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## National Context, Family Satisfaction, and Fairness in the Division of Household Labor

*This study uses data from married women in 30 nations to examine justice processes involving perceptions of fairness of the division of household labor and satisfaction with family life. Relative deprivation theory suggests that national context—operationalized here as nation-level gender equity—might serve as a comparative referent used by married women when making determinations of the fairness of the division of household labor. Multilevel analyses confirm that the effect of inequalities in the division of household labor on perceptions of fairness is moderated by national context, as is the effect of perceptions of fairness on satisfaction with family life. The effects are strongest in nations with high levels of gender equity, confirming two hypotheses suggested by relative deprivation theory.*

The study of unpaid household labor has become one of the most important areas for research in family sociology. A search of *Web of Science*, for example, identified over 1,000 articles in peer-reviewed journals on the topic in the last 10 years. This high level of interest is not surprising considering that the division of household labor provides an arena in which beliefs about what is normative for wives and for husbands have

real consequences for how married persons spend their time and for the production and reproduction of gender-based inequalities.

There have been three major findings of this body of research. First, gender is by far “the most reliable determinant of time in housework” (Kroska, 2004, p. 906) among heterosexual couples. In general, regardless of income, education, ideology, or extent of paid employment, women tend to do far more domestic labor than their male partners. Even though married men’s contributions to domestic labor more than doubled from 1965 to 1995 (Bianchi, Milkie, Sayer, & Robinson, 2000), married women in most industrialized nations still perform about two thirds of all domestic work.

Second, the kinds of domestic tasks that women and men do most often are gendered. Traditionally “feminine” tasks such as cooking, laundry, and cleaning are overwhelmingly performed by women; traditionally “masculine” tasks such as yard work and auto maintenance tend to be done by men (Gupta, 1999).

Third, despite these pervasive gender-based inequalities in the division of household labor, most women appear relatively unlikely to perceive these inequalities as unfair or inequitable. Previous research (Greenstein, 1996a) suggests that a relative deprivation explanation may account for this seeming inconsistency. The purpose of the current research is to show how relative deprivation theory explains why the effects of inequalities in the division of household labor on perceived fairness and the effects of perceived fairness or justice on family satisfaction are conditional upon national context.

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Relative deprivation theory (Crosby, 1976) makes four crucial assumptions about the nature of justice. First, it is the *subjective evaluation* of outcomes that determines whether one feels unjustly treated. Researchers have often assumed that women necessarily perceive an unequal division of household labor as unfair, but nearly every study of the subject suggests that this is not the case.

Second, individuals must *value* an outcome in order for justice phenomena to be relevant. Third, perceptions of injustice or inequity are the result of *comparison processes*. It is axiomatic that no justice phenomenon can arise in the absence of a stable frame of reference. Fourth, relative deprivation theory suggests that there is a *preference for equity* in relationships, and that when individuals feel they have been unfairly treated they will be motivated to take action to restore equity.

An outcome may be judged to be equitable or fair when it is similar to that of some comparative referent (e.g., another person, a group, past experience, one's own expectations). When an outcome falls short of what is expected, the individual may feel deprived in a relative sense (even though in absolute terms the individual may not be deprived at all). The relative deprivation approach has been quite successful in helping social scientists understand justice processes in families and intimate relationships (Baxter, 2000; Baxter & Western, 1998; Crosby, 1982; Gager, 1998; Greenstein, 1996a; Kluwer, Heesink, & van de Vliert, 2002; Major, 1993; Sanchez, 1994; Voydanoff & Donnelly, 1999).

In many of these studies it was found that the effects of inequalities in the division of household labor on perceptions of fairness were conditional upon the woman's gender ideology. In general, women holding relatively traditional gender ideologies are unlikely to perceive these inequalities as unfair or unjust, regardless of the extent of the inequality. On the other hand, for women holding less traditional (more egalitarian) ideologies, perceptions of fairness are generally affected by the extent of the inequality.

These findings are typically explained (Greenstein, 1996a) as a relative deprivation phenomenon: the result of married women of differing gender ideologies employing differing comparative referents. Married women holding traditional or conservative gender ideologies are more likely to compare themselves to other married women and, finding themselves

in approximately the same situation as other women, are relatively unlikely to see the situation as unjust. Married women holding nontraditional or egalitarian ideologies are more likely to make comparisons to their husbands or to men in general and, as a result, tend to perceive themselves to be unfairly treated.

As confirmation of this explanation, a growing and cumulative body of research has found that the antecedents, consequences, and interpretation of family processes are contingent upon gender ideology. Whether the process is marital quality (Lavee & Katz, 2002), effects of age at marriage on marital stability (Davis & Greenstein, 2004), the amount of housework performed by married men (Greenstein, 1996b), effects of wives' employment on marital stability (Sayer & Bianchi, 2000), or the effects of wife's relative income on likelihood of abuse (Atkinson, Greenstein, & Lang, 2005), researchers have consistently found that family processes differ as a result of wives' and husbands' gender ideologies. The effects of all of these antecedents seem to be conditional upon gender ideology, that is, the effects of given factors differ for women differing in gender ideology because women differing in gender ideology tend to choose different comparative referents.

Up until this point research employing the relative deprivation perspective has focused primarily on microlevel phenomena. For example, married women are often seen as choosing neighbors, friends or coworkers—specific, known individuals—as comparative referents. The literature reviewed above has suggested that the choice of a comparative referent is at least partially a function of one's gender ideology: Traditional women are most likely to compare their outcomes to those of other women but that egalitarian women are as likely to compare themselves to men (especially their husbands) as to women. The "status value" version of equity theory (Anderson, Berger, Zelditch, & Cohen, 1969; Berger, Zelditch, & Anderson, 1972), however, introduced the idea that such comparisons are not limited to a particular other but can also be made to a *generalized* other—a "typical" or "average" woman, all employed women, all men, and so forth. It is this notion that I am using as a springboard to introduce national context as a comparative referent in these processes.

I extend this cumulative body of research to argue that the effects of inequalities in the

division of household labor on perceptions of fairness and the effects of perceptions of fairness on marital quality are situated in national context through this comparison process. Just as differences in gender ideology (at the individual level) have been found to lead women to different choices of comparative referents and consequently to reach different conclusions about the fairness of the division of household labor, national context provides a comparative referent for married women from which they might form their perceptions of justice relevant to the division of household labor. I propose that women not only compare themselves to other individuals when making determinations of fairness or justice but that they also compare themselves to the more generalized conception of the level of support for gender equity in their nation. That is, women who perceive a high level of support for gender equity in their generalized comparative referent—for example, their perception of the beliefs of the people in their nation or society—are more likely to perceive microlevel inequalities as inequities.

The framing of family-related processes within national context is a relatively new approach. Panayotova and Brayfield (1997) found that “so-called liberating policies and structural characteristics did not lead to more progressive ideas about women’s work in Hungary” (p. 649). Diefenbach (2002) studied the impact of spouse’s relative resources on the division of household labor in 24 nations and noted that relative resources (employment status and income) have more effect on the division of household labor in nations with a transitional gender ideology than those with egalitarian or traditional ideologies. In a study of 22 nations Yodanis (2005) found that the division of household labor was more equal in nations where divorce was accepted and practiced. Using data from Great Britain, Sweden, and Norway, Knudsen and Wærness (2008) found that nation-level female empowerment affected the household division of household labor.

#### HYPOTHESES

In each of the studies cited above it was found that individual- and couple-level processes operate differently in different national contexts. What is not always clear in these and similar studies, however, is exactly how national context

is supposed to affect individual- and couple-level processes. With the theoretical literature on relative deprivation and the recent empirical findings on the effects of national context in mind, I argue that the effects of inequalities in the division of household labor on perceptions of fairness and the effects of perceptions of fairness on satisfaction with family life will be strongest in nations with high levels of gender equity and weakest in nations with low levels of gender equity. I make this argument because national context provides a generalized comparative referent that women use as a basis of comparison. Women who find themselves in a national context that is supportive of gender equity will be more likely to invoke justice phenomena over issues of gender equality. Women in nations that are less supportive of gender equity will be less likely to see issues of gender equality as justice phenomena or more likely to accept inequalities based on gender as “fair” or “just.”

Drawing from the theoretical literature on relative deprivation and the above-cited body of empirical literature, I propose two specific hypotheses:

*Hypothesis 1.* The effects of inequalities in the division of household labor on perceptions of fairness will be conditional upon nation-level gender equity. The effects of the division of household labor on perceptions of fairness will be minimal in nations with relatively low levels of gender equity, but strong and positive in nations with high levels of gender equity (i.e., inequalities in the division of household labor will be associated with perceptions of fairness in nations of high gender equity but not in nations of low gender equity).

*Hypothesis 2.* The effects of perceptions of fairness of the division of household labor on self-reported levels of satisfaction with family life will be conditional upon nation-level gender equity. The effects of perceptions of fairness will be strongest in high gender-equity nations (i.e., perceptions of fairness will be strongly associated with family satisfaction in nations of high gender equity).

It is important to note that I expect to find these effects even in the presence of the individual-level comparative referent effects found in earlier studies. Greenstein (1996a), for example, found that married women varying in gender ideology apparently used different comparative referents when making determinations of justice in the division of household labor. I predict that national context will interact

with individual-level characteristics such as division of household labor and perceptions of fairness even when the individual-level comparison processes found in earlier research are taken into account.

## METHOD

### Data

The data for these analyses come from the International Social Survey Programme (ISSP), a cross-national collaboration in which independent institutions replicate survey questions in their own nations (Zentralarchiv für Empirische Sozialforschung, 2004). I used data gathered in 2002 from the 30 ISSP nations (Australia, Austria, Brazil, Bulgaria, Chile, Czech Republic, Denmark, Finland, Flanders, France, Germany—the former East and former West Germany are treated as separate nations for analytic purposes—Hungary, Ireland, Israel, Japan, Latvia, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Slovak Republic, Spain, Sweden, Switzerland, the United Kingdom, and the United States) that participated in the Family and Changing Sex Roles III project and for which the country-level measure of gender equity (see below) was available.

The universe under study here was all currently married women in these 30 nations. Although these data were gathered from individuals (i.e., only one member of each couple was interviewed), questions were asked about the respondent's partner's employment status and household labor. The 30 nations contributed between 88 (East Germany) and 491 cases (France). As might be expected in a cross-national survey of this type, nonresponse rates varied greatly across nations (Klein & Harkness, 2004); for comparison, see Smith (2007) for an extensive discussion of nonresponse procedures in the 2005 ISSP. Exact calculation of nonresponse rates is made problematic by the fact that different nations used different definitions of what constitutes "eligible" and "ineligible" interviews, how "partially completed" interviews are tabulated, and so forth (Klein & Harkness), and, as a result, published nonresponse rates range from a low of 20.3% (France) to a high of 99.2% (Spain) with a total sample mean response rate of approximately 54%. There were 10,115 married women in the 30 nations

who provided information about family income. The total working sample size after elimination of cases with missing data on key variables was 8,805.

### Level 1 Variables

*Household labor.* Two different measures of household labor were employed in the analyses. The first is simply the number of hours per week the respondent reported spending in household labor; the specific item asked, "On average, how many hours a week do you personally spend on household work, not including childcare and leisure time activities?" Respondents were also asked, "And what about your spouse/partner? On average, how many hours a week does she/he personally spend on household work, not including childcare and leisure time activities?" to determine how many hours of household labor the respondent's husband performed. From these two items the wife's proportion of total household labor performed was calculated by dividing the wife's hours spent on household work by the sum of the wife's and husband's hours.

*Satisfaction with family life.* Respondents were asked, "All things considered, how satisfied are you with your family life?" Response choices (and percentages falling in each category) were "Completely satisfied" (18%), "Very satisfied" (39%), "Fairly satisfied" (34%), "Neither satisfied nor dissatisfied" (6%), "Fairly dissatisfied" (2%), "Very dissatisfied" (0.5%), and "Completely dissatisfied" (0.2%). For analytic purposes responses were coded from 1 to 7, with 1 = *Completely dissatisfied* and 7 = *Completely satisfied* (i.e., higher scores indicate higher levels of family satisfaction).

*Perception of fairness of the division of household labor.* Respondents were asked, "Which of the following best applies to the sharing of household work between you and your spouse/partner?" Response choices were "I do much more than my fair share of the household work" (29%), "I do a bit more than my fair share of the household work" (26%), "I do roughly my fair share of the household work" (41%), "I do a bit less than my fair share of the household work" (3%), and "I do much less than my fair share of the household work" (1%). For analytic purposes the responses were coded 1 = *I do much more than my fair share of*

the household work through 5 = *I do much less than my fair share of the household work*; that is, higher scores indicate higher levels of perceived fairness of the division of household labor.

*Gender ideology.* I constructed a measure of gender ideology from six items in ISSP questionnaire. The questions began with the phrase “Do you agree or disagree . . .” (“A working mother can establish just as warm and secure a relationship with her children as a mother who does not work”; “A preschool child is likely to suffer if his or her mother works”; “All in all, family life suffers when the woman has a full-time job”; “A job is all right, but what most women really want is a home and children”; “Being a housewife is just as fulfilling as working for pay”; and “A man’s job is to earn money; a woman’s job is to look after the home and family”) with response categories *strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree*. The response categories were rescaled so that higher responses indicated more egalitarian (i.e., less traditional or less “separate spheres”) ideologies. The six items were summed to produce an index of gender ideology. On this measure, if a respondent had more than one instance of missing data (out of six items), the respondent was dropped from the analysis; if there was only one missing response, the sample mean was substituted for the missing value. The resulting six-item index has a Cronbach’s  $\alpha$  reliability of .74 and is scaled so that higher scores indicate more egalitarian ideologies.

*Family relative income.* Because of problems of comparability of income values cross-nationally, a relative measure was created by dividing the total reported family income by the national mean so that a family whose income was at the national mean had a relative income score of 1, those with incomes twice that of the national mean had a score of 2, those at half the national mean had a score of 0.5, and so on. I then logged this result to take into account the skewed nature of the distribution.

*Employment.* I included a dummy variable indicating whether the husband was employed full-time and dummy variables indicating whether the wife was employed full-time or part-time.

*Education.* Respondent’s education was represented by a dummy variable indicating whether the respondent had a college degree.

*Age.* A second-order effect of age was included in the models because much of this literature (see, e.g., Batalova & Cohen, 2002) has suggested that age has a curvilinear (inverted U) effect on the amount of housework performed.

*Household size.* Because the amount of housework is typically related to the number of residents of a household, household size was included in the model.

### Level 2 Variables

*Gender equity.* The World Economic Forum (Lopez-Claros & Zahidi, 2005) has created a “Global Gender Gap” measure that incorporates measures relevant to women’s economic participation, economic opportunity, political empowerment, educational attainment, and health and well-being. Indicators from official government statistics and qualitative data from the Executive Opinion Survey (Lopez-Claros, Porter, & Schwab, 2005) were used to create a rank on each the five dimensions. The nation’s rank on each of the five dimensions was averaged to produce an index score that potentially ranges from 1 (*least equitable*) to 7 (*most equitable*). For analytic purposes this scale was then transformed so that it ranged from 0 to 1, where 1 was the score assigned to the nation with the highest index score (Sweden, with a raw index score of 5.53) and 0 to the nation with the lowest index score (Mexico, with a raw index score of 3.28).

*GDP.* It is reasonable to expect that at least some of the variability in perceptions of fairness in the division of household labor and in satisfaction with family life might be due to differing economic conditions across nations. To represent this factor I included a logged measure of GDP per capita for 2002 (Central Intelligence Agency, 2008) expressed in thousands of U.S. dollars.

## RESULTS

Table 1 presents individual-level descriptive statistics for the 8,805 respondents and on the nation-level gender equity GDP per capita measures. About two thirds of the husbands and a little over one-third of the wives are employed full-time. The wives average a little less than 46 years of age, with about 16% having completed college. The households averaged about 3.4 members.

Table 1. *Descriptive Statistics for All Variables in Analyses*

Variable	<i>M</i>	<i>SD</i>	Minimum	Maximum
Individual-level (Level 1) variables ( <i>N</i> = 8,805)				
Weekly hours of housework by wife	22.10	15.98	0	95
Weekly hours of housework by husband	7.79	10.04	0	90
Wife's proportion of housework	0.75	0.19	0	1
Perceived fairness of housework (higher scores indicate more fairness)	2.21	0.94	1	5
Satisfaction with family life (higher scores indicate more satisfaction)	5.61	0.99	1	7
Gender ideology (higher scores indicate more egalitarian responses)	18.75	5.10	6	30
Husband employed full-time	66.8%			
Wife employed full-time	37.3%			
Wife employed part-time	17.5%			
Age	45.76	13.62	16	86
Household size	3.41	1.46	2	23
Respondent completed college	15.8%			
Relative family income	1.01	1.04	0	50.42
Nation-level (Level 2) variables ( <i>N</i> = 30)				
Gender equity score (higher scores indicate higher levels of gender equity)	4.36	0.55	3.28	5.53
GDP per capita (US\$1,000)	21.83	8.91	6.60	37.60

Table 2 presents information aggregated at the nation level. The nation-level gender equity scores range from 3.28 (Mexico) to 5.53 (Sweden). Married women in Chile report performing the most hours of housework per week (38.78 hours), whereas women in Norway perform the least (12.22 hours). On a proportional basis, Japanese women do the most housework (89.5%), whereas Polish women do the least (65.3%).

I used two-level hierarchical linear (or multilevel) models (Raudenbush & Bryk, 2002) to study which factors affect wife's perceived fairness of the division of household labor and wife's satisfaction with family life, controlling for other individual-level characteristics (Level 1). As the respondents are nested within nations (Level 2), such models make it possible to take into account the nonindependence of individuals within the sample. Estimation of random coefficients for Level 1 characteristics also allows us to take into account varying effects of those characteristics across nations. On the basis of previous research and theory, I controlled for the nation-level characteristics of gender equity and GDP per capita. Inclusion of nation-level characteristics in the model also allows us to construct cross-level

interactions between Level 1 and Level 2 factors to tell us whether nation-level gender equity affects the slope of any given individual-level characteristic.

Table 3 presents the results of six multilevel models predicting wife's hours of domestic work, wife's share of domestic work, wife's perceptions of injustice in the division of household labor, and wife's satisfaction with family life. All of these models were solved using restricted maximum likelihood estimation. The first two models are presented to allow comparison with two other recent cross-national studies of household labor (Davis & Greenstein, 2004; Fuwa, 2004). All of these models allow for random effects of each of the Level 1 predictors (with the exception of the age-squared variable). Although there is some variation across models, in general the random effects for husband's contributions to household labor, husband's full-time employment, wife's share of household labor, having a college degree, and relative income were statistically significant, suggesting that these effects varied across nations.

Model A predicts wife's hours of domestic labor; all of the terms in the model are statistically significant beyond the .05 level.

Table 2. Descriptive Statistics for Nations (N = 30) for Gender Equity Score, GDP per Capita, and Dependent Variables

Nation	<i>n</i>	GGG (Gender Equity Score)	GDP per Capita US\$1,000	Wife's Weekly Hours of Household Labor	Wife's Share of Household Labor (%)	Perceived Fairness of Division of Household Labor	Satisfaction With Family Life
Australia	289	4.61	27.0	22.66	68.7	2.12	5.66
Austria	349	4.13	27.7	23.73	78.5	1.98	6.02
Brazil	307	4.13	7.6	35.61	84.2	2.25	5.40
Bulgaria	281	4.06	6.6	22.28	71.3	2.49	5.11
Chile	327	3.46	10.0	38.78	81.4	2.22	5.77
Czech Republic	307	4.19	15.3	23.18	73.4	2.03	5.31
Denmark	324	5.27	29.0	13.24	69.4	2.52	5.73
Finland	336	5.19	26.2	12.74	69.2	2.35	5.55
Flanders	268	4.30	29.0	24.46	74.3	1.85	5.55
France	491	4.49	25.7	13.05	81.0	2.09	5.55
Germany (East)	88	4.61	26.6	17.59	70.2	2.22	5.61
Germany (West)	174	4.61	26.6	22.55	75.1	2.08	5.65
Hungary	236	4.19	13.3	29.84	73.8	2.44	5.59
Ireland	275	4.40	30.5	35.00	79.4	2.09	5.95
Israel	293	3.94	19.0	17.78	75.0	2.39	5.78
Japan	299	3.75	28.0	26.80	89.5	2.33	5.61
Latvia	195	4.60	8.3	20.39	65.8	2.47	5.21
Mexico	317	3.28	9.0	28.50	71.2	1.87	5.96
Netherlands	253	4.48	26.9	16.91	75.6	2.00	5.68
New Zealand	264	4.89	20.2	15.08	73.6	2.04	5.75
Norway	353	5.39	31.8	12.22	75.7	2.37	5.62
Poland	324	4.36	9.5	21.64	65.3	2.34	5.54
Portugal	290	4.21	18.0	26.68	83.8	2.48	5.57
Russia	303	4.03	9.3	28.02	68.1	2.31	5.20
Slovak Republic	352	4.28	12.2	22.05	68.8	2.24	5.15
Spain	422	4.13	20.7	32.09	82.4	2.17	5.55
Sweden	210	5.53	25.4	14.79	68.1	2.30	5.76
Switzerland	115	3.97	31.7	20.75	77.6	2.39	5.92
United Kingdom	479	4.75	25.3	13.24	73.3	2.03	5.75
United States	284	4.40	37.6	13.48	71.1	2.14	5.88

Nation-level gender equity has a negative effect on wife's hours of domestic labor; net of the Level 1 factors, wives in nations with higher levels of gender equity tend to perform fewer hours of domestic work. The Level 1 findings are consistent with other literature in this area; non-traditional wives, employed wives, and wives in households with higher relative incomes tend to do less housework, whereas wives whose husbands work full-time, wives who completed college, and wives in larger households tend to do more hours of housework. Wife's age has the characteristic curvilinear effect with the predicted hours of housework per week starting

off relatively low for younger wives, peaking around age 50, then declining.

Model B predicts wife's share of domestic labor. Again, I found that there is a negative effect of nation-level gender equity on wife's share of domestic labor, net of the Level 1 effects. Nontraditional wives, wives who are employed, and wives in households with higher relative incomes tend to do a smaller share of the housework, whereas wives whose husbands are employed full-time and wives who completed college tend to do a larger share. Wife's age has a curvilinear effect similar to that described above, with the highest percentage of housework done by wives around age 50.

Table 3. *Multilevel Models Predicting Wife's Hours of Domestic Work, Wife's Share of Domestic Work, Wife's Perceived Fairness, and Satisfaction With Family Life (N = 8, 805 Level 1 Respondents)*

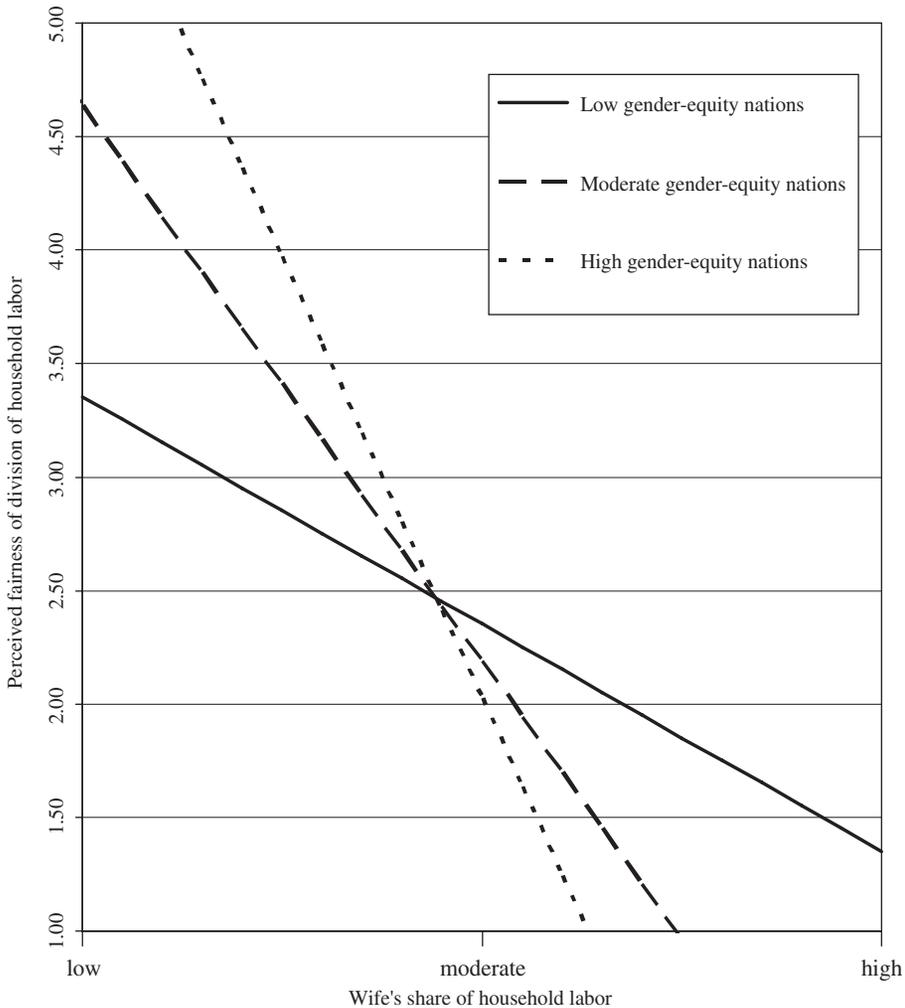
Variable	(A) Wife's Hours of Domestic Work	(B) Wife's Share of Domestic Work	(C) Wife's Perceived Fairness	(D) Wife's Perceived Fairness (Interaction)	(E) Wife's Satisfaction With Family Life	(F) Wife's Satisfaction With Family Life (Interaction)
Intercept	21.79*	0.73*	2.19*	2.19*	5.59*	5.59*
Nation-level (Level 2) predictor						
Gender equity	-8.50*	-0.122*	0.122	-0.226*	-0.297*	-0.338*
Logged GDP per capita (US\$1,000)	-0.85	0.041*	-0.067	-0.050	0.400*	0.399*
Individual-level (Level 1) Predictors						
Wife's share of household labor	—	—	-2.34*	-2.45*	-0.33*	-0.31*
Husband's household labor hours	0.44*	-0.01*	-0.008*	-0.008*	0.00	0.00
Perceived fairness of the division of household labor	—	—	—	—	0.01	0.03
Gender ideology	-0.29*	-0.003*	0.01	0.01	-0.02*	-0.02*
Husband employed full-time (1 = <i>yes</i> )	1.95*	0.03*	0.04	0.04	0.04	0.04
Wife employed full-time (1 = <i>yes</i> )	-7.99*	-0.07*	-0.19*	-0.19*	-0.10*	-0.10*
Wife employed part-time (1 = <i>yes</i> )	-5.78*	-0.04*	-0.10*	-0.10*	0.01	0.01
Respondent completed college (1 = <i>yes</i> )	1.92*	0.02*	-0.00	-0.00	-0.05	-0.06
Age (in years)	0.49*	0.004*	-0.02*	-0.02*	-0.04*	-0.04*
Age-squared	-0.005*	-0.00004*	0.0002*	0.0002*	0.0004*	0.0004*
Household size	1.08*	0.01*	-0.02	-0.02	0.00	0.00
Logged relative household income (1 = <i>at national mean</i> )	-1.35*	-0.01*	0.05*	0.05*	0.14*	0.14*
Level 1 interactions						
Wife's share of household labor × Ideology	—	—	-0.02	-0.01	—	—
Perceived fairness × Ideology	—	—	—	—	0.006*	0.006*
Cross-level interactions						
Gender equity × Wife's share of household labor	—	—	—	-1.93*	—	—
Gender equity × Perceived fairness	—	—	—	—	—	0.121*
Deviance statistic	69,372.2	-11,522.7	21,405.9	21,389.0	23,927.2	23,929.1
Parameters	13	13	15	16	17	18
Intraclass correlation	.076	.050	.445	.445	.481	.481

Models C and D are nested multilevel models examining effects on perceptions of injustice in the division of household labor. In Model C husband's household labor hours has a negative effect on perceptions of injustice. Employed wives are less likely to report feeling unfairly treated. Age again has a curvilinear effect on perceptions of injustice. Not surprisingly, wife's share of household labor has a statistically significant and negative effect on perceived fairness of the division of household labor; women who do a greater share of the household labor are more likely to perceive this inequality as unfair. To capture the relative deprivation

effect found in previous research I included a product-term interaction between wife's share of household labor and gender ideology, but this effect is not statistically significant.

Model D adds a cross-level interaction between nation-level gender equity and individual level wife's share of household labor to Model 3; this effect is statistically significant. The nature of this interaction is that wife's share of household labor has a much steeper slope (i.e., a stronger effect) on perceptions of injustice in nations with higher levels of gender equity. The interaction effect is best visualized in Figure 1.

FIGURE 1. INTERACTIVE EFFECTS OF NATION-LEVEL GENDER EQUITY AND THE DIVISION OF HOUSEHOLD LABOR ON PERCEPTIONS OF FAIRNESS.



Models E and F are nested multilevel models examining effects on wife's satisfaction with family life. In Model E I found no effect of nation-level gender equity (i.e., women in high gender-equity nations are no more or no less likely to be satisfied with their family lives). Wife's share of household labor is negatively related to satisfaction with family life; as wife's share of household labor increases, satisfaction with family life is predicted to decrease. Perceived fairness of the division of household labor is positively associated with satisfaction, as is household income. Wives who are employed full-time have lower levels of satisfaction with family life. Age has a U-shaped association with satisfaction with family life, bottoming out at about age 60. Again, to provide comparability to previous research using a relative deprivation perspective, I included a product-term interaction between perceived fairness of the division of household labor and gender ideology. This effect is statistically significant in both Models E and F and, consistent with previous research, suggests that perceived fairness is more strongly associated with satisfaction with family life as gender ideology becomes more egalitarian.

The final model (Model F) adds a cross-level interaction between nation-level (Level 2) gender equity and individual-level (Level 1) wife's perception of fairness of the division of household labor to Model E; this effect is statistically significant. The nature of this interaction is such that wife's perception of the fairness of the division of household labor has a positive effect on satisfaction with family life in nations with higher levels of gender equity, but a negative effect in nations with lower levels of gender equity. This interaction effect is presented graphically in Figure 2. Note that nation-level gender equity does not seem to be associated with satisfaction with family life for women who perceive that the division of housework is fair. On the other hand, for women who perceive the division of household labor as unfair there is a strong effect of nation-level gender equity: Women in low gender-equity nations tend to express relatively high levels of satisfaction with family life, whereas women in high gender-equity nations tend not to be satisfied with family life.

#### DISCUSSION

This research is focused around two primary hypotheses concerning the effects of national

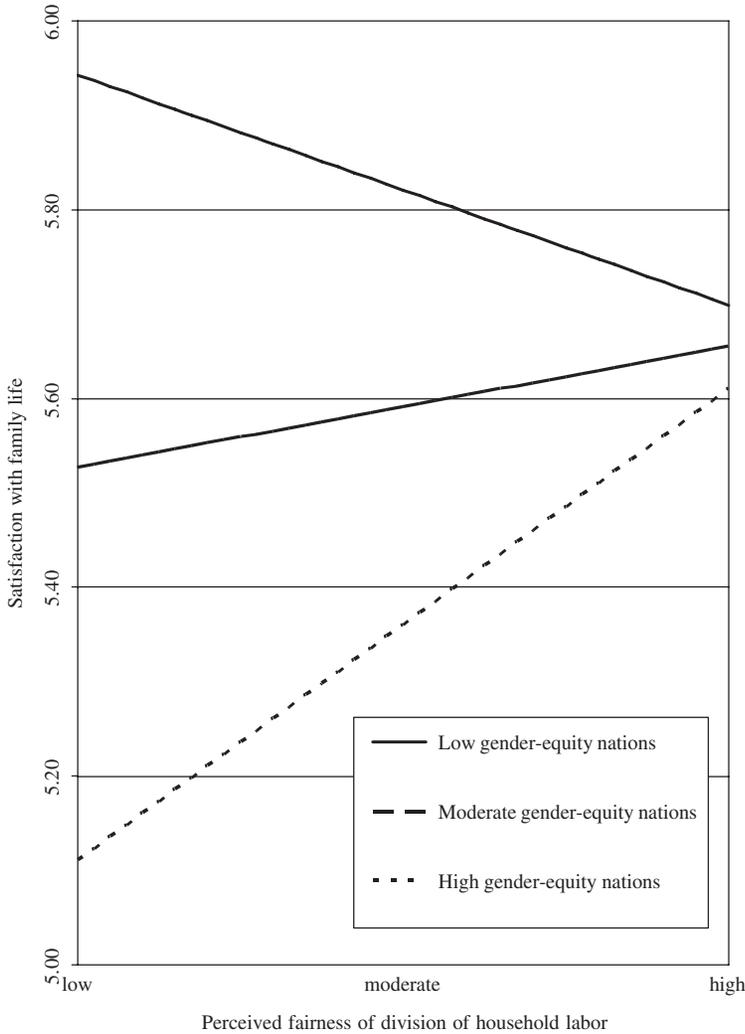
context on perceptions of fairness in the division of household labor and on the effects of such perceptions on satisfaction with family life. The first hypothesis predicted that the effects of inequalities in the division of household labor on perceptions of fairness would be conditional upon nation-level gender equity. The analyses in Model D and depicted in Figure 1 show that the effects of the division of household labor on perceptions of fairness were minimal in nations with relatively low levels of gender equity but strong and positive in nations with high levels of gender equity.

To better understand this conditional effect, consider the differences between a low gender-equity nation (Mexico) and a high gender-equity nation (Sweden). In Mexico, increasing a wife's share of household labor from 25% to 75% is predicted to have a relatively small effect on her perception of fairness, from a predicted score of about 3 (the midpoint of the fairness scale) to about 2.4 (about midway between "I do a bit more than my fair share of the household work" and "I do roughly my fair share of the household work"). In Sweden, on the other hand, the same increase in household labor is predicted to be associated with a shift from a predicted score of 4 ("I do a bit less than my fair share of the household work") to almost 2 ("I do a bit more than my fair share of the household work").

The second hypothesis predicted that the effects of perceptions of fairness of the division of household labor on self-reported levels of satisfaction with family life would be conditional upon nation-level gender equity. The results for Model F in Table 3 and depicted in Figure 2 show that the effects of nation-level gender equity were minimal for women who perceive the division of household labor to be fair but relatively strong for women who perceive the division of household labor to be unfair.

In my presentation of the hypotheses I noted that comparison processes involving national context would be active even in the presence of individual-level comparison processes. In both Models D and F interaction effects were included to capture the individual-level comparison effect noted in previous research. In Model D an interaction term involving wife's share of household labor and wife's gender ideology was included (reflecting the findings from previous research that wives varying in gender ideology use different comparative referents to judge the fairness of the division of household labor); in Model F

FIGURE 2. INTERACTIVE EFFECTS OF NATION-LEVEL GENDER EQUITY AND PERCEIVED FAIRNESS OF THE DIVISION OF HOUSEHOLD LABOR ON SATISFACTION WITH FAMILY LIFE.



the interaction between perceived fairness of the division of household labor and gender ideology was included (reflecting the findings from previous research that inequalities in the division of household labor are perceived differently by wives varying in gender ideology). In both models the national context effect was statistically significant even when these individual-level interactions were included.

One potential problem with this study is the lack of direct information from the husbands of the women interviewed. Without such data I am left to rely on the wives' accounts of the distribution of household labor, which some

studies (Lee, 2005) suggest may be somewhat biased. There are also concerns with the self-report measures and how their validity compares with that of methods such as time diaries, but in the absence of better data I am forced to base my inferences on what is available.

Recall that the GGG measure is composed of indicators of five dimensions of gender equity: women's economic participation, women's economic opportunity, women's political empowerment, women's educational attainment, and women's health and well-being. Given that these analyses have demonstrated the importance of nation-level gender equity for

understanding couple-level behaviors, it might be interesting to know which aspects of gender equity are operative in these processes. Such an investigation, however, must await data that includes a larger sample of nations, because the relatively small number of Level 2 units makes it impractical to estimate a model with separate measures of each of these five dimensions.

Another possible shortcoming of these data is the overrepresentation of industrialized (or “core”) nations. One could reasonably ask whether the effects and relationships noted here would also be present in a sample of developing or “periphery” nations. Unfortunately I am not aware of any source of information on the issues raised in the paper that includes data on developing nations, so this is another issue that will have to await further research.

One anonymous reviewer suggested an intriguing alternative to the models tested here. What if a nation had relatively low levels of gender equity but an institutional structure that socialized women into accepting the argument that being a full-time housewife (and performing nearly all of the domestic labor) is a fulfilling and rewarding life choice? It may well be that wives’ perceptions of fairness would, in such a nation, be similar to those in a nation with high levels of gender equity—but for obviously different reasons. Inspection of the scatterplots of the data (not presented here) suggests at least two such outliers: Japan and Brazil. Both of these nations have a gender equity score below the median but a perceived fairness score above the median. Given that there is very little relationship between nation-level gender equity and perceptions of injustice (Model C in Table 3 shows that there is no main effect of gender equity on perceptions of injustice and the bivariate correlation at the nation level is below .10), however, it is difficult to draw strong inferences from these findings.

What do these findings tell us about the role of national context in understanding perceptions of fairness of the division of household labor and satisfaction with family life? First, it is apparent that national context may serve as a comparative referent for married women when determining their perceptions of fairness. For women in low gender-equity nations, the extent of the inequality of the division of household labor has only a trivial effect on perceptions of fairness, whereas in high gender-equity nations it has a rather substantial effect. Similarly, in

low-gender equity nations perceptions of fairness of the division of household labor have relatively little effect on satisfaction with family life, whereas in high gender-equity nations there is a strong effect of perceptions of fairness on satisfaction with family life.

Second, on the basis of these findings scholars may need to reevaluate previous research on perceptions of fairness and gender ideology. These findings show that there is no statistically significant effect of individual-level gender ideology on perceived fairness when national-level gender equity level is taken into account. This suggests that national context may be a more important determinant of perceptions of fairness than gender ideology, or, more specifically, that national context is a more important comparative referent than is gender ideology.

Finally, these findings also help explain the link between macrolevel gender equity and microlevel behaviors. In multilevel studies such as this one, a key problem is to explain how and why phenomena at the macrolevel might affect individual-level behaviors. In many studies this connection is somewhat vague, but here it is made explicit by applying the principles of relative deprivation theory. The processes linking nation-level gender equity and perceptions of fairness of the division of household labor and linking gender equity and satisfaction with family life were theorized to be the result of the use of national context as a comparative referent by married women to make justice comparisons. The findings of this study provide strong support for that contention.

#### NOTE

The Family and Changing Sex Roles III survey was fielded as part of the International Social Survey Program (ISSP). The data utilized in this article were documented and made available by the Zentralarchiv für Empirische Sozialforschung, Koeln. The data for the ISSP were collected by independent institutions in each country. Neither the original data collectors nor the Zentralarchiv bear any responsibility for the analyses or conclusions presented here. The author thanks Shannon N. Davis for her comments on an earlier draft of this paper.

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