

Limited research has investigated positive spillover and support cross-nationally. We found main effects for both family-supportive supervisor behaviors and coworker support on positive work-to-family spillover indicating that more support was associated with more positive spillover. With regard to moderation, we found that the relationship between coworker support and work-to-family positive spillover was moderated by humane orientation. Consistent with the congruence perspective, the positive relationship between coworker support and work-to-family positive spillover was stronger in higher humane orientation cultures than in lower humane orientation cultures. This effect was robust when also testing with imputed GLOBE scores. Our findings suggest that when the organizational context matches the societal context, positive spillover from work to family is more likely to occur. However, we did not find that humane orientation moderated the positive relationship between family-supportive supervisor behaviors and work-to-family positive spillover, suggesting that family-supportive supervisor behaviors are an important facilitator of positive spillover across cultural contexts.

We also found evidence for moderation with regard to family-to-work positive spillover. Specifically, the positive relationship between instrumental family support and family-to-work positive spillover was stronger for those in higher humane orientation cultures relative to those in lower humane orientation cultures. This finding was robust when tested with imputed GLOBE humane orientation scores as well as when collectivism and gender egalitarianism imputed scores were included as controls. We did not find that the relationship between emotional support and family-to-work positive spillover was moderated by humane orientation, suggesting that emotional support is equally relevant across humane orientation cultures for facilitating family-to-work positive spillover.

Our supplemental analyses yielded several other additional findings of note. As we report in Appendix B, we found some evidence of cross-domain main effects of support. Although the domain specificity hypothesis asserts that support from a given domain should most highly relate to conflict that originates in the same domain, cross-domain effects may still occur (French et al., 2018). Our findings suggest that across cultures, coworker support can be beneficial in reducing both directions of conflict. Similarly, support from the family can help enhance work-to-family positive spillover while support from supervisors and coworkers can help enhance family-to-work positive spillover. These findings further highlight the important role of social support for the work–family interface across cultures.

## Theoretical Implications

Our research has theoretical implications for the cross-cultural study of the work–family interface. First, it paves the way for a more comprehensive theorizing of the role of culture in etic comparative work–family research (Shockley et al., 2017; Spector et al., 2015) by analyzing data from 30 countries/territories, including those from underrepresented regions of the world, and by measuring humane orientation. The inclusion of contexts that differ across the world in terms of kinship ties, family rituals, and religiosity, such as Ethiopia and Indonesia, is theoretically important because cultural beliefs such as those pertaining to humane orientation deeply shape the meanings that individuals attach to “work,” “family,” and “support” (Allen et al., 2015; Kossek & Ollier-Malaterre, 2013; Powell et al., 2009).<sup>1</sup>

Second, by drawing from fit theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977), we provide a unique theoretical lens by which to view cross-cultural work–family research. We find that humane orientation has a compensatory role in the relationships between supports and work–family conflict whereas it has (mostly) an amplifying role in the relationships between supports and work–family positive spillover. Moreover, these mechanisms appear consistent across both individual and country-level analyses of humane orientation (see Appendix C, for individual-level analyses of humane orientation). These findings contribute to the understanding of how cultural contexts modify relationships between supports and work–family outcomes by underscoring that the amplifying versus attenuating processes involved with regard to positive versus negative work and family interdependencies differ drastically. Our findings concerning work–family conflict are in line with the compensation perspective of fit theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977) and with the complementary person–environment fit tradition rooted in need fulfillment (Edwards, 1991). However, when considering positive work–family spillover, the congruence perspective of fit theory is most relevant. Supplementing or matching characteristics of the culture with that of the environment are most beneficial in engendering positive spillover. Within the person–environment fit literature, such similarity has been referred to as value congruence (Cable & Edwards, 2004). Our study also contributes to the broader cross-cultural psychology and cross-national management literature (Dorfman et al., 2012; Hofstede et al., 2010; House et al., 2004; Javidan et al., 2006; Schlösser et al., 2013; Schwartz, 1994; Shi & Wang, 2011) by advancing research on humane orientation and showing the importance of thinking through alternative theoretical arguments for the moderating role of humane orientation. Our findings suggest that not only is humane orientation a cultural dimension that relates to important outcomes for employees and workplaces and warrants greater attention than has been given to date, but also it calls for careful theorizing as it may either attenuate or amplify established relationships between constructs.

<sup>1</sup> To examine the importance of inclusion of underrepresented regions, we tested our models without Ethiopia, Nigeria, South Africa, India, and Indonesia. Results differed in that the cross-level interactions for three dependent variables changed. Specifically, significant cross-level interactions for work-to-family conflict, family-to-work conflict, and positive work-to-family spillover were no longer significant. Findings suggest that research on humane orientation that does not include countries from these regions may mask moderation effects.

## Practical Implications

Our findings suggest that policymakers and workplace practitioners need to consider cultural beliefs and in particular humane orientation as they craft regulations and programs to reduce work–family conflict and facilitate positive spillover. This may help HR practitioners in multinational companies to adapt their work–family programs to different country contexts, and local policymakers and practitioners to direct their resources toward the most needed programs.

Regarding conflict, our findings imply that it is especially important to think about what the culture lacks that the workplace or the family can supply. For example, in lower humane orientation cultures individuals are expected to solve problems on their own (Kabasakal & Bodur, 2004); and thus, employees may have a greater need for supervisors and coworkers to supply support. Support from those within the workplace is needed in such cultures to help compensate for lesser support provided within society. Interventions such as family-supportive supervisor training (Hammer et al., 2011) and training programs that make employees aware of the importance of peer support to alleviate work–family conflict may be more beneficial in such contexts than in higher humane orientation contexts, even as they go against broader cultural norms. Likewise, policies that encourage increased family support, such as tax deductions for dependents, pension benefits, and legal provisions that facilitate access to part-time schedules and family leaves, may result in greater reduction in work–family conflict in lower (vs. higher) humane orientation contexts.

However, regarding positive spillover beneficial outcomes occur when the situation is aligned with individual belief systems. Thus, investing in fostering supervisor and coworker support may benefit positive spillover more in higher humane orientation contexts where these supports are compatible with the cultural context than in lower humane orientation contexts where they may be viewed as incongruent with broader cultural norms. Likewise, policies and legal provisions that encourage family support may result in greater positive spillover in higher (vs. lower) humane orientation contexts.

## Strengths

Our study has several notable strengths. Our cross-national sample is inclusive of regions of the world that have received little research attention. The importance of including heterogeneous regions such as Southern Asia and Sub-Saharan Africa that are high in humane orientation was underscored by our supplemental analyses that demonstrated that moderation effects disappear without such regions included. This finding may explain why the limited empirical research (French et al., 2018; Ollier-Malaterre et al., 2020) that tested Powell et al.'s (2009) hypothesis of a moderation found no support for such moderation. Moreover, cross-cultural work–family research has mostly studied managers and professionals, which neglects major segments of populations (Griggs et al., 2013). Thus, our findings overall are more heterogeneous with regard to culture and populations around the globe than previous cross-national research studies.

A larger geographical scope also offers important methodological advantages. A larger set of countries in cross-cultural research not only allows us to directly measure and model the impact of humane orientation on the outcome of interest (Yu, 2015), but it also increases the variance associated with this cultural dimension (Stankov, 2015). This is a key contribution in that tests of moderation assume that variable distributions include the full range of possible values. Even a

relatively small degree of range restriction can significantly decrease the statistical power to detect moderation (Aguinis et al., 2017; Aguinis & Stone-Romero, 1997). For example, the lack of inclusion of high humane orientation countries in cross-national work–family research may explain why previous studies have found little support for humane orientation as a moderator (French et al., 2018). The inclusion of diverse countries also increases the generalizability of findings to a larger set of countries. Moreover, assessing humane orientation directly from participants addresses several limitations of the existing literature. It enables us to establish measurement invariance for humane orientation and our other variables of interest, providing greater confidence that differences observed are actual rather than an artifact of different scale interpretations across countries (Chen, 2008). In doing so, our research is in line with the observation of Gelfand et al. (2017) who note that while still somewhat rare, studies increasingly measure cultural differences, and pay attention to measurement equivalence, rather than assume that country X and country Y differ based on prior studies or based on imputation of preexisting country scores. By contrast, studies such as GLOBE that are often used to provide imputed country scores rather than measure them directly are time-bound and based on specialized samples (i.e., middle managers) and industries, which may not generalize to later data collections or other employee groups. Another contribution of using individual participants' humane orientation data is that it permits us to include countries that are missing from studies such as the GLOBE and for which estimated country scores are missing. This helps to ensure that the body of cross-national research exceeds the boundaries of those defined by GLOBE at present.

## Limitations and Future Directions

A study limitation is that we cannot say that our data are representative of the cultural contexts from which we sampled and thus generalizability remains uncertain. Another limitation of our research is that data are based on self-reported measures based on Likert scales, which might be subject to reference group effects (He et al., 2017; Heine et al., 2002). In contrast to most cross-national work–family research, we assessed humane orientation at the individual level and then aggregated to the country level. This permitted us to assess measurement invariance to ensure our participants shared a common understanding of the constructs we assessed. We were able to establish metric measurement equivalence for all study variables, which is sufficient for the analysis of structural relationships (Jang et al., 2018). To rule out potential reference groups effects, scalar invariance is recommended (He et al., 2017; Van de Vijver & Leung, 1997). We were able to obtain partial scalar invariance (releasing one or two intercepts per measure) for some of our study variables (such as work–family conflict, family-supportive supervisor behavior, and coworker support) but not for all of them. At the individual level, this is less of a concern due to the group/country-level centering of these variables in our hierarchical linear models. However, we were not able to obtain partial scalar invariance for the humane orientation measure, despite having chosen a measure used in previous cross-cultural research (Kabasakal & Bodur, 2004). To further address this study limitation, we conducted robustness checks for our models imputing GLOBE humane orientation scores, which largely confirmed our findings (see Table 8). In addition, the local collaborators conducted pilot studies prior to data collection to enhance the applicability of measures across

the different cultural contexts. Despite these procedures, we need to acknowledge that we cannot entirely rule out some bias due to reference group effects in our study.

Our research was also limited in that we did not investigate all forms of social support and we did not have analogous forms of support across the work and family domains. The various sources of support and different dimensions of support are not interchangeable. Further research is needed that for example, examines if different dimensions of support from coworkers and supervisors (e.g., instrumental vs. emotional) interact with humane orientation in unique ways in relation to work–family experiences. In addition, the results of the present study lead to several additional directions for future cross-cultural work–family research. Our findings underscore the importance of conducting primary cross-cultural research from a wide array of regions. Continued research that includes underrepresented regions of the world, particularly subregions of Africa and the Middle East that we were not able to include is needed.

Our incorporation of fit theory (Fry & Smith, 1987; Nightingale & Toulouse, 1977) opens new avenues for cross-national work–family research. Importantly, our findings underscore the different processes at play between culture and positive versus negative interdependencies between work and family. Multilevel research further analyzing the congruence versus compensation perspectives across national and lower level environments such as workplaces and workgroups may be a fruitful direction for future research.

Humane orientation is a key cultural dimension when examining social support. While we have focused on the key constructs of work–family conflict and positive spillover, we believe that research on the moderating role of humane orientation between support and work–family balance (Casper et al., 2018; Wayne et al., 2017) would also be fruitful. Moreover, because supervisors and family members are gatekeepers in terms of people’s ability to manage the boundaries between work and family according to their preferences (Clark, 2000), it is possible that humane orientation moderates the relationships between work and family supports and the control (Kossek et al., 2012) that individuals have over their boundary management behaviors.

## Conclusion

We contribute to the cross-national work–family literature by investigating humane orientation as a moderator of the relationship between social support and work–family outcomes. Our findings indicate that in situations in which the cultural context generally is lacking in support, it seems particularly important for organizations to encourage supervisor and coworker support for employees’ work–family needs. Moreover, positive spillover can be facilitated through congruence of cultural context and support from work and family domains.

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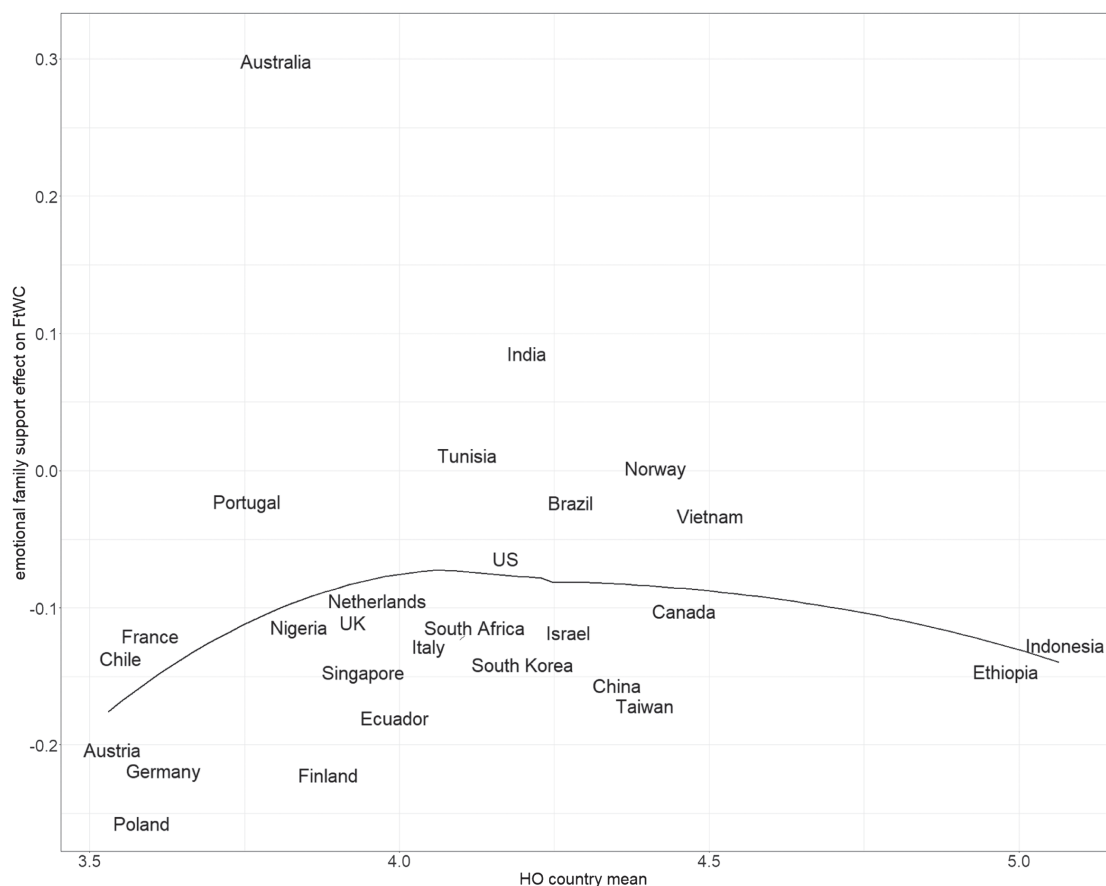
## Appendix A

### Analysis to Determine if Compensation and Congruence Effects Are Mutually Exclusive

Our cross-level analyses yielded four nonsignificant cross-level interactions. To examine whether compensation and congruence effects are mutually exclusive or might be at play at the same time

and therefore limiting the ability of our models to detect an overall moderation effect, we plotted the effects of the respective predictor on the outcome variable by country (see Figures A1–A4). Figures A1

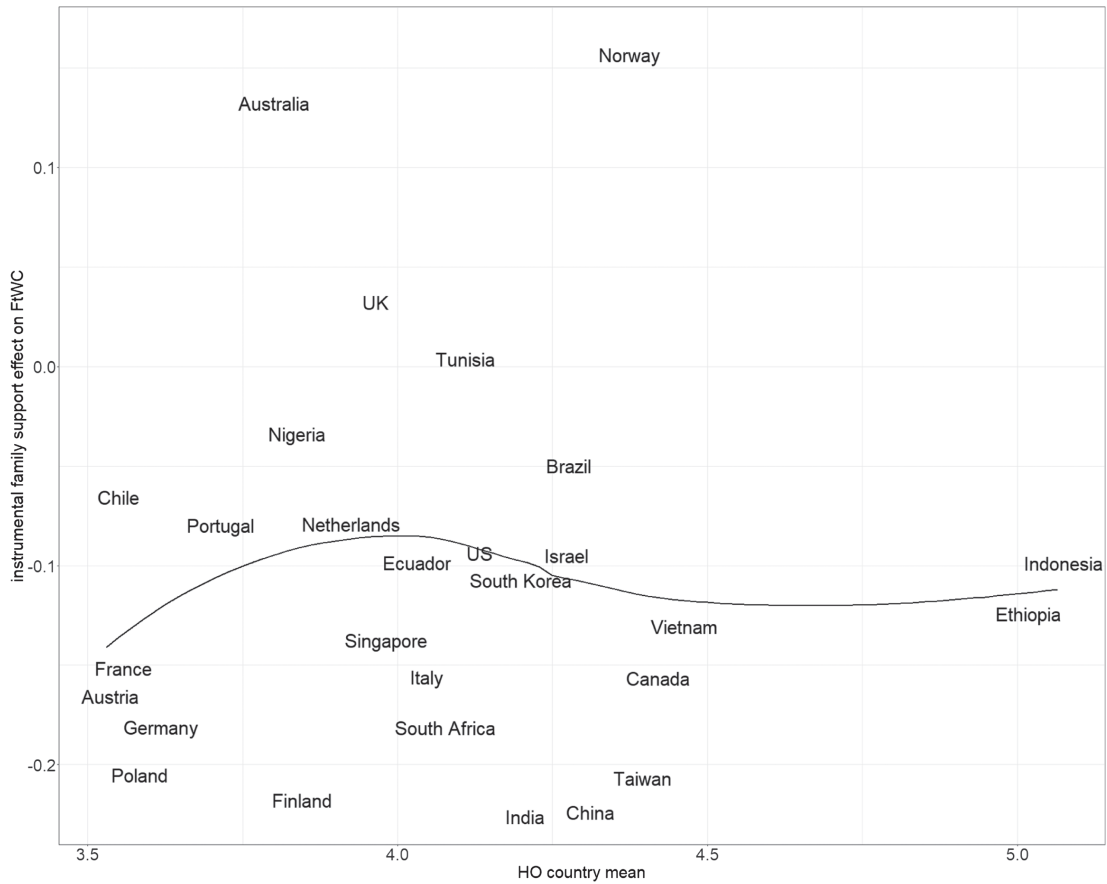
**Figure A1**  
Effect of Emotional Family Support on FtWC by Country



Note. HO = humane orientation; FtWC = family-to-work conflict.

(Appendices continue)

**Figure A2**  
*Effect of Instrumental Family Support on FtWC by Country*



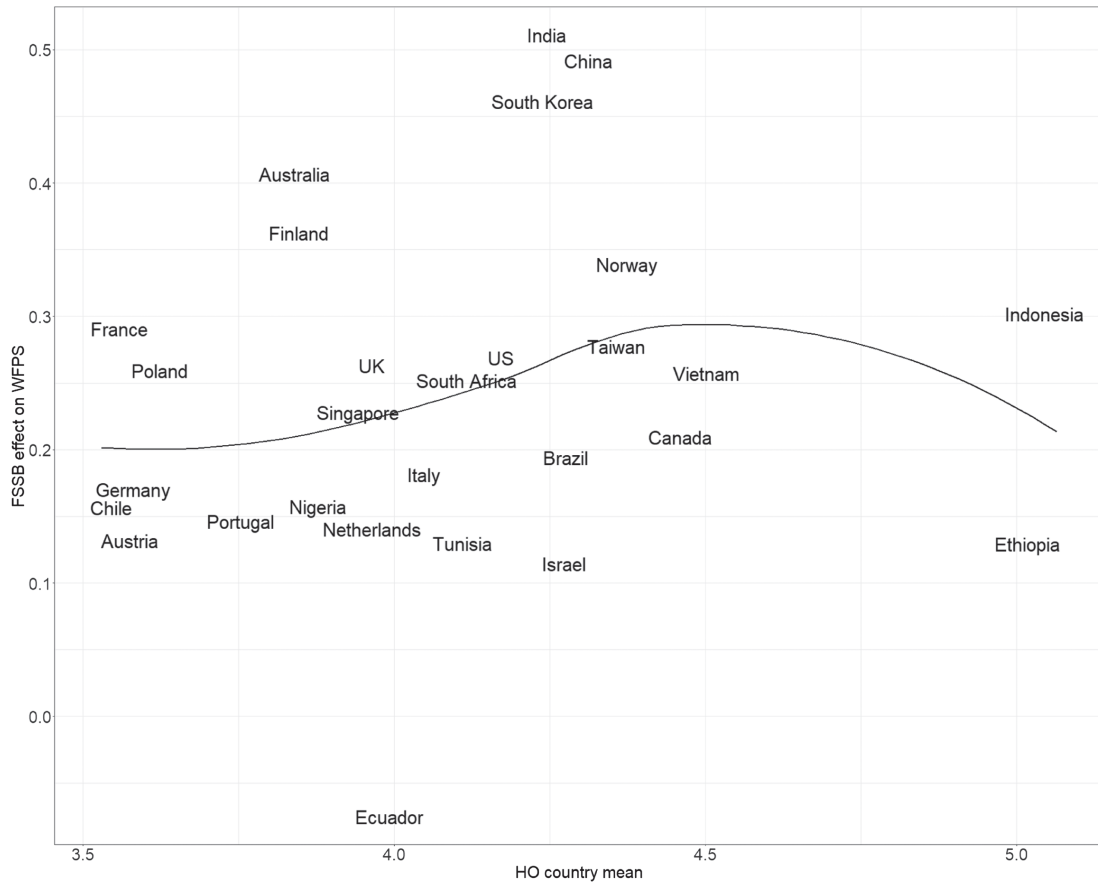
*Note.* HO = humane orientation; FtWC = family-to-work conflict.

and A2 show that with very few exceptions the effects of both types of family support on work-to-family conflict are below or around zero in all countries, independent of whether the countries are higher or lower on humane orientation. Negative effects are indicative of a compensation effect of family support. Plots for positive spillover (Figures A3 and A4) show the opposite pattern with effects for family-supportive supervisory behaviors on work-to-family spillover and

emotional family support on family-to-work spillover largely above or around zero in all countries, irrespective of the country's mean level of humane orientation. Positive effects indicate an enhancing effect of work and family support on positive spillover. Hence, the plots show that either buffering or enhancing effects of support resources are at play, indicating that compensation and congruence mechanisms seem to be mutually exclusive rather than active at the same time.

*(Appendices continue)*

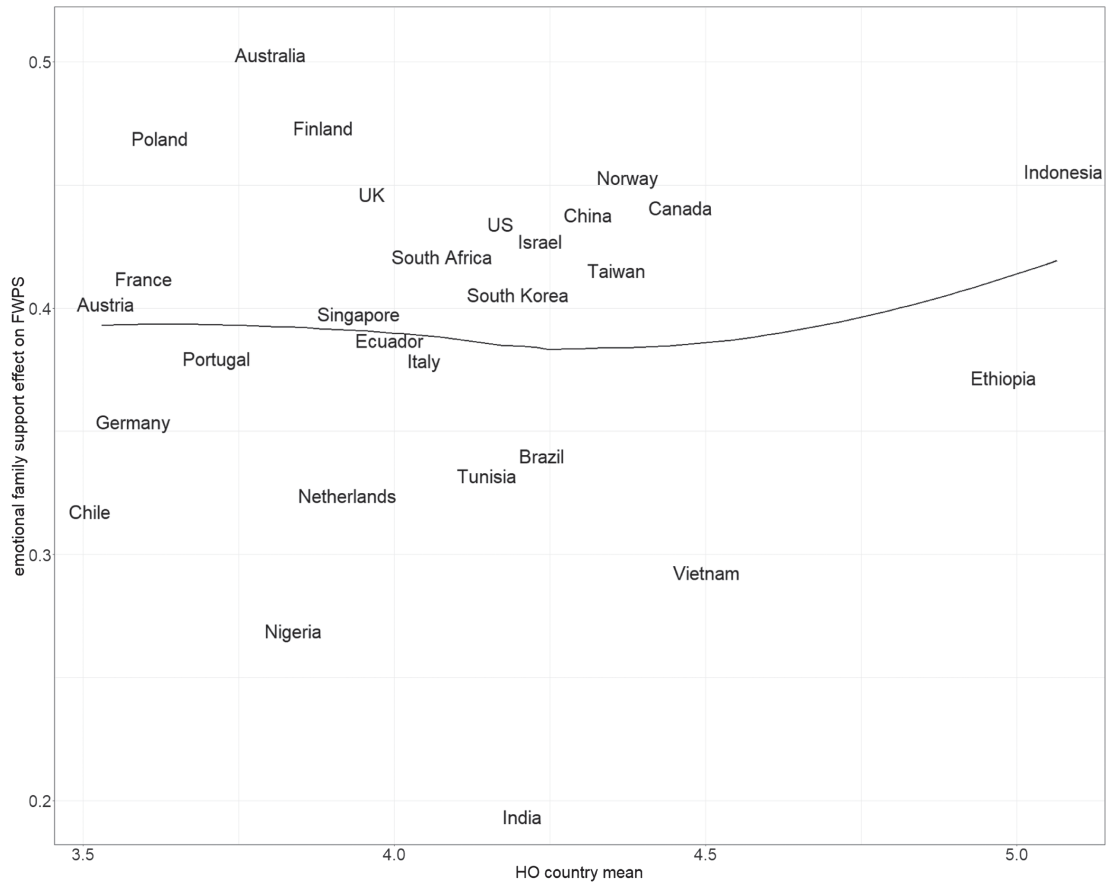
**Figure A3**  
*Effect of FSSB on WFPS by Country*



*Note.* HO = humane orientation; FSSB = family support from supervisor; WFPS = work-to-family positive spillover.

*(Appendices continue)*

**Figure A4**  
*Effect of Emotional Family Support on FWPS by Country*



Note. FWPS = family-to-work positive spillover; HO = humane orientation.

*(Appendices continue)*

## Appendix B

## Analyses Controlling for Nonoriginating Domain Role Support

To determine whether the source of support (work vs. family) matters in the context of humane orientation we ran a series of models in which we included support from the outcome domain (i.e., family support in predicting work-to-family conflict). Models for work-to-family conflict remained significant. Neither form of nonoriginating role support significantly related to work-to-family conflict (see Table B1). Findings for family-to-work conflict also remained the same in terms of significance. Among the nonoriginating support sources, coworker support was significantly and negatively related to family-to-work conflict ( $b = -.08^{**}$ ) whereas support from the supervisor was not (see Table B2). The cross-level interactions with humane orientation did not change for the dependent variables.

**Table B1**  
Supplementary Multilevel Analyses for Work-to-Family Conflict

Variable	Model 1	Model 2	Model 3
Intercept	2.95**	2.95**	2.94**
Level 1			
Gender	-.02	-.03	-.03
Age	-.01*	-.01**	.00
Marital status	-.05*	-.03	-.02
Education	-.01	-.01	.00
Supervisor	.10**	.11**	.11**
No children	.05**	.05**	.05**
FSSB		-.19**	-.18**
COWS		-.13**	-.13**
FS_e		-.02	-.02
FS_i		.00	.00
HO_ind		.00	.00
Level 2			
HO			-.19
Cross-level interactions			
FSSB × HO			.11**
COWS × HO			.09**
Level 1 interactions			
FSSB × HO_ind			.05**
COWS × HO_ind			.00
Deviance	26,202.21	25,418.95	25,348.57
ICC	.06	.07	.06
Var (within)	.74**	.68**	.68**
Var (between)	.05**	.05**	.04**
ΔMVP explained variance <sup>a</sup>	.007	.079	.094

*Note.*  $N = 10,307$  (30 countries); FSSB = family supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_i = instrumental family support; HO\_ind = humane orientation individual level; HO = humane orientation country level; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup>Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).  
\*  $p < .05$ . \*\*  $p < .01$ .

**Table B2**  
Supplementary Multilevel Analyses for Family-to-Work Conflict

Variable	Model 1	Model 2	Model 3
Intercept	2.40**	2.40**	2.39**
Level 1			
Gender	-.04*	-.05**	-.05**
Age	-.01**	-.01**	-.01**
Marital status	-.05*	.01	.01
Education	.00	.00	.00
Supervisor	.00	.01	.01
No children	.04**	.04**	.04**
FSSB		-.01	-.01
COWS		-.08**	-.08**
FS_e		-.06**	-.06**
FS_i		-.09**	-.08**
HO_ind		.05**	.05**
Level 2			
HO			-.02
Cross-level interactions			
FS_e × HO			.05
FS_i × HO			-.01
Level 1 interactions			
FS_e × HO_ind			-.02
FS_i × HO_ind			.01
Deviance	24,122.70	23,836.41	23,854.75
ICC	.10	.11	.11
Var (within)	.60**	.59**	.59**
Var (between)	.07**	.07**	.07**
ΔMVP explained variance <sup>a</sup>	.004	.033	.034

*Note.*  $N = 10,307$  (30 countries); FSSB = family-supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_i = instrumental family support; HO\_ind = humane orientation individual level; HO = humane orientation country level; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup>Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

In the models with work-to-family positive spillover as the outcome, significance levels of direct effects and cross-level interaction effects did not change (see Table B3). Similarly, there was no change in significance for family-to-work positive spillover (see Table B4). Among the non-originating support variables, support from the supervisor and from coworkers yielded small significant negative effects on positive family-to-work positive spillover ( $b = .04^{**}$  for both forms of support at the workplace). As for work-to-family positive spillover, emotional family support was significantly and positively related to work-to-family positive spillover ( $b = .19^{**}$ ) whereas instrumental support was not.

(Appendices continue)

**Table B3**  
Supplemental Analyses for Work-to-Family Positive Spillover

Variable	Model 1	Model 2	Model 3
Intercept	3.16**	3.16**	3.15**
Level 1			
Gender	.04*	.02	.02
Age	.00	.00	.00
Marital status	.03	-.04*	-.04
Education	.03**	.03**	.03**
Supervisor	.12**	.10**	.10**
No children	.02*	.02*	.02**
FSSB		.15**	.15**
COWS		.08**	.08**
FS_e		.19**	.19**
FS_i		.00	.00
HO_ind		.06**	.06**
Level 2			
HO			.21
Cross-level interactions			
FSSB × HO			-.01
COWS × HO			.05*
Level 1 interactions			
FSSB × HO_ind			.01
COWS × HO_ind			.00
Deviance	21,654.03	20,154.03	20,173.88
ICC	.08	.05	.10
Var (within)	.55**	.46**	.46**
Var (between)	.05**	.05**	.05**
ΔMVP explained variance <sup>a</sup>	.012	.137	.146

Note.  $N = 9,687$  (28 countries); FSSB = family-supportive supervisor behavior; COWS = coworker Support; FS\_e = emotional family support; FS\_i = instrumental family support; HO\_ind = humane orientation individual level; HO = humane orientation country level; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup> Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

**Table B4**  
Supplemental Multilevel Analyses for Family-to-Work Positive Spillover

Variable	Model 1	Model 2	Model 3
Intercept	3.57**	3.59**	3.58**
Level 1			
Gender	.03*	.04**	.04**
Age	-.01*	.00	.00
Marital status	.11**	-.03	-.03
Education	.01**	.01	.01
Supervisor	.07**	.06**	.06**
No children	.01	.01	.01
FSSB		.04**	.04**
COWS		.04**	.04**
FS_e		.34**	.34**
FS_i		.08**	.08**
HO_ind		.02**	.02**
Level 2			
HO			.30*
Cross-level interactions			
FS_e × HO			-.02
FS_i × HO			.05*
Level 1 interactions			
FS_e × HO_ind			.02*
FS_i × HO_ind			.00
Deviance	16,723.96	17,458.52	17,470.64
ICC	.11	.15	.13
Var (within)	.47**	.35**	.35**
Var (between)	.06**	.06**	.05**
ΔMVP explained variance <sup>a</sup>	.009	.218	.240

Note.  $N = 9,687$  (28 countries); FSSB = family-supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_i = instrumental family support; HO\_ind = humane orientation individual level; HO = humane orientation country level; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup> Explained variances were computed using the formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

(Appendices continue)



## Appendix C

## Examination of Humane Orientation at the Individual Level

Because humane orientation was measured at the individual level (and then aggregated to the country level), our data allow us to examine underlying psychological mechanisms at the individual level in relation to the country level. Table C1 includes individual-level humane orientation and individual-level interactions in the equation.

Regarding main effects, the effects for country-level humane orientation remained the same as those in our tested models that did not include individual-level humane orientation. Country-level humane orientation and country mean-centered individual-level humane orientation are uncorrelated and explain different mechanisms. However, the main effects of country-level humane orientation

**Table C1**  
*Results of Multilevel Analyses Including Humane Orientation at the Individual Level*

Variable	DV = WtFC	DV = WFPS <sup>a</sup>	DV = FtWC	DV = FWPS <sup>a</sup>
Intercept	2.94**	3.15**	2.40**	3.58**
Level 1				
Gender	-.03	.02	-.05**	.04**
Age	-.01	.00	-.01**	.00
Marital status	-.02	-.04	.01	-.03
Education	.00	.03**	.00	.01
Supervisor	.11**	.10**	.01	.06**
No children	-.05**	.02*	.04**	.00
FSSB	-.18**	.15**	-.01	.04
COWS	-.13**	.08**	-.08**	.04**
FS_e	-.02	.19**	-.06**	.34**
FS_i	.00	.00	-.08**	.08**
HO_ind	.00	.06**	.05**	.02**
Level 2				
HO	-.19	.21	-.02	.29*
Level 1—interactions				
FSSB × HO_ind	.05**	.01		
COWS × HO_ind	.00	.00		
FS_e × HO_ind			.02	.02*
FS_i × HO_ind			.01	.00
Cross-level interactions				
FSSB × HO	.10**	-.01		
COWS × HO	.09*	.05*		
FS_e × HO			.05	-.02
FS_i × HO			-.08	.05*
Deviance	25,348.57	20,173.88	23,854.75	17,470.64
ICC	.05	.12	.11	.13
Var (within)	.68**	.46**	.59**	.35**
Var (between)	.04**	.05**	.07**	.05**
ΔMVP explained variance <sup>b</sup>	.09	.156	.034	.24

*Note.*  $N = 10,307$  (30 countries); DV = dependent variable; WtFC = work-to-family conflict; FtWC = family-to-work conflict; WFPS = work-to-family positive spillover; FWPS = work-to-family positive spillover; FSSB = family-supportive supervisor behavior; COWS = coworker support; FS\_e = emotional family support; FS\_i = instrumental family support; HO = humane orientation country level; HO\_ind = humane orientation individual level; ICC = intraclass correlation coefficient; MVP = multilevel variance partitioning.

<sup>a</sup>  $N = 9,687$  (28 countries). <sup>b</sup> Explained variances using the following formula,  $\text{var}(\hat{Y}_{ij})/(\text{var}(\hat{Y}_{ij}) + \tau_{00} + \sigma^2)$  (LaHuis et al., 2019).

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

(Appendices continue)

differ from the individual-level main effects. Whereas for work-to-family conflict both main effects of humane orientation are nonsignificant, we find a positive main effect of individual-level humane orientation on family-to-work conflict. The country-level main effect of humane orientation on family-to-work conflict is nonsignificant. This means that individuals whose assessment of humane orientation is above the country average report higher levels of family-to-work conflict than do individuals whose assessment of humane orientation is below the country average. In the case of work-to-family positive spillover, we observe a similar effect. Individuals who report humane orientation scores above their society's average humane orientation score report higher levels of positive work-to-family spillover.

Regarding moderation effects, several cross-level interactions remained the same. In addition, we detected two significant moderation effects at the individual level. The significant individual-level interaction for supervisor support on work-to-family conflict

indicates that the negative, buffering relationship of family-supportive supervisor behavior on work-to-family conflict is weaker for individuals who perceive their society's humane orientation as above (vs. below) the average of the country's mean humane orientation score. The significant positive interaction effect of emotional family support on family-to-work positive spillover at the individual level indicates that the positive enhancing effect of emotional support from one's family on positive family-to-work spillover is stronger for individuals who perceive their society's humane orientation score above the country average score. Overall, the pattern of results suggests that the individual level moderating effects act similarly to those observed at the country level.

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