Despite the fact that women have been entering the formal labor force in increasing numbers over the past 40 years in almost all economically developed nations, household work remains largely women's work (Brewster and Rindfuss 2000; Fuwa 2004). Even though women's hours spent on chores have declined in response to their increasing employment, men's hours have only risen slightly (Robinson and Godbey 1997). A considerable literature has developed on the gender division of household labor to explain why men have not contributed more to housework (see Coltrane 2000 for review). Among the many theories advanced, two consistent explanations have emerged: economic exchange and gender ideology. Economic exchange theories assume that the division of household labor is a product of a rational decision making process between two individuals, based on their relative resources and constraints (Blood and Wolfe 1960; Becker 1991). Gender ideology theories assert that the division of household labor is a product of the social norms surrounding gender roles, and that doing housework is a predominant way people perform expected gender identities (Ferree 1990; Hochschild 1989). Therefore, the division of household labor is embedded in gendered institutions and symbolic roles for men and women that potentially can vary between cultural contexts, such as nations.

This paper compares the gender division of household labor in the United States and Japan to test if economic exchange and gender ideology theories operate equivalently in both contexts. Japan and the U.S. provide an engaging comparison for this study because both have undergone similar trends of industrialization, urbanization, and other modernization forces, vet each country retains a unique cultural history with respect to the division of household labor (Mason et al 1998). Previous work argues that the traditional gender division of work is more strongly enforced and encouraged in Japan than in the U.S.; the foundation for this argument comes from Japan's roots in Confucian ideology, patrilineal kinship ties, and approval of the housewife role, compared to the American emphasis on individualism, bilateral families, and low public esteem given to housewives (Kamo 1994). As a consequence, gender ideology in Japan is expected to play a stronger role in determining the division of household labor, and economic exchange a weaker role than in the U.S. Despite the theoretical importance of gender ideology, little attention has been given to the measurement of this concept or to issues of endogeneity with division of household labor and other variables that are measured concurrently with gender role attitudes. This paper employs a multi-group analysis using structural equations modeling techniques that allow more careful measurement of gender ideology as a latent variable, provide controls for endogeneity bias by including gender ideology as a mediating rather than a purely

exogenous variable, and permit formal testing for equivalence of the models between the U.S. and Japan.

The data for this paper come from the 2002 International Social Survey Programme (ISSP) module "Family and Changing Gender Roles III." The ISSP is a centralized effort among 39 countries to administer a set of questions on a specific topic every year in each country's equivalent of the General Social Survey. The questionnaire was originally drafted in British English and then translated into Japanese by a government translation bureau. The surveys were conducted by different research teams but shared similar designs; he samples from the U.S. and Japan are both representative of the non-institutionalized national population over 18 years old. I select only the respondents currently living with a partner at the time of the survey. My final sample includes 1253 respondents – 589 from the U.S. and 664 from Japan. These data were released in November 2004; previous cross-national work uses surveys from the mid-1990s, so this paper utilizes the most up-to-date data available.

The division of household labor is measured by a series of questions on who does five routine and typically female-typed household chores – doing the laundry, caring for sick family members, shopping for groceries, doing the household cleaning, and preparing the meals. Each question is a measure of relative contribution of household labor, from "always me" to "always my spouse/partner." These responses are recoded so that the five point scale ranges from the woman always does the chore (1) to the man always does the chore (5). The codes are summed for each respondent and divided by the number of questions answered, providing a new scale from 1 to 5 on the average division of household labor across all the chores. Table 1 presents descriptive statistics for the division of household labor variable between the two countries.

Table 1. Descriptive Statistics for Division
Of Household Labor in U.S. and Japan.

Statistic	U.S.	Japan
Mean	2.40	1.71
Standard Deviation	0.76	0.69
N	589	664

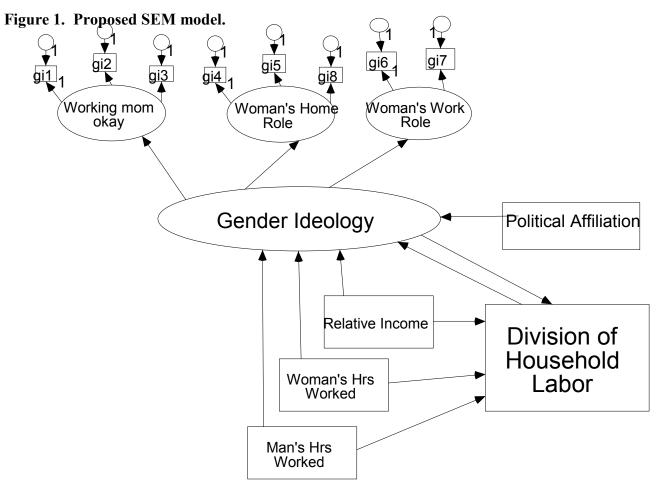
It is already apparent that U.S. men do more housework than Japanese men, and that there is slightly less variance in the relative contributions to housework in Japan. Most of the distribution of this averaged division of household labor measure falls between the woman performing all of the housework and an equal division between spouses; few husbands are doing

more housework than their wives. The Family and Changing Gender Roles module also provides much richer measures of gender ideology than other surveys, with a series of eight attitudinal items. A previous paper ("Gender Ideology in the U.S. and Japan – Cross-National Measurement Equivalence," presented at the 2006 Meetings of the American Sociological Association) established a factor structure for the gender ideology items that is equivalent in both countries. For the economic exchange factors, time spent in paid work is included for both partners, as is a measure of relative income.

Structural equations modeling (SEM) techniques will be used to estimate the models for this paper. SEM provides a number of important methodological advantages over the singleequation regression studies that currently dominate the quantitative literature on division of household labor (see Bollen 1989). The first major advantage of SEM is that it allows the estimation of latent variables to better connect complex theoretical concepts with empirical measurement, including taking account of measurement error present in the observed variables. My proposed model makes gender ideology a latent variable with three dimensions that are measured by the series of eight gender role items. Second, the full structural model also makes it possible to estimate a reciprocal relationship between gender ideology and division of household labor. This possibility of reverse causation is a problem that has been acknowledged but largely ignored in past research; in the absence of longitudinal data to sort out temporal priority, the SEM cross-section model provides estimates for both directions of causation. Third, the response to the gender ideology statements is likely to be influenced by the respondent's current income and labor force participation, so gender ideology is explicitly modeled as an intervening rather than an exogenous variable in the model that predicts the division of household labor (see Figure 1 for proposed model).

Finally, multigroup analysis within the SEM framework allows formal testing of differences between Japan and the U.S. Instead of relying on ad hoc arguments that the measures and models are not equal across contexts, multigroup analysis permits the systematic testing for increasingly rigorous levels of equivalence between the two countries. I will first test for structural equivalence to determine if the proposed structure of the model fits equally well in both contexts. I predict that the structure of the model will be invariant. Even though economic exchange theories and gender ideology theories are predicted to differ between the countries in relative strength, the same theoretical processes are at work in both contexts – I do not argue that Japanese couples completely avoid bargaining over who does the housework, or that American

couples' decisions are independent of gender ideologies. If structural equivalence is supported, it is possible to test the equivalence of coefficients and variances for the economic exchange and gender ideology variables. I predict that these will differ, with the expectation of larger effects for gender ideology in Japan and larger effects for economic exchange in the U.S.



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