



# Dyadic Associations Between Division of Household Labor and Marital Satisfaction Among Chinese Married Couples

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**Abstract.** In the study with a sample of heterosexual couples living in China (N = 409), husbands and wives reported their division of household labor (i.e., domestic chores contribution rate and household economy contribution rate) and marital satisfaction. The results indicated a partial gender effect within the division of household labor and marital satisfaction. There is a gender effect on household economic contribution rate, but not on domestic chores contribution rate. These findings result in the comprehension of the impact of a partner's division of household labor on marital satisfaction within Chinese married couples.

**Keywords:** Numerical analysis, Mathematical models, Big Data analysis, Game theory, Psychology

## 1 Introduction

There exists a correlation between the division of household labor and marital satisfaction has become a focal point in the field of family studies [1]. With the increasing employment rate of wives, the traditional gendered division of household labor (men working outside, women working inside) may change. The researchers found that alterations in the contributions of wives and husbands to household economics and domestic chores also yielded different effects on marital satisfaction [2].

This study focused on investigating the role of the division of household labor (e.g., domestic chores contribution rate and household economy contribution rate) on the spouses' marital satisfaction. Previous studies indicated that the impact of the division of household labor on marital satisfaction has been performed among husbands and wives, respectively [3]. By using a dyadic design, this study explored the data by employing the actor-partner interdependence model [4]. Moreover, the approach is beneficial for examining how each spouse's evaluation of the division of household labor

not only impacts their marital satisfaction but also influences the marital satisfaction of their partner.

In addition, this design was beneficial for exploring how the wives' and husbands' assessments of the division of household labor associate with the spouses' marital satisfaction. Data analysis was conducted on the basis of the actor-partner interdependence model (APIM) [5]. In the marital relationship, husband and wife constitute a dyadic interactive partnership, where individual characteristics have the potential to affect not only their own marital satisfaction (actor effect) but also influence the marital satisfaction of their spouse (partner effect). As shown in the APIM, variables which represent that both couples are involved in the analysis, exhibiting potential reciprocity within the marriage.

This study proposed the following three hypotheses:

1. We hypothesized that within each couple, a lower assessment of one's contribution in domestic labor would be related to higher levels of marital satisfaction for individual and spouse.
2. It could be hypothesized that regarding each individual, husbands' and wives' higher assessment of one's contribution in economic income would show a relationship to the marital satisfaction.
3. We hypothesized that there are similar levels of marital satisfaction between husbands and wives are similar and positively correlated.

## 2 Methods

### 2.1 Participants

The participants were 409 heterosexual couples living in China (for descriptive statistics, Table 1). Averagely, the couples were married for 7.55 years ( $SD = 7.86$ ) and had 0.99 children ( $SD = 0.66$ ). To examine reciprocal influences between partners, the two members of each couple were involved in the study. Participants' average age was 34.68 ( $SD = 8.45$ ) for husbands and 33.35 ( $SD = 8.03$ ) for wives. The level of wives' education was shown to be similar to that of their husbands (81.7% of wives and 80.9% of husbands had attained a junior college degree or above). In addition, the wives reported the annual household income varied; 39.6% reported less than 150,000 RMB, 42.8% reported 150,000 RMB to 300,000 RMB, and 17.6% reported more than 310,000 RMB [6].

Participants were informed of the aim of this work and responded to the survey questions voluntarily. Then, participants completed online questionnaires distributed on Wechat, and were arranged to provide a link to an online questionnaire for their partners. Then, participant anonymity was guaranteed, and steps were used to safeguard the confidentiality of their responses (e.g., respondents were directed to complete the questionnaire in private, refrain from discussing it with their spouse, and submit it directly). In addition, all the respondents provided signed informed consent [7].

## 2.2 Measures

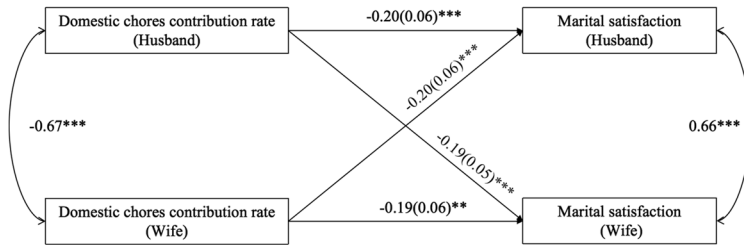
Division of household labor. Division of household labor was measured in the following two domains: domestic chores contribution rate (1 item; e.g. the surveys asked participants, “the percentage of housework responsibility they have taken in their marriage.”) and household economy contribution rate (1 item; e.g. respondents were required to indicate “the percentage of household financial responsibility they have taken in their marriage”) [8]. Therefore, a lower score signifies a greater portion belonging to the partnership for both spouses, while a higher score suggests a larger share held individually.

Marital satisfaction. Marital Satisfaction Scale of the subscale of the Enrich Marital Inventory was used to measure marital satisfaction [9]. The Marital Satisfaction Scale requires respondents indicating their level of agreement or disagreement with ten statements pertaining to marital relationship on a five-point scale, within the range from 1 (strongly disagree) to 5 (strongly agree) [10]. Besides, a sample item is, ‘I am greatly pleased with the mutual responsibilities that both partners undertake within the marriage.’ Based on Cronbach’s alpha, the internal consistency of the Marital Satisfaction Scale was 0.88 for husbands while 0.89 for wives [11].

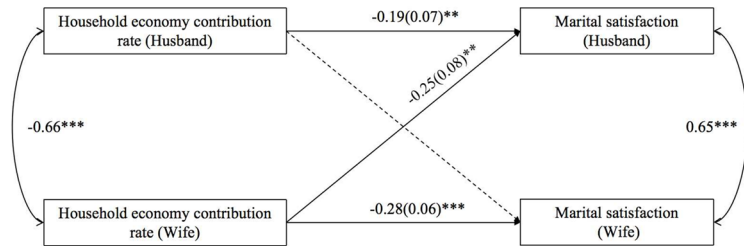
**Table 1.** Correlations and means (SD) for the study variables.

	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1 Domestic chores contribution rate (Husband)	0.43	0.19	-					
2 Domestic chores contribution rate (wife)	0.59	0.19	-0.67***	-				
3 Household economy contribution rate (husband)	0.63	0.14	-0.23***	0.28***	-			
4 Household economy contribution rate (wife)	0.40	0.13	0.34***	-0.19***	-0.66***	-		
5 Marital satisfaction (husband)	4.14	0.64	-0.05	-0.09	-0.04	-0.11*	-	
6 Marital satisfaction (wife)	4.03	0.69	-0.05	-0.11*	0.06	-0.19***	0.68***	-

Note: N = 409. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$



**Fig. 1.** APIM for the relationship between domestic chores contribution rate and marital satisfaction.



**Fig. 2.** APIM for the relationship between household economy contribution rate and marital satisfaction.

### 3 Analysis

Table 1 displays the means (SD) and associations for the study variables of husbands and wives in the model. With the purpose of avoiding cluttering, correlations with sociodemographic variables are not presented.

#### 3.1 Domestic Chores Contribution Rate and Marital Satisfaction

The research model demonstrated excellent fit to the data:  $\chi^2(5) = 5.555, p = 0.352, CFI = 0.998, TLI = 0.996, RMSEA = 0.016$  (90% CI [0.000, 0.072]),  $SRMR = 0.022$ . We constrained the two-actor and two-partner effects as equal, finding no obvious difference between this model and the previous one [12]. Then, this study focused on examining the new model where men and women were set as indistinguishable.

The second hypothesis revealed negative associations between the contributions in rate of domestic labor as evaluated through a spouse and their marital satisfaction. Figure 1 showed the final results that the two-actor associations between domestic chores contribution rate and marital satisfaction were of significance ( $b = -0.20, p < .001; b = -0.19, p < .01$ ), as well as the two-partner associations ( $b = -0.20, p < .001; b = -0.19, p < .001$ ). This indicated that both husbands' and wives' patterns in associations

between domestic [13] chores contribution rate and the marital satisfaction were between the actor-oriented and couple-oriented pattern. As a result, the second hypothesis of the study was verified.

The direct impacts of wives' education demographic variables on the couples' marital satisfaction were of significance [14].

### 3.2 Household Economy Contribution Rate and Marital Satisfaction

When household economy contribution rate served as the independent variable, the model fit the data well,  $\chi^2(6) = 14.709$ ,  $p = 0.022$ , CFI = 0.972, TLI = 0.939, RMSEA = 0.060 (90% CI [0.021, 0.099]), SRMR = 0.036. To investigate the impact of gender on these results, a freely estimated model was compared against a constrained model. The results indicate that husbands and wives are distinguishable in terms of the household economic contribution rate model. Therefore, we will maintain the freely model as the research model [15].

In this model (Figure 2), the wife's absolute income, as a demographic control variable, directly influences marital satisfaction.

Although there was a partial discrepancy in the significance of the data between husbands and wives, our findings indicate that marital satisfaction is similar for both spouses. Thus, the third hypothesis of the study demonstrated that husbands' and wives' assessments of the division of household labor exerted similar impacts on the husbands' and wives' marital satisfaction.

## 4 Conclusion

To conclude, this study strengthened the understanding of family and marriage relationship by exploring the correlation between the couples' subjective perception of the division of household labor (i.e., domestic chores contribution rate and household economy contribution rate) and marital satisfaction. In terms of couples, a reduction in the contribution rate of domestic chores has been demonstrated to positively affect the marital satisfaction of both partners. However, a decrease in household economy contribution rate is linked to increased levels of marital satisfaction for the spouses. Based on the actor-partner interdependence model, this study demonstrated that the perceptions of the division of household labor by an individual and their spouse influence the marital satisfaction of both spouses. We indicated that the marital satisfaction of each spouse is dependent not only on their evaluation of the division of household labor but also on the other spouse. Moreover, this finding enhances our comprehension of the intricate interaction processes among family and marriage.

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