



Asian Marriage Migrant Women's Labor Market Participation: Korean Husbands' Egalitarian Gender Role Attitudes and Resources

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Abstract

This study aims to analyze Asian marriage migrant women's participation in the labor market, focusing on the case of Korean husbands in Korea, who have an interaction effect between resources and couple's gender role attitudes. Data on 4,610 couples consisting of Asian marriage migrant women and Korean husbands were extracted from the Survey on the Actual Conditions of Multicultural Families (2018). Logistic regression models and average marginal effects were tested. The results indicated that Asian marriage migrant women with high-income husbands who believe in gender egalitarianism have a negative impact on labor market participation, including the interaction effect of resources and gender role attitudes. The findings indicate that traditional gender divisions of labor are deeply rooted among Asian marriage migrant women and Korean husbands.

Keywords Asian marriage migrant women · Labor market participation · Egalitarian gender role attitudes · Husband's resources

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Introduction

For many years, Koreans have taken their ethnic and racially homogeneous society for granted (Lim, 2012). In the 2000s, the number of marriage migrant women (hereafter MMW)¹ has increased rapidly with the acceleration of Korea's economic growth (Kim & Kiley, 2016). There are two key reasons for the increasing number of immigrants entering Korea: employment opportunities and international marriage institutions (Yang, 2011). In the latter case, the Korean government has enacted local ordinances to support international marriages and provided partial financial assistance for bearing the cost of such marriages (Park, 2020).

In Korea, the majority of MMW are from Asia country. Asian MMW in Korea are known to be oppressed by patriarchal cultures, such as birth tools. Asian MMW in Korea have been referred to as victims of international marriage policy failure (regarding international marriage support for rural bachelors). The Korean government is partially responsible for driving this phenomenon (Kim, 2018; Kim et al., 2015) in its quest for solving Korea's societal problems, such as the decline in birth rates in an aged society and the scarcity of brides in rural areas.

The most serious issue is that Asian MMW are viewed by their parents-in-law and husbands as commodities that can be purchased with money. The cost of international marriage is approximately 13 million Korean won, leading many Korean husbands to incur debts or take out bank loans; this situation is referred to as a bride-order marriage.

From the beginning, the institution of international marriage was accepted as a tool for the low marriage rate in Korea, and the gendered division of labor was forced upon women from such marriages. The primary role of the Asian MMW is taking charge of household chores and child-rearing. The gender differentiation of women being wives, daughters-in-law, and mothers rather than independent individual women is emphasized (Jang, 2022; Lee, 2021).

Unfortunately, 31.9% of MMW face financial problems (Korea Statistics, 2015) and are susceptible to poverty or low household income (Kim et al., 2015). In Korea, Asian MMW informants reported an average age gap of approximately 10 years between themselves and their Korean husbands (Kim et al., 2015). When their Korean husbands retire, Asian MMW are expected to be employed so that they can bear the financial responsibility for other household members (Kim & Choi, 2018). Furthermore, from the perspective of Asian MMW, employment is important in terms of self-realization. In addition to its economic significance, Asian MMW's participation in the labor market has contributed to the social integration of immigrants and secondary social adaptation as immigrants (Kim & Choi, 2018).

Gender role attitudes in Korea, although still influenced by traditional beliefs regarding women's domestic roles, are progressing towards egalitarianism (Yoon, 2023). Based on traditional gender roles, there is a clear division of labor by gender. Husbands perform paid work as primary financial supporters, while wives perform child-rearing

¹ Since the majority of MMW (94%) in this study are composed of Asian MMW, the unit of analysis in the study was set as Asian MMW. They are often exposed to issues such as arranged marriages and domestic violence.

and household chores. By contrast, individuals with egalitarian attitudes support a more equal share of housework between husbands and wives and devote more time and energy to labor force participation (Stam et al., 2014; Wang, 2019). In the past, women's labor market participation was determined solely by economic utility. Recently, it has been influenced not only by economic utility but also by the relationship with the couple's gender role attitudes (Khoudja & Fleischmann, 2017, 2018). Economic utility theory relates to two contradictory perspectives. Household specialization theory explains the negative effect on women's labor participation (Becker, 1991; Blau et al., 2014; Shafer, 2011), whereas social capital theory mostly supports the positive effect on women's labor participation (Bröckel, 2018; Bröckel et al., 2015; Van Tubergen, 2008). In addition, women's decision to engage in the labor market or undertake all household duties is affected by not only gender roles but also their husbands' economic resources (Khoudja & Platt, 2018). For example, husbands' gender role attitudes may influence whether they utilize their resources to aid their wives in finding work or discourage their ambitions. Husbands' high incomes may be used to outsource childcare and domestic work, enabling family to devote more time and effort to external jobs (Bröckel, 2018).

Previous studies have separately examined the effects of gender roles and husbands' resources (e.g., income, education level, and age) on wives' labor market participation attitudes (Brekke, 2013; Jacob & Kleinert, 2014; Lee et al., 2008; Verbakel & Graaf, 2009). To date, several studies have explored the phenomena of the husbands' resources and gender roles attitudes (or gender division). In patriarchal Korean society, men's resources and gender role attitudes are likely to be combined. However, a few studies have considered the interaction effect between husbands' resources and gender role attitudes (Khoudja & Fleischmann, 2017, 2018). Asian MMW do not have the same power as their husbands. Thus, Asian MMW who are impacted by intersectionality (i.e., gender and nationality) may be easily subject to Korea's patriarchal culture (Jang, 2022; Lee, 2021).

This study investigates the interaction effect between couples' gender role attitudes and Korean husbands' resources on the labor market participation of Asian MMW.

In this context, this study conducted two empirical tests.

First, we investigated whether the gender role attitudes of intermarried couples would significantly affect Asian MMW's labor market participation in Korea.

Second, we investigated whether the interaction between couples' gender role attitudes and Korean husbands' resources affects Asian MMW's labor market participation.

Theoretical Background

The Main Effects of Intermarried Couples' Gender Role Attitudes

Gender role attitudes are beliefs related to behaviors, responsibilities, and activities that are considered appropriate for women and men (Eagly & Kite, 1987). Generally, women who believe in more traditional gender roles are more involved in childcare and domestic labor duties, which decrease their opportunities and

confidence in labor market activities (Alesina & Giuliano, 2010; Cunningham, 2008; Fortin, 2005; Rogers & Amato, 2000; Stam et al., 2014; Stickney & Konrad, 2007).

However, women with egalitarian gender role attitudes have an equal share of household tasks and a more positive attitude toward labor market participation (Berridge et al., 2009). Egalitarian gender roles emphasize the inclusion of men in household responsibilities and women in paid work, giving equal importance to their careers and financial contributions to their households.

The gender norms of migrants may exacerbate the effect of their ethnic background when they migrate (Blau, 2015), which can have a significant impact on women's willingness to join the labor force when settling in a new country (Koh, 2019; Schieckoff & Diehl, 2021).

Asian women immigrants generally adhere to traditional gender role attitudes and demonstrate little participation in the labor market of the host country's labor market (Breidahl & Larsen, 2016; Frank & Hou, 2016). In Korea, most MMW originate from Asia, and the more egalitarian their gender role attitudes are, the greater the rate of their labor market participation (Koh, 2019).

Thus, following the previous literature, we hypothesized that:

Hypothesis 1 *Asian MMW with egalitarian gender role attitudes are more likely to participate in the labor market.*

Furthermore, if women experience conflict when deciding between their labor force participation and their husbands' traditional gender role attitudes, they might abandon their careers, despite having high human capital, to minimize disagreement with their husbands and destabilization of their families (Galván, 2022; McRae, 2003). In other words, MMW is influenced by husbands' attitudes toward gender roles (Huh, 2018). For instance, a study on migrant women in the Netherlands revealed that partners' traditional gender role attitudes were negatively associated with their labor market participation (Khoudja & Fleischmann, 2017). In Korea, research conducted on native Korean women indicates that husbands' traditional gender roles negatively affect women's labor market participation (Baek et al., 2022; Gwak & Choi, 2015).

Based on previous studies, we posit that:

Hypothesis 2 *Asian MMW whose husbands display egalitarian gender role attitudes are more likely to participate in the labor market.*

Interaction Effects of Couples' Gender Role Attitudes and Husbands' Resources

The relationship between husbands' gender role attitudes and wives' labor market participation is often confounded by other factors, such as husbands' resources (Abendroth, 2014; Khoudja & Fleischmann, 2017, 2018). Two main theories explain the impact of husbands' resources on wives' labor market participation; however, these explanations are contradictory.

Household specialization theory extends the human capital theory by changing the unit of analysis from the individual to the family (Becker, 1991; Blau

et al., 2014; Shafer, 2011). According to this theory, couples are expected to combine their resources to increase household utility rather than individual utility (Becker, 1991). This theory suggests that the most efficient method for optimizing household economic benefits is to separate unpaid and paid work between spouses (Becker, 1985, 1991). The decision to specialize in an area is determined by comparing each person's productivity in each area (Pepin et al., 2018). Wives often have fewer valuable resources such as income and less powerful bargaining positions, resulting in their specialization in domestic work (Becker, 1991). Thus, wives' labor market participation is negatively influenced by husbands' resources. Empirical findings from several previous studies on immigrant women support this theory (Basu, 2017; Khoudja & Fleischmann, 2017).

Conversely, the social capital theory indicates that husbands' labor market resources positively influence wives' labor market performance (Bernardi, 1999; van Tubergen, 2008). There are numerous definitions of social capital; however, it is generally defined as an individual's societal network through which all resources can be obtained (Coleman, 1990; Lancee, 2010). Recent studies indicate that the negative impact of husbands' resources on wives' labor market participation diminishes (Bröckel, 2018; Bröckel et al., 2015; Van Tubergen, 2008). Instead, there is a stronger tendency for husbands' resources to support wives' participation in the labor market (Kraaykamp, 2012). MMW typically have narrower and more homogeneous social networks composed mainly of individuals with similar and lower social statuses. Husbands' social resources can serve as crucial tools for escaping these disadvantaged networks (Lin, 2000).

Couples can help each other improve their job skills and knowledge and support each other with important information, coaching, and training in the labor market participation process (Bernardi, 1999; Bernasco et al., 1998; Han & Moen, 1999; Jacob & Kleinert, 2014). For example, partners with high levels of education seem to have a greater likelihood of being promoted to higher positions (Baerts et al., 2011; Booth & Francesconi, 1999) or of receiving higher wages (Brynin & Francesconi, 2004).

Both theories emphasize the effect of husbands' economic resources (such as education level, wages, and employment status) as a decision-related factor in married women's labor market behavior. However, wives' labor market activities are determined by not only the economic utility of their households but also the couple's attitudes toward gender roles and preferences (Khoudja & Fleischmann, 2017, 2018).

For example, the process of cultural modernization has influenced gender role attitudes regarding the gendered division of labor, with approval being given to working mothers and caring fathers (Treas & Widmer, 2000). This implies that household utility is not determined by economic incentives alone; rather, subjective utility plays an important role. If their husbands provide sufficient income for the household, traditional wives can focus on their domestic duties without imposing an economic burden. However, egalitarian wives may be able to use their husbands' incomes to acquire better jobs (Khoudja & Fleischmann, 2018).

Based on past research and the two theories discussed above, Hypotheses 3 and 4 were developed.

Hypothesis 3 *If Asian MMW have more egalitarian gender role attitudes, the resources of their Korean husbands make it more likely that Asian MMW will participate in the labor market.*

Hypothesis 4 *If Korean husbands have more egalitarian gender role attitudes, their resources will make it more likely that Asian MMW will participate in the labor market.*

Methods

Data

The primary data were derived from the Survey on the Actual Conditions of Multicultural Families (2018) conducted by Korea's Ministry of Gender Equality and Family. The Multicultural Families Support Act (2008) was enacted to aid marriage migrants in their adaptation to Korean society and ensure their families' well-being. These data are based on the Multicultural Families Support Act (2008), Article 4, in which the Korean government surveys marriage migrants' lives in multicultural families every three years. The data contained questions about personal and family characteristics (gender, age, education level, family relations), ethnic origin (place of birth, race/ethnicity, current nationality), labor market participation (employment status, wage, working hours, and occupation), housing, health status, social networks, Korean language fluency, and gender role attitudes. The primary dataset included 17,073 responses.

For the empirical analysis, primary data were processed in the following three steps. First, the data excluded husbands (respondents) who were born and raised outside Korea and who obtained Korean nationality only after immigration. Moreover, MMW have been defined as women who hold a Marriage Migrant Visa (F-6 Visa) and may have migrated to marry native Korean men after being born abroad. MMW without husbands were also excluded from the data. Second, the data excluded respondents who were older than 65 years or younger than 20 years because they were not in the labor market and did not have to choose between paid and unpaid work. Third, this study limited its focus to Asian MMW because 94% of the countries of origin in the data were Asian. Finally, Korean husbands—the spouses of Asian MMW—were extracted through the following process: Based on the extracted Asian MMW, Korean husbands residing in the same household were selected. The final sample included 4610 Asian MMW and their Korean husbands.²

² To justify our sample size, we conducted a power analysis. The results indicated that a sample size of 4,610 is sufficient to detect medium effect sizes with 80% power and a significance level of 0.05. Our sample was selected using stratified random sampling to ensure representativeness across key immigration. These have also been approved as official statistics by the Korean government. Moreover, our sample size is consistent with that used in similar studies, such as the work by Lee and Rudolf (2024) on women immigrant's labor market participation in Korea.

Measures

Dependent Variable

The dependent variable was the Asian MMW's labor market participation, which led us to focus on wages and salary employment. We excluded unpaid workers (family workers and employers) whose entry into the labor market was relatively easier than that of paid workers. It is differentiated according to two outcomes: (1) participation in the labor market as a wage worker and (2) no participation in the labor market. People were considered to participate in the labor market if they worked for a wage or salary of at least one hour per week at the time of the survey.

Independent Variables

Four items were used as indicators of gender role attitudes for Asian MMW and their Korean husbands. First, the husband has the primary responsibility to support the family financially. Second, it is important for the wife to become economically independent of her husband. Third, the wife should devote more time and effort to caring for her young children than to pursuing a career. Fourth, the husband should be able to take care of the children without others' help. The first and third items were reverse coded. Participants responded to each answer on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating more egalitarian attitudes.

Two measures were used to capture Korean husbands' resources. First, the education level was measured and coded into three categories: 0 = less than middle school, 1 = high school, and 2 = two-year college graduate or higher. Second, the average monthly income of Korean husbands was calculated over three months at the time of the survey and categorized as follows: 0 = less than 1.5 million Korea Won (KRW); 1 = 1.5 million–2.5 million KRW; 2 = 2.5 million–3.5 million KRW; and 3 = more than 3.5 million KRW.

Control Variables

The model controlled for the following variables that were likely to affect labor market participation in the Asian MMW: variables related to human capital, such as education and health (Knize Estrada, 2018); variables related to residency in Korea, such as length of residence, language proficiency, and nationality (Chiswick, 1978; Chiswick & Miller, 1992; Lee et al., 2014; Rebhun, 2010; Wang, 2019); variables related to household characteristics, such as the presence of children, household size, and household assets (Reed, 2004; Stier & Tienda, 1992); and residential area (Martin & Taylor, 2003).

The following was an explanation of the measurement of control variables.

Nationality was measured using eight categories: (1) Chinese (mainland); (2) Korean Chinese (*Joseonjok*); (3) Vietnamese; (4) Japanese; (5) Filipino; (6) Cambodian; (7) Thai; and (8) other Asian. The other Asian countries included 24 Asian states: Mongolia, Nepal, Indonesia, and Kyrgyzstan etc.

The self-rated health of Asian MMW and their Korean husbands was measured on a 5-point Likert scale, with higher scores indicating better self-rated health. Korean language proficiency was assessed using four items (speaking, writing, hearing, and reading abilities), and each item was measured on a 5-point Likert scale ranging from 1 (very poor) to 5 (very good). For Korean husbands, we added information indicating whether they were officially registered as disabled. We utilized various individual variables such as age, length of residence (the number of years lived in Korea), and the total number of household members. Residential areas, both urban and rural, were included in the study. As a final control variable, we examined whether the household received public assistance and its home ownership status.

Analytic Strategy

As the dependent variable was binary, a logistic regression analysis was conducted.³ First, the main effects of couples' gender role attitudes on Asian MMW's labor market participation were investigated, including control variables. Second, the labor market resources (income and education level) of the husbands and their interactions with the couples' gender role attitudes were estimated. Additionally, the independent variable of couples' gender role attitudes was centered (West et al., 1996).

Our goal was to analyze and compare the coefficients of the logistic regression models. It is important to consider the issue of scaling because it is likely to be introduced in cross-model comparisons (Mood, 2010). Hence, following Mood's suggestion, average marginal effects (AMEs) were used to solve this problem effectively. These were calculated by averaging the effects of all observations based on the initially estimated logistic regression model. AMEs are easier to understand than odds ratios because they demonstrate a predicted change in the probability of the dependent variable when the independent variable increases by one unit (Wang, 2019).

Thus, after logistic regression, the AME method was applied to both main and interaction effects, similar to the logistic regression analysis. However, the results of this estimation was illustrated in a graph only when there is a statistically significant interaction effect (not shown). As a robustness check, we compared the results of the logistic regression with the AME estimates; the results did not differ substantially.

AMEs indicate the predicted likelihood of change in a dependent variable (labor market participation), which is related to a 1-unit change in an independent variable (gender role attitudes, resources of the Korean husband), with all other covariate

³ We employ K-fold cross-validation to evaluate the generalization performance of the model, estimating the area under the receiver operating characteristic curve (CV-AUC). This technique is among the most prevalent resampling methods for assessing predictive models. The process involves partitioning the sample into K subsets. Subsequently, K models are constructed, with each one trained on K-1 subsets, and validated on the remaining subset. Commonly, K is set to 5 or 10 (James et al., 2013), and typically, only a single random data split is performed. CV-AUC provides a robust measure of the model's predictive power when applied to novel data from a similar study population (Weber et al., 2018).

In our study, the logistic regression model shows a high cross-validation AUC value of 0.7437(95% CI, 0.7255–0.7562), indicating its good discriminatory ability in distinguishing between labor market participation and no labor market participation.

variables being constant (Williams, 2012). The results of this estimation were illustrated in the graph only when there a statistically significant interaction effect (not shown).

Results

Descriptive Statistics

Table 1 presented the descriptive statistics of intermarried couples by gender. We found that approximately 40.8% of Asian MMW participated in the labor market as wage workers. Although not directly indicated, Korean husbands' labor market participation was just above 69.6%. Korea was known for its low female labor market activity and large gender gap in the labor market (Lee et al., 2008). We confirmed that these phenomena apply to both Asian MMW and their Korean husbands.

Married immigrant men were likely to play traditional roles than married immigrant women (Huh, 2018). In terms of scores for average gender role attitudes, the scores of Asian MMW and Korean husbands were at the center of egalitarian and traditional gender role attitudes, and no difference between couples was observed.

Asian MMW were younger than their Korean husbands, and the average age difference between the spouses was 11 years. The Asian MMW in our analysis were often less educated than their Korean husbands. Most of the Asian MMW had less than a middle school education. Korean husbands had higher education levels, with approximately 38.3% having graduated from a two-year college or higher. We divided the nationality of Asian MMW into eight main groups: Vietnamese (24.7%), Japanese (14.5%), Chinese (11.0%), Korean Chinese (6.0%), Filipino (10.6%), Cambodian (6.6%), Thai (7.9%), and other Asian countries (18.8%).

Among Korean husbands, the group with the highest monthly income in the sample (3.5 million or more KRW) accounted for 21.9%. By contrast, the group with the lowest income (1.5 million or less KRW) accounted for only 10.6%.

The Main Effects of Couples' Gender Role Attitudes

Table 2 showed the estimated main effects of gender role attitudes on Asian MMW's labor market participation for the two different models. We included the interaction terms between intermarried couples' gender role attitudes and their husbands' resources (Table 3). All the coefficients interpreted below were statistically significant unless stated otherwise.

First, Asian MMW's gender role attitudes were positively linked to women's labor market participation when the variables related to Korean husbands were not imputed (Model 1). We could interpret that Asian MMW with more egalitarian gender role attitudes had a greater probability of participating in the labor market. However, when we included variables related to Korean husbands in Model 2, the coefficient of Asian MMW's gender role attitudes were no longer significant.

Table 1 Summary statistics for Asian MMW and Korean husbands

Variables	Range	Asian MMW			Korean husbands		
		M	SD	Missing (%)	M	SD	Missing (%)
Wage worker	0–1	0.408	0.491	9.70			
Egalitarian gender role attitudes	1–5	2.013	0.418		2.029	(0.398)	
Age	Asian MMW:20–65 Korean hus- bands:21–81	34.832	8.928		45.910	8.219	
Education							
Less than middle school	0–1	0.909	0.288		0.121	0.326	
High school graduate	0–1	0.031	0.175		0.496	0.500	
Two-year college graduate or higher	0–1	0.060	0.237		0.383	0.486	
Self-rated health	1–5	4.066	0.778		3.884	0.853	
Length of residence	0–39	7.428	5.118				
Korean language proficiency	1–5	3.360	0.904				
Nationality							
China	0–1	0.110	0.312				
Korean Chinese	0–1	0.060	0.238				
Vietnam	0–1	0.247	0.431				
Japan	0–1	0.145	0.352				
Philippines	0–1	0.106	0.308				
Cambodia	0–1	0.066	0.248				
Thailand	0–1	0.079	0.269				
Other Asian Countries	0–1	0.188	0.391				
Child younger than 6 years	0–1	0.517	0.500				
Household members	2–9	3.489	1.220				

Table 1 (continued)

Variables	Range	Asian MMW			Korean husbands		
		M	SD	Missing (%)	M	SD	Missing (%)
Residence area	1–2						
Urban	0–1	0.607	0.488				
Rural	0–1						
Owner-occupied housing	0–1	0.546	0.498				
Receiving public assistance	0–1	0.029	0.167				
Disabled	0–1				0.036	0.187	
Monthly income	1–4						7.16
Less than 1.5 million KRW					0.106	0.308	
1.5million to 2.5 million KRW					0.348	0.476	
2.5 million to 3.5million KRW					0.327	0.469	
More than 3.5 million KRW					0.219	0.414	
Number of observations		4610				4610	

Second, Model 2 depicted the positive coefficients of Korean husbands' egalitarian gender role attitudes. The coefficient of the fitted Korean husbands' gender role attitudes was approximately 0.177 when we controlled for Asian MMW's traits, household characteristics, and husbands' resources. In other words, Asian MMW who had Korean husbands with egalitarian gender role attitudes were more likely to join the labor force, thereby supporting Hypothesis 2.

Third, Korean husbands' resources were associated with Asian MMW's labor market participation. The husbands' income levels appeared to be a more decisive factor in determining Asian MMW's labor market participation: If Asian MMW husbands earned a high income (more than 3.5 million KRW per month), the participation probability of Asian MMW was substantially lower than if their husbands earned less than 1.5 million KRW. Moreover, the coefficient for earnings between 1.5 million to 3.5 million KRW per month was negative for husbands who had less than 1.5 million. These results suggest that Asian MMW were encouraged to participate in the labor force to compensate for the deficit in their husbands' income. If husbands' income was sufficient, Asian MMW could be discouraged from being involved in the labor market so that they could devote their time and energy to household duties. Thus, this finding supports the household specialization theory.

Our results imply that Korean husbands with more resources (income) less likely to participate in the labor market, which reduced the probability of Asian MMW participating in the labor market. However, there was no evidence to support the social capital theory, according to which husbands' resources should increase Asian MMW's labor market participation.

Fourth, the effects of other Asian MMW individual variables—age, length of residence, Korean language proficiency, and nationality—were similar to those in Models 1 and 2. When we entered age and age squared into the equation, both coefficients were highly significant. The estimated coefficients of age and age squared enabled us to identify the relationship between Asian MMW's labor activity (which took the form of an inverted U) and length of residence, which was significantly associated with Asian MMW's labor market participation. Korean language proficiency was also a significant factor and proficient language skills were positively related to Asian MMW's labor market activities. Additionally, Asian MMW's nationality had a major impact on their labor market participation. The probability of participating in the labor market was higher for Asian MMW from other Asian nations than for Asian MMW from Japan, the most economically developed nation among the nations to which Asian MMW belonged.

Fifth, regarding the household situation, the probability of participating in the labor market declined among Asian MMW with children under the age of six, as predicted. This outcome indicated that taking care of preschool-age children could be a large burden for relatively young Asian MMW who want to be involved in labor market activities.

Table 2 Logistic regression model of Asian MMW's labor market participation

Predictors	Model 1		Model 2	
	Coef	S.E	Coef	S.E
Characteristics of Asian MMW				
Egalitarian gender role attitudes (centered)	0.218**	(0.082)	0.065	(0.094)
Age	0.101***	(0.031)	0.128***	(0.035)
Age ²	-0.001***	(0.000)	-0.002***	(0.000)
Less than middle school (ref)				
High school graduate	-0.258	(0.198)	-0.322	(0.218)
Two-year college graduate or higher	-0.140	(0.153)	0.011	(0.160)
Self-rated health	0.008	(0.046)	0.045	(0.051)
Length of residence	0.165***	(0.021)	0.161***	(0.024)
Length of residence ²	-0.004***	(0.001)	-0.004***	(0.001)
Korean language proficiency	0.079+	(0.043)	0.111+	(0.046)
Japanese (ref)				
Chinese	1.056***	(0.148)	0.800***	(0.160)
Korean Chinese	0.674***	(0.182)	0.647***	(0.197)
Vietnamese	1.575***	(0.143)	1.175***	(0.165)
Filipino	1.428***	(0.155)	1.052***	(0.174)
Cambodian	1.356***	(0.183)	0.979***	(0.205)
Thai	0.830***	(0.169)	0.685***	(0.184)
Other Asian Countries	0.877***	(0.134)	0.676***	(0.148)
Child younger than 6 years (ref=No)	-0.001	(0.036)	-1.034***	(0.093)
Household members	-1.018***	(0.087)	-0.021	(0.039)
Urban residence (ref=Rural)	-0.233***	(0.072)	-0.113	(0.078)
Owner-occupied housing (ref=No)	-0.048	(0.072)	0.019	(0.076)
Receiving public assistance (ref=No)	-0.055	(0.201)	-0.529+	(0.289)
Household characteristics				

Table 2 (continued)

Predictors	Model 1		Model 2	
	Coef	S.E	Coef	S.E
Characteristics of Korean husbands				
Egalitarian gender role attitudes (centered)				
Age	0.177+	(0.103)	0.177+	(0.103)
Age ²	-0.053	(0.042)	-0.053	(0.042)
Self-rated health	0.001+	(0.000)	0.001+	(0.000)
Disabled	-0.086+	(0.051)	-0.086+	(0.051)
Less than middle school (ref)	0.042	(0.224)	0.042	(0.224)
High school graduate			-0.071	(0.127)
Two-year college graduate			-0.217	(0.139)
Less than 1.5 million KRW (ref)				
1.5–2.5 million KRW			-0.287*	(0.136)
2.5–3.5million KRW			-0.691***	(0.139)
More than 3.5 million KRW			-1.175***	(0.154)
Constant			-2.390*	(1.102)
Log likelihood		-2474.2638		-2211.1087
LR chi-square		679.75***		758.95***
N		4163		3849

1000 KRW = 0.73 USD

+ $p < .1$; * $p < .05$, ** $p < 0.01$, *** $p < 0.001$

Table 3 Logistic regression model of Asian MMW's labor market participation with interaction effects

Predictors	Model 3		Model 4	
	Coef	S.E	Coef	S.E
Characteristics of Asian MMW				
Egalitarian gender role attitudes (centered)	0.460	(0.358)	0.347	(0.379)
Characteristics of Korean husbands				
Egalitarian gender role attitudes (centered)	0.182 +	(0.103)	0.720 +	(0.422)
Less than middle school (ref)				
High school graduate	- 0.071	(0.127)	- 0.067	(0.127)
Two-year college graduate or higher	- 0.214	(0.140)	- 0.209	(0.140)
Less than 1.5 million KRW (ref)				
1.5-2.5 million KRW	- 0.288*	(0.136)	- 0.282 +	(0.136)
2.5-3.5 million KRW	- 0.686***	(0.140)	- 0.679***	(0.140)
More than 3.5 million KRW	- 1.173***	(0.154)	- 1.182***	(0.155)

Table 3 (continued)

Predictors	Model 3		Model 4	
	Coef	S.E	Coef	S.E
Two-way interactions				
High school graduate Korean husbands × Asian MMW's gender role attitudes	-0.269	(0.284)	-0.285	(0.309)
Two-year college graduate or higher Korean husbands × Asian MMW's gender role attitudes	-0.075	(0.299)	-0.137	(0.325)
1.5–2.5 million KRW Korean husbands × Asian MMW's gender role attitudes	-0.399	(0.322)	-0.230	(0.337)
2.5–3.5 million KRW Korean husbands × Asian MMW's gender role attitudes	-0.110	(0.330)	0.000	(0.346)
More than 3.5 million KRW Korean husbands × Asian MMW's gender role attitudes	-0.187	(0.360)	0.074	(0.381)
High school graduate Korean husbands × Korean husbands' gender role attitudes			0.033	(0.324)
Two-year college graduate or higher Korean husbands × Korean husbands' gender role attitudes			0.171	(0.350)
1.5–2.5 million KRW Korean husbands × Korean husbands' gender role attitudes			-0.686+	(0.385)
2.5–3.5 million KRW Korean husbands × Korean husbands' gender role attitudes			-0.505	(0.393)
More than 3.5 million KRW Korean husbands × Korean husbands' gender role attitudes			-0.948*	(0.434)
Constant	-2.474*	(1.102)	-2.541	(1.104)
Log likelihood	-2208.8468		-2206.0496	

Table 3 (continued)

Predictors	Model 3		Model 4	
	Coef	S.E	Coef	S.E
LR chi-square	763.47***		769.07***	
N	3849		3849	

“X” indicates interaction. 1000 KRW = 0.73
 + $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The Interaction Effects of Couples' Gender Role Attitudes and Husbands' Resources

Table 3 showed the associations between intermarried couples' gender role attitudes and husbands' resources (Models 3 and 4, respectively). First, it was once again confirmed that Korean husbands' positive attitudes toward gender roles had a positive influence on the Asian MMW's labor market participation. Second, we found no evidence of an interaction between intermarried couples' gender role attitudes and Korean husbands' educational levels (Models 3 and 4). Third, we found only two significant interactions between Korean husbands' gender role attitudes and monthly income levels (Model 4). Contrary to our expectations, Asian MMW with high-income Korean husbands who earned 3.5 million KRW or more were less likely to participate if their husbands had more egalitarian attitudes than Asian MMW whose husbands earned less than 1.5 million KRW (Model 4).

Figure 1 offered a simple illustration of the two significant interactions between Korean husbands' gender role attitudes and monthly income (1.5–2.5 million KRW, more than 3.5 million KRW). The diamond slope represented the relationship between Korean husbands with a monthly income of 1.5–2.5 million KRW and Asian MMW's probability of labor market participation according to Korean husbands' gender role attitudes. This figure indicated that when Korean husbands' gender role attitudes shift from traditional to egalitarian, MMW's probability of labor market participation declines. However, with rising egalitarian attitudes of Korean husbands, the estimated effect of Korean husbands' monthly income of 1.5–2.5 million KRW compared to a monthly income of less than 1.5 million KRW approached zero and lost significance. There was no clear evidence that gender role attitudes moderated the effect of husbands' resources on Asian MMW's labor market participation.

In addition, the circular slope embodied the relationship between Korean husbands' monthly income of more than 3.5 million KRW (the highest income in the data) and the probability of Asian MMW entering the labor market based on their Korean husbands' gender role attitudes. AMEs sloped downward from traditional attitudes toward egalitarian attitudes. The more Korean husbands showed egalitarian gender role attitudes, the more negative the estimated effect of having a monthly income greater than 3.5 million KRW became. There were meaningful differences between AMEs at different levels of gender role attitudes among Korean husbands with high incomes. The results provided more evidence for a moderating effect of gender role attitudes among high-income Korean husbands.

The interaction effect demonstrated that even for Korean husbands with egalitarian gender role attitudes, if husbands' incomes were relatively stable, the probability of Asian MMW participating in the labor market decreased. This findings were consistent with the arguments of the household specialization theory (Lee et al., 2008; Park, 1991). We could deduce that the Asian MMW's decision to participate in the labor market was influenced more by household economic factors than by perceptions of gender roles.

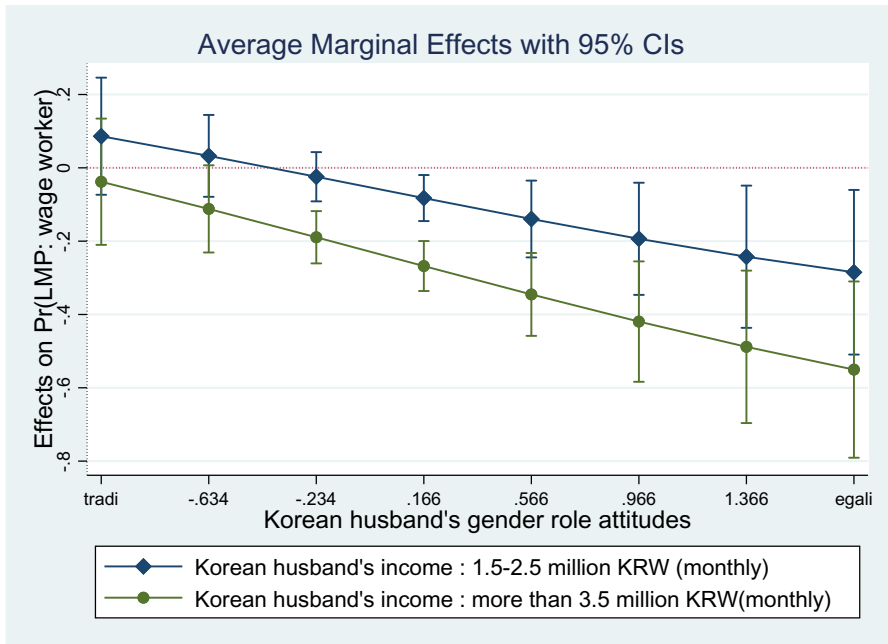


Fig. 1 Average marginal effects of Korean husbands’ monthly income (1.5–2.5 million KRW, more than 3.5 million KRW) on changes in probability of Asian MMW’s labor market participation, interacted with Korean husbands’ gender role attitudes. The plot’s upper and lower bounds indicate the 95% confidence interval. AME Average marginal effect

Discussion

This study examined the gender role attitudes of Asian MMW and their Korean husbands in shaping their labor market participation using data from the Survey on the Actual Conditions of Multicultural Families (2018). Overall, this study revealed the main effects of Korean husbands’ gender role attitudes and the interaction effects between Korean husbands’ gender role attitudes and their resources. We obtained these findings through hypothesis testing.

Asian MMW’s gender role attitudes did not significantly explain their labor market participation. Originally, intermarried couples were likely to have gender norm dissimilarities due to various factors, such as race, ethnicity, education level, and personality. Specifically, owing to linguistic and cultural differences within the family, native Korean husbands could weigh heavily on bargaining power because of their greater familiarity with Korean society. Hence, we could assume that Asian MMW’s gender role attitudes were affected more by their Korean husbands’ than by their own attitudes.

We showed that the egalitarian gender role attitudes of Korean husbands had a significant impact on the labor market participation of Asian MMW. This finding was consistent with those of previous studies (Corrigan & Konrad, 2007; Khoudja & Fleischmann, 2017). Our interpretation of this outcome is that Korean husbands' direct normative influence on Asian MMW's labor market activities is significant. Intermarriage, which is characterized by positive assortative mating, can weaken traditional gender roles and attitudes, such as those of male breadwinners and female homemakers (Espiritu, 1999). However, this does not apply to marriage migration in South Korea. Asian MMW are primarily driven by demand and receive approval from the Korean government to solve specific social problems such as a low birthrate and an imbalanced marriage market. Given their greater familiarity with their host country, Korean husbands have a significant advantage in intermarried households. Korean husbands need to adopt a positive attitude toward the Asian MMW participation in the labor force and integration of Korea society.

Moreover, the Korean household has traditionally been based on a patriarchal system—the husband is seen as the leader of the household and the primary decision-maker, while the wife is supposed to carry out domestic duties. This patriarchal system is currently being challenged, with wives participating in paid work outside of their homes. Nevertheless, they are also expected to perform household duties (Kim & Son, 2020).

It is a striking finding that Korean husbands who have egalitarian gender role attitudes and an income above a certain level have a negative impact on Asian MMW's participation in the labor force because husbands use their income to discourage their wives' career ambitions. (Khoudja & Fleischmann, 2017, 2018).

One interpretation of this difference is that the effects suggested by the household specialization theory are much stronger than husbands' positive attitudes toward Asian MMW's employment. In Korea, many people recognize husbands as the breadwinners of the household; thus, husbands' income has a strong influence on a household's economic status. Some studies have provided empirical evidence for specialization in households. If the husband's income is higher than the wife's, there is a shrinking probability that the wife will engage in the labor market (Shafer, 2011). Kim and Choi (2018) revealed similar results, observing that husbands' higher incomes are negatively related to the probability of Asian MMW participating in economic activities in Korea.

An alternative explanation is employment quality. Asian MMW generally obtain low-paying and low-skilled jobs due to problems with the Korean language, socio-cultural differences, and childcare burden (Kim & Choi, 2018). If husbands earn a stable income, there is less need for Asian MMW to have a stable job; hence, they focus on domestic work regardless of gender role attitudes.

These results could also be interpreted as the challenges faced by employed wives in reconciling their work and family lives. In general, working mothers experience a high level of stress as a result of having to work a "second shift," that is, having to perform domestic duties, such as childcare and house chores, after having completed an entire shift at their place of formal employment (Hochschild & Machung, 2012). Particularly in poor households, employed wives have little choice but to work both

inside and outside the home, bearing the double responsibility themselves. Similarly, in Korea, working wives undertake a disproportionate share of domestic duties in addition to their paid work in double-income households (Won, 2012). As such, if the husbands' income is stable, it is expected that Asian MMW will not engage in paid work to avoid a dual burden.

Policy and Practice Implications

Considering the interaction of Korean husbands' gender role attitudes and income with Asian MMW's labor market participation, this study suggests important policy implications in terms of supporting Asian MMW's labor market activities.

First, a patriarchal family culture can control intermarried women's labor participation through the interaction of the husband's gender attitudes and resources; to overcome this obstacle, a multicultural family policy program should be prepared to help Asian MMW and their husbands achieve equal opportunities in labor market participation. Second, the local government needs to provide Asian MMW with Korean language education and schooling. Such opportunities will expand the opportunities to participate in jobs through independent judgment among Asian MMW based on their gender role attitudes. Finally, human resource development programs (such as vocational training and job placement services) should be prioritized in low-income Asian MMW households.

Conclusion

While prior studies have emphasized the importance of how a couple's gender role attitudes influence women's labor market participation, this study revealed that in addition to the Korean husband's egalitarian gender role attitudes, its interaction with the Korean husband's high-income variable is an important factor negatively affecting Asian MMW's employment. This study makes a vital contribution by presenting a new perspective on interaction factors, including gender role attitudes and husbands' resources, such as high income, that hinder the participation of Asian MMW in the labor market. Importantly, these barriers control Asian MMW's independent self-realization and social integration through labor participation in the new country. Although Korea initially became a multicultural society through marriage immigration policies, it ignored the Asian MMW's labor force participation. Despite the decline of patriarchal values in Korea, they are being forced on Asian MMW, resulting in gender and immigrant inequality. These findings are crucial to consider in the process of moving from a country where patriarchal values have been sustained for a long time to a multicultural society and can have important implications for the formation of policies for multicultural families.

Despite these significant findings, this study has several limitations, based on which directions for future research are proposed. First, we did not examine the quality of employment of Asian MMW, such as whether their jobs were regular or non-regular. Second, there may be a large generational gap in gender role attitudes

between young and old age groups in Korea. This study did not conduct group comparisons by the age of husbands; therefore, future research should examine the differences in gender role attitudes among husbands of different age groups. Third, in Korea, as patriarchal family values are rapidly deteriorating, gender role attitudes within families are evolving. However, this was a cross-sectional study, and we were unable to reveal these long-term patterns of change. In future research, if a longitudinal study were to be conducted based on data accumulated over a more extended period, it would be possible to cover shifts in the impact of changes in the interaction of gender role attitudes and husbands' resources in multicultural families on Asian MMW's job participation.

It is hoped that the establishment of such data and implementation of active research will be pursued in the future.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Informed Consent All respondents provided their informed consent prior to their inclusion in the survey.

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