

Hard Times and Harder Minds: Material Hardship and Marital Well-Being Among Low-Income Families in South Korea

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Abstract

Experiencing material hardship may bring various negative consequences for married couples and family members. However, little is known about this topic in Korea. Using a nationally representative sample from the Korean Welfare Panel Study, we examined how material hardship was associated with marital well-being among low-income families in Korea, separately for husbands (i.e., male household heads) and wives. Overall, we found experiencing any material hardship was associated with lower levels of satisfaction of both family life and spousal relationship, consistently for husbands and wives. We also found depression and self-esteem partially mediated the associations in both groups. Furthermore, among individual items of material hardship, experiencing food hardship was associated with lower levels of satisfaction of family life for both husbands and wives, whereas experiencing problems with credit was associated with lower levels of satisfaction of both family life and spousal relationship for wives but not for husbands.

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The quality of marital relationship influences the couple themselves and their family members. The quality of marriage therefore has great influences on family stability (Park & Bae, 2011). Scholars have paid particular attention to divorce rates since it remains the most common proxy for family stability and have been increasing in South Korea (hereafter Korea). Korea's crude divorce rate has steadily increased in the past decades peaking at 2.9 in 2004; while this figure has gone down to 2.3 in 2014,¹ Korea maintains one of the higher divorce rates among the Organization for Economic Cooperation and Development (OECD) countries (Lee, 2010; OECD, 2011; Statistics Korea, 2015).

It is notable that Korean couples have chosen to get a divorce due to irreconcilable differences (47%), economic problems (14%), family conflicts (9%), unfaithfulness (8%), and domestic abuse (5%; Park & Bae, 2011; Statistics Korea, 2010). Among those reasons, various economic problems have become one of the most discussed social issues, especially due to deepening poverty and inequality in Korea. Over the past decade in Korea, the official poverty rate increased from 6.5% in 2001, to 11.5% in 2009, and to 16.5% in 2013 (Korea Institute for Health and Social Affairs [KIHASA], 2010; Statistics Korea, 2014). Currently, Korea's relative poverty rate is the eighth highest among the OECD members; moreover, it ranks lower than the OECD average in 6 of the 11 categories of the OECD well-being index (OECD, 2014).²

Korea has also witnessed a dramatic income inequality peaking at 0.314 Gini index in 2008 and 2009 (KIHASA, 2010), which was a higher figure compared with the OECD average (OECD, 2012). By 2009, the ratio of the top to the bottom income quintile had increased to 5.7, which was the 10th highest among the OECD countries; in addition, the trend of rising inequality has reduced the size of the middle class from 75.4% in 1990 to 67.5% in 2010 (OECD, 2014).

Economic hardship brings various negative consequences for married couples and family members. And these include an increased risk of marital dissolution, family disorganization, and physical abuse, among others (Conger, Conger, & Martin, 2010; Conger & Elder, 1994; Conger, Rueter, & Elder, 1999). These damaging impacts of economic hardship have a similar implication in the Korean context. Indeed, compared to the general population, the level of satisfaction in an individual's life as well as family

relationship was reported significantly lower among low-income population (Kim et al., 2012). However, little is known about the association between economic hardship and satisfaction in both individual and family lives among low-income families in Korea. In this light, our study examines the association between economic strain (as measured by material hardship) and marital well-being (as measured by satisfaction of family life and spousal relationship). We also investigate whether particular material hardship measures have a stronger association with marital quality. In addition, we examine whether the association between material hardship and marital well-being is mediated by depression and self-esteem. Finally, we intend to frame potential differences between spouses in their response to material hardship.

Theoretical and Empirical Background

Material Hardship and Marital Well-being

In order to better understand the ways in which economic hardship matters to marital well-being, studies such as Conger and Elder (1994) and Conger et al. (1999) introduced the “family stress model.” In this model, economic difficulties often marked by low income, job instability, and negative financial events lead to economic pressures for couples in romantic unions. When those pressures are high and consistent, for example, “unmet material needs involving necessities such as adequate food and clothing, the inability to pay bills or make ends meet, and having to cut back on even necessary expenses including health insurance and medical care” (Conger et al., 2010, p. 691), couples are at higher risk of suffering from emotional distress such as depression and anger. Similar research findings have been found across diverse samples and research methods not only in the United States but also in other countries such as Finland, Korea, Germany, and Turkey (Aytaç & Rankin, 2009; Hardie, Geist, & Lucas, 2014; Kinnunen & Feldt, 2004; Kwon, Rueter, Lee, Koh, & Ok, 2003; Parke et al., 2004; Solantaus, Leinonen, & Punamäki, 2004).

Therefore, the association between economic hardship and marital well-being may be explained by the fact that economic hardship can increase stress among couples, which in turn can result in less satisfaction in life and marriage overall (Dakin & Wampler, 2008; Hardie et al., 2014; Hardie & Lucas, 2010). For instance, when couples have arguments over money, it is known that they tend to be more intense and reoccurring compared with arguments concerning other matters (Hardie et al., 2014; Papp, Cummings, & Goeke-Morey, 2009). There can also be additional compounding factors when it comes to couples living with economic hardship, such as poor neighborhood environment, health issues, and other possible traumatic events, which can

further aggravate relationship quality (Dakin & Wampler, 2008; Rauer, Karney, Garvan, & Hou, 2008). Keeping that in mind, another mechanism through which economic hardship influences marital quality can be understood by the fact that higher income may afford diverse resources to reduce potential problems and conflicts between married couples; this includes but is not limited to couples' therapy services, household cleaning, and other home-related assistance (Hardie et al., 2014; Hardie & Lucas, 2010).

Mediating Role of Depression and Self-Esteem

Several mediating factors play a significant role in the association between economic hardship and marital well-being, such as depression and self-esteem. It has been known that when couples have issues with low self-esteem or depressive symptoms, economic hardship can be more detrimental (see Conger et al., 2010; Park & Bae, 2011; Wickrama, Surjadi, Lorenz, Conger, & O'Neal, 2012, for more details). These mediating variables may have varying degrees of association with marital well-being between husbands and wives.

Rich literature indicated that self-esteem has significant mediating effects on relationship for couples (Fincham & Bradbury, 1993; Gabriel, Beach, & Bodenmann, 2010; Wickrama et al., 2012). When husbands cannot fulfill their role as a provider or breadwinner, the negative influences of economic hardship can be much greater on their self-esteem, which in turn may deteriorate marital quality via frustrated and even aggressive behaviors (Williams, Cheadle, & Goosby, 2013). On the other hand, wives are more likely to internalize stress and be susceptible to depression compared to husbands, which as a result can negatively affect their marital relationship (Kessler, 2003). Our study intends to further explore whether the previous findings hold true among low-income families in Korea where spousal roles and expectations are known to be particularly rigid and narrow (Lee & Lee, 2012).

As for depression, there are studies that looked into the mediating effects of depressive symptoms in the Korean context (Choi, 2010; Kwon et al., 2003), which, similar to non-Korean literature (e.g., Faulkner, Davey, & Davey, 2005; Fincham, Beach, Harold, & Osborne, 1997; Fincham & Bradbury, 1993), also indicated the negative effects of depressive symptoms between economic hardship and marital quality. For instance, examining 236 married couples in Korea, Kwon et al. (2003) showed that economic pressure had negative effects on marital satisfaction via emotional distress such as depression. Choi (2010), using the data on 5,059 married individuals from the Seoul City Welfare Panel, found depressive symptoms caused by stress were one of the significant mediating factors between economic hardship and marital quality among low-income families in Korea. Overall, previous

research showed that higher levels of depression were inversely related to marital satisfaction proving the significant mediating effects of depressive symptoms on relationship. Our study, using a nationally representative panel data focused on low-income families in Korea will examine whether and how the findings are still applicable.

Gender Differences

The question on how certain items of material hardship may be more strongly associated with marital well-being needs to be further explored given the lack of prior research. We examine the associations of the four measures of material hardship and marital well-being, separately for husbands and wives, and discuss its implications in the Korean society. Given that there are persistent gender roles and expectations between spouses across all cultures and times that are reflected in people's behaviors (Paat, 2011; Williams et al., 2013), we expect that different items of material hardship may be to be more strongly associated with marital well-being across husbands and wives. This is particularly relevant to our study given that expected roles and responsibilities of "male breadwinners" and "female homemakers" are still prevalent in the Korea society where the conservative view on gender roles remains strong (Lee & Lee, 2012).³

Recently, there have been an increasing number of studies that examined the association between economic hardship and marital well-being, and investigated various mediating factors in the association in the Korean context with an emphasis on gender differences between husbands and wives. Among the studies mentioned above, for instance, Lee and Lee (2012) found that whereas men with more conservative views on gender-based spousal roles and expectations (i.e., men being expected to be providers and women homemakers) reported lower levels of marital satisfaction, there was a positive association between men's self-esteem and marital satisfaction. Kim and Park (2013), using a sample of married couples living in metropolitan areas, found that marital satisfaction of both husbands and wives were influenced by not only individual resource variables such as self-esteem but also couple relationship variables (i.e., spousal support, spousal similarity, and recovery attempts) and alternatives to marriage (i.e., living alone, divorce, marrying someone else, and having an extramarital affair). The study also indicated that overall the level of marital satisfaction among husbands was significantly higher than that among wives. Husbands reported more positively on the variables discussed above affecting their satisfaction levels. This difference between men and women was examined previously in Korea (Park & Ko, 2005) as well as in other places (Amato, Booth, Johnson, & Rogers, 2007).⁴

The Present Study

In summary, recognizing that previous studies reviewed above succeeded in bringing attention to the association between economic hardship and marital well-being as well as potential mediating factors and gender differences in the association, our study contributes to the existing literature as follows. First, we extend previous findings, particularly those of Korean research, by incorporating more detailed measures of material hardship. Second, we use a nationally representative sample. Finally, we apply advanced methodological approaches (i.e., regressions with rich controls and with a previous outcome) to obtain more precise estimates. Given that the dramatic increase in divorce in recent years and aggravating economic circumstances especially for low-income families in Korea (KIHASA, 2010; Lee, 2010), we believe it is urgent to examine how experiencing material hardship influences marital well-being among low-income married couples.

This study investigates the following three questions. We explore each question separately for husbands and wives. First, is experiencing any material hardship associated with marital well-being among low-income families in Korea? Based on the theoretical and empirical evidence reviewed above, we expect that experiencing any material hardship will be associated with lower levels of marital well-being for both husbands and wives. Second, are particular items of material hardship more strongly associated with marital well-being? Again, based on the theoretical and empirical evidence, we expect that the association between material hardship and marital well-being will differ across individual items of material hardship, and that the associations will differ across husbands and wives. Third, are the adverse associations between material hardship and marital well-being, if any, explained by individual psychological well-being (i.e., depression or self-esteem)? We expect that both depression and self-esteem may mediate the association between material hardship and marital well-being. We also expect that the mediating role of psychological well-being may vary between husbands and wives.

In addressing these research questions, this study contributes to the existing empirical literature in several respects. First, this study is the first attempt to examine the association between material hardship and marital well-being for husbands and wives in low-income families in Korea, and therefore may suggest practical policy implications in the Korean context. Second, controlling for an income-based poverty measure,⁵ we incorporate four detailed measures of material hardship that may better capture the daily struggles (e.g., skipping meals and having difficulty in paying for bills) faced by low-income families. Third, using a nationally representative sample from the

Korean Welfare Panel Study (KOWEPS), we apply two methodological methods to more precisely estimate the association between material hardship and marital well-being. Finally, we examine the mediating role of two psychological factors (i.e., depression and self-esteem) in the association between material hardship and marital well-being to see whether these factors are potential mechanisms that link the association.

Method

Data and Sample

Our study used data from the KOWEPS, which is an annual panel study following a nationally representative sample of 7,072 households since 2006 (KIHASA, 2008). With an extensive set of questions for household heads, household members, and topical modules, the KOWEPS provides rich information on economic activities and resources, participation in and attitude toward welfare programs, as well as various well-being indicators among low-income families in Korea. In the first stage of the sampling process, 517 nationwide survey districts were selected with a proportionate stratified sampling method, which covered 90% of the 2005 Korean population census. Then, 3,500 low-income households (i.e., those less than 60% of the median household income), and 3,500 middle- and high-income households were proportionally selected in each survey district (KIHASA, 2008). The KOWEPS is appropriate for our study since low-income households were oversampled.

Our study used two most recent waves of the KOWEPS, which were conducted in 2012 and 2013. The analytic sample consisted of 1,822 respondents (911 married couples): the husband sample (i.e., male household heads) included 911 low-income household heads who were married and lived with their wife in both waves and who had nonmissing information in our focal variables (i.e., material hardship and marital well-being), and the wife sample consisted of 911 wives of the male low-income household heads who had nonmissing information in the focal variables. The head of household refers to the person who earns the primary sources of income in family. In the KOWEPS, when both a husband and a wife contribute to household income, the husband is considered as the household head regardless of their share of contributions (KIHASA, 2008). Only 18 female-headed couples were identified, which were excluded to make the analytic sample to consistently include male-headed couples (we also conducted supplemental analyses including those 18 cases but found no differences; results available on request). In addition, we excluded 60 and 56 cases missing the marital well-being variables in both waves from the husband and wife samples, respectively. We also excluded 81

cases from the husband sample and 97 cases from the wife sample since these cases did not have matched spouse's information. The respondents of the analytic sample were economically more disadvantaged than those of the original sample; for example, average annual household income was approximately \$13,500 versus \$42,400 (1,000 Korean won = US\$1).

Measures

Material Hardship. In the second wave, husbands were asked 13 questions regarding whether their family experienced material hardship due to shortage of money in the past year. The material hardship items included (1) skipped meals, (2) reduced meals, (3) unable to purchase food, (4) unable to have balanced meals, (5) had to skip a meal due to financial reasons, (6) unable to pay utility bills, (7) had utility disconnected, (8) unable to pay rent or moved for not paying the rent, (9) unable to heat home in winter, (10) unable to pay children's tuitions, (11) unable to receive medical services, (12) lost health insurance, and (13) had problems with credit. As mentioned previously, compared with the conventional income-based poverty measure, these multiple items of material hardship better identified the unmet basic needs that occurred due to limited economic resources among low-income families. We created a dichotomous indicator due to the skewed distribution of a counted material hardship measure (i.e., only 22% experienced any material hardship), with a value of 1 if a household head reported that he had experienced any material hardship between the two survey points and 0 otherwise. In addition, following the conceptual categorization of material hardship from prior studies (Heflin, Sandberg, & Rafail, 2009; Lee, 2011), for the analysis of individual items of material hardship, we created four binary indicators for "food hardship" (Items 1-5), "difficulty in paying bills" (Items 6-10), "medical hardship" (items 11-12), and "problems with credit" (Item 13).

Marital Well-Being. Marital well-being was measured using two questions at both waves: "How satisfied are you with your family life?" and "How satisfied are you with your spouse?" The couples in our study (i.e., both husbands and wives) answered these two questions with a 7-point Likert-type scale (1 = *very unsatisfied* to 7 = *very satisfied*).

Depression and Self-Esteem. Both depression and self-esteem were measured at the second wave. Depression was measured using 11 items of the Center for Epidemiological Studies–Depression (Kohout, Berkman, Evans, & Cornoni-Huntley, 1993). Husbands and wives were asked 11 items about how often they experienced specific depression symptoms in the past week

(e.g., restless sleep, poor appetite, and feeling lonely) with a 4-point Likert-type scale (0 = *rarely or never* to 3 = *most or all the time*). We used the total scores of 11 items ($\alpha = .86$ for husbands and $\alpha = .87$ for wives), with higher scores indicating higher levels of depression. Self-esteem was measured using 10 items from the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Couples were asked 10 items regarding how much they agreed on general feelings about themselves with a 4-point Likert-type scale (0 = *strongly disagree* to 3 = *strongly agree*). We reverse-coded all items and then took the total scores of all items ($\alpha = .78$ for both husbands and wives), with higher scores indicating lower levels of self-esteem.

Demographic Characteristics. Based on previous studies examining the associations between economic strain and marital well-being (Kim & Park, 2013; Lee & Lee, 2012; Shin & Ok, 2014; William et al., 2013), an extensive set of covariates, which were reported by husbands at the first wave, included age, income-to-needs ratio, the presence of dependent child aged younger than 18, level of education attainment (i.e., elementary school graduate or less, middle school graduate or less, high school graduate or less, or college or above), employment status (i.e., unemployed, self-employed, temporarily employed, or permanently employed), urbanicity (i.e., metropolitan city, small city, or rural area), and self-rated health (i.e., poor, fair, good, very good, or excellent). The same set of covariates was included in the analysis for wives, some of which were reported by wives themselves at the first wave: age, level of education attainment, employment status, and self-rated health.

Analytic Approaches

We conducted descriptive statistics to show the general characteristics of all variables used in our study, separately for husbands and wives. The descriptive statistics were adjusted with personal longitudinal weights. To examine the first research question, we next employed two analytic approaches with ordinary least squares regression. First, as a conventional way to address the omitted variable bias, we started with a regression model with a rich set of covariates for each outcome. Second, to control for change over time, we included a previous outcome variable (i.e., variables for marital well-being assessed at the first wave). The second model allows us to estimate the association of experiencing material hardship with the extent to which respondents' marital well-being changes from the baseline assessment to the second year's assessment (Johnson, 2005). We selected the second model as our main model. We conducted two models for each outcome, separately for husband and wife groups.

Next, to answer the second research question, using the main model, we examined associations between each of the four individual material hardship items and marital well-being for each outcome, separately for husband and wife groups. In addition, we conducted postestimation *t* tests to examine whether the coefficients were different between husbands and wives. Finally, to answer the third research question, we conducted two sets of analyses for each outcome: one adding depression to the main model and the other adding self-esteem to the main model, again separately for husband and wife groups. Changes in coefficients for the material hardship (in particular, decreases in the magnitude) were considered as being suggestive of mediation (Preacher & Hayes, 2008). We tested mediating roles of depression and self-esteem separately as a previous study suggests separate pathways between material hardship and marital well-being (Williams et al., 2013). All regression analyses were not adjusted by sample weights to report more consistent results across the main, individual item, and mediation models (we also conducted all regression models using weights, in which we found no differences in the coefficients but the standard errors of analyses for individual hardship items slightly increased probably due to great variation in sample weights as well as small cell sizes; results available on request).

Results

Sample Description

Table 1 presents descriptive characteristics for all variables used in this study by material hardship, separately for husbands and wives. For brevity, we focus on several key patterns of the descriptive statistics, which were adjusted using the appropriate sample weights to make them nationally representative. First, about 22% of household heads reported experiencing at least one material hardship. With respect to individual items of hardship, about 14% of household heads reported experiencing food hardship, followed by about 8% experiencing difficulty in paying bills and problems with credit and about 3% experiencing medical hardship. Second, the couples who experienced any hardship were less likely to be satisfied with their family life and spousal relationship at both survey waves compared to those who did not experience hardship. Third, the couples who experienced hardship tended to report higher depression and self-esteem scores (reversed coded, with higher scores indicating lower levels of self-esteem) than those not experiencing hardship. Finally, the couples experiencing hardship were more likely to be younger, temporarily employed, and living in rural areas compared to those not experiencing hardship.

Table 1. Sample Characteristics by Material Hardship.

	Husbands		Wives	
	No material hardship	Any material hardship	No material hardship	Any material hardship
Focal variables				
Any material hardship between W1 and W2	78.3	21.7	—	—
Individual hardship items between W1 and W2				
Difficulty in paying bills		7.6		—
Medical hardship		2.9		—
Food hardship		13.7		—
Problems with credit		7.8		—
Satisfaction of family life				
Wave 1	5.3 (1.0)	4.9 (1.2)*	5.3 (1.0)	4.7 (1.3)***
Wave 2	5.2 (1.0)	4.8 (1.2)**	5.2 (1.1)	4.6 (1.2)***
Satisfaction of spousal relationship				
Wave 1	5.3 (1.1)	4.9 (1.3)**	5.1 (1.2)	4.7 (1.4)**
Wave 2	5.2 (1.2)	4.8 (1.3)**	4.9 (1.2)	4.4 (1.5)***
Depression at W2	3.5 (4.5)	5.6 (6.0)**	4.2 (4.7)	6.6 (6.3)***
Self-esteem at W2	20.7 (4.4)	23.8 (5.2)***	20.2 (4.3)	23.0 (5.2)***
Demographic variables at W1				
Age	66.5 (12.8)	60.0 (13.6)***	61.4 (10.7)	56.8 (13.3)**
Income to needs ratio	1.4 (0.4)	1.4 (0.3)	—	—
Educational attainment				
Elementary school graduate or less	38.4	33.6	54.3	46.8
Middle school graduate or less	18.8	24.6	13.8	14.3
High school graduate or less	27.5	17.6*	24.2	27.7
College or above	15.3	24.2	7.7	11.2
Employment status				
Unemployed	55.0	56.5	82.3	73.2†
Self-employed	27.2	20.3	4.0	3.2

(continued)

Table 1. (continued)

	Husbands		Wives	
	No material hardship	Any material hardship	No material hardship	Any material hardship
Temporarily employed	13.9	22.9	12.7	21.8 [†]
Permanently employed	3.9	0.3**	0.9	1.8
Living with one or more children	3.4	7.1	—	—
Region				
Metropolitan area	35.6	32.1	—	—
Small city	63.2	67.5	—	—
Rural area	1.2	0.4*	—	—
Self-rated health				
Poor	2.3	3.0	1.1	0.7
Fair	29.1	32.8	30.2	30.2
Good	28.1	27.6	31.7	25.8
Very good	36.9	32.5	33.2	36.8
Excellent	3.7	4.0	3.8	6.5
N	911		911	

Note. Percentages or means with standard deviations in parentheses. Numbers were weighted using personal longitudinal weights at Wave 7. *T* tests were conducted to test differences between no material hardship and any material hardship groups. Waves (W) 1 and 2 indicate the 2012 and 2013 surveys, respectively.

[†]*p* < .10. **p* < .05. ***p* < .01. ****p* < .001.

Associations Between Material Hardship and Marital Well-Being

Table 2 shows the results of examining the associations between experiencing any material hardship and marital well-being and between individual items of material hardship and marital well-being, separately for husbands (Panel A) and wives (Panel B). In Panels A1 and B1, Model 1 was an ordinary least squares regression including all covariates, and Model 2 was the same as Model 1 but added an outcome measure at the first wave. In Panels A2 and B2, all estimates were based on Model 2 (i.e., the main model). All models reported in Table 2 included all covariates, which are not presented in Table 2 but are available on request. The results of significance tests to see whether estimates between husbands and wives are different from each other are also presented in Table 2. Since Model 2 is our main model, we focus on

Table 2. Material Hardship and Marital Well-Being, Separately for Husbands and Wives.

	Satisfaction of family life		Satisfaction of spousal relationship	
	Coeff.	SE	Coeff.	SE
Panel A. Husbands				
Panel A1. Main models				
Model 1	-0.44***	(0.10)	-0.32**	(0.10)
Model 2	-0.35***	(0.09)	-0.21*	(0.10)
Panel A2. Individual material hardship items				
Difficulty in paying bills	0.02 ^a	(0.19)	-0.21	(0.21)
Medical hardship	-0.04	(0.26)	0.28	(0.28)
Food hardship	-0.44***	(0.11)	-0.17	(0.12)
Problems with credit	-0.12	(0.17)	-0.35 [†]	(0.18)
Panel B. Wives				
Panel B1. Main models				
Model 1	-0.56***	(0.10)	-0.52***	(0.11)
Model 2	-0.43***	(0.10)	-0.38***	(0.11)
Panel B2. Individual material hardship items				
Difficulty in paying bills	-0.64*** ^a	(0.20)	-0.44 [†]	(0.23)
Medical hardship	0.20	(0.27)	-0.14	(0.31)
Food hardship	-0.28*	(0.11)	-0.17	(0.13)
Problems with credit	-0.37*	(0.18)	-0.68***	(0.20)

Note. In Panels A1 and B1, Model 1 was OLS regressions including all covariates and Model 2 was the same as Model 1 but additionally included an earlier outcome measure. In Panels A2 and B2, all estimates were based on lagged dependent variable models. Sample sizes were 911 in all models. Coeff. = unstandardized coefficient; SE = a standard error of the coefficient. Sharing the same superscript letter indicates that the coefficients are significantly different from each other at $p < .05$.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

the results of Model 2. We also focus on statistically significant associations at least at $p < .05$ level.

Overall, as expected, we found that experiencing any material hardship was associated with lower levels of satisfaction of both family life and spousal relationship, consistently for husbands ($B = -0.35$, $p < .001$, and $B = -0.21$, $p < .05$, respectively; Model 2 of Panel A1) and wives ($B = -0.43$, $p < .001$, and $B = -0.38$, $p < .001$, respectively; Model 2 of Panel B1).

Next, in the results of individual items of material hardship (Panels A2 and B2 of Table 2), interestingly, we found that experiencing difficulty in paying bills was associated with lower levels of satisfaction of family life for wives

Table 3. Mediating Role of Depression and Self-Esteem in the Association Between Material Hardship and Marital Well-Being.

	Satisfaction of family life		Satisfaction of spousal relationship	
	Coeff.	SE	Coeff.	SE
Panel A. Husbands				
Any material hardship	-0.35**	(0.09)	-0.21*	(0.10)
Panel A1. Mediating role of depression				
Any material hardship	-0.23*	(0.09)	-0.12	(0.10)
Depression	-0.05***	(0.01)	-0.04***	(0.01)
Panel A2. Mediating role of self-esteem				
Any material hardship	-0.15†	(0.11)	-0.05	(0.10)
Self-esteem	-0.09***	(0.01)	-0.07***	(0.01)
Panel B. Wives				
Any material hardship	-0.43***	(0.10)	-0.38***	(0.11)
Panel B1. Mediating role of depression				
Any material hardship	-0.29**	(0.09)	-0.21†	(0.11)
Depression	-0.05***	(0.01)	-0.06***	(0.01)
Panel B2. Mediating role of self-esteem				
Any material hardship	-0.19*	(0.09)	-0.16	(0.11)
Self-esteem	-0.08***	(0.01)	-0.08***	(0.01)

Note. All estimates were based on Model 2 (OLS models that additionally included a prior outcome measure). Self-esteem was reverse-coded with higher scores indicating lower levels of self-esteem. Sample sizes were 911 in all models. Coeff. = unstandardized coefficient; SE = a standard error of the coefficient.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

($B = -0.64, p < .01$), but this was not true for husbands; the difference (-0.64 vs. 0.02) was statistically significant. In addition, experiencing food hardship was associated with lower levels of satisfaction of family life for both husbands and wives ($B = -0.44, p < .001$, and $B = -0.28, p < .05$, respectively). Notably, experiencing problems with credit was associated with lower levels of satisfaction of both family life and spousal relationship ($B = -0.37, p < .05$, and $B = -0.68, p < .001$, respectively) for wives but not for husbands.

Mediating Role of Depression and Self-Esteem

Table 3 shows the results of examining the mediating role of depression and self-esteem, separately for husbands (Panel A) and wives (Panel B). Overall, as expected, we found that both depression and self-esteem suggestively

mediated the association between material hardship and marital well-being in both samples. Basically, the results reported in Table 3 show that higher levels of depression or lower levels of self-esteem were associated with lower levels of satisfaction of both family life and spousal relationship in both samples. Furthermore, once adding depression or self-esteem to the main model (i.e., Model 2), the significant coefficients for satisfaction of both family life and spousal relationship substantially decreased in the magnitude in both samples, which suggests that experiencing any material hardship might adversely affect their psychological well-being (i.e., depression or self-esteem) and, in turn, might adversely affect their marital well-being. In addition, we also found suggestive evidence showing that the mediating role of self-esteem was somewhat larger than that of depression, in both samples.

Discussion

Using a nationally representative sample of low-income families in Korea, this study examined the association between material hardship and marital well-being and whether the association was mediated by depression or self-esteem. We found that experiencing any material hardship was associated with lower levels of satisfaction in both family life and spousal relationship for both husbands and wives. These adverse associations were consistently found even after accounting for an extensive set of controls and a previous outcome variable. This was an expected result based on the aforementioned theoretical background that explained economic hardship can increase stress among couples, which in turn can result in less satisfaction in marriage (Dakin & Wampler, 2008; Hardie et al., 2014; Hardie & Lucas, 2010). This finding was also consistent with previous studies that demonstrated economic hardship was an important risk factor for marital quality for married couples in low-income households (e.g., Kim & Park, 2013; Lee & Lee, 2012; Shin & Ok, 2014; White & Rogers, 2000).

Next, our results showed that experiencing difficulty in paying bills was associated with lower levels of satisfaction in family life for wives but not for husbands. On the other hand, experiencing problems with credit was associated with lower levels of satisfaction in both family life and spousal relationship for wives but not for husbands. These results shed light on rather an interesting gender view between husbands and wives in the Korean society. We believe that one of the reasons why difficulty in paying bills and problems with credit can matter to only wives is perhaps because it is women that take care of daily household-related responsibilities (i.e., paying bills and managing their credit). We argue that the findings are close to what we had

expected based on the fact that the conservative view on gender-based spousal roles is still prevalent in Korea (Lee & Lee, 2012). After all, women in Korea overall may be in a position where they have to manage most of the daily household-related responsibilities and activities whereas husbands are mostly breadwinners (i.e., working outside the home). This role may be particularly stressful for women in low-income families since they are expected to manage all of the aforementioned responsibilities with limited economic means on a regular basis.

In addition to the findings on the aforementioned two items, we also found that experiencing food hardship was associated with lower levels of satisfaction of family life for both husbands and wives. Here we argue again that this finding is close to previous studies showing the important social and human development implications of food insecurity, including physical, psychological, as well as sociofamilial consequences (Hamelin, Beaudry, & Habicht, 2002; Hamelin, Habicht, & Beaudry, 1999). Moreover, this finding may also have to do with research identifying both the symbolic and practical importance of sharing a certain life style among family members, including experiencing the joy of eating (Hamelin et al., 2002; Kremmer, Anderson, & Marshall, 1998). Therefore, we believe that experiencing food hardship (e.g., skipping meals) can be matter to the overall satisfaction in family life for both husbands and wives.

Finally, we found that both depression and self-esteem suggestively mediated the association between material hardship and marital well-being for both husbands and wives. Our findings on mediating factors were somewhat different from the results of previous studies showing the mediating role of self-esteem among men (since they are more likely to be main breadwinners) and of depression among women (since they are more likely to internalize stress; Kessler, 2003; Williams et al., 2013). Our results may perhaps be explained by the fact that, while in our sample husbands and wives currently do hold certain positions in their family as suggested above (i.e., husbands being main breadwinners and wives taking care of household-related responsibilities), that differentiation might be becoming less important to the couples when experiencing financial-related stress (Bronte-Tinkew, Horowitz, & Carrano, 2010; Lee & Lee, 2012; Williams et al., 2013). Considering the fast changing society where husbands and wives are expected to share equal responsibilities between work and family, it can be explained that there would be more of the similar association of the two mediating indicators with our outcome variables in both groups.

Our study has some limitations. First, this study relied on a sample of low-income families in Korea, and therefore, our findings cannot be generalized for all households in the country, especially those with higher earning and

resources. Second, due to some of the potentially unobserved covariates that may be linked to both material hardship and marital well-being (e.g., social policies as well as other macro-level socioeconomic and cultural factors), although we used analytic approaches to control for a wide set of controls and a previous outcome measure, we were not able to confirm a causal relationship between the two variables. Third, since our study used material hardship items that were reported by husbands, they may be somewhat limited to capture material hardship that wives experienced. Therefore, future research needs to better understand how husbands and wives experience material hardship separately. Finally, we could not differentiate whether a gender ideology or being a household head explained our results of gender differences in individual hardship results. However, given the sampling structure of considering a husband as a household head when both a husband and a wife contribute to household income, the results of gender differences seem to be the case of spousal roles.

In spite of these limitations, the findings of this study suggest several policy implications. Given that marital quality influences the well-being of all family members (Park & Bae, 2011), we should perhaps focus more on anti-poverty efforts if we were to improve the marital quality among married couples in low-income families. Although the Korean government does provide a means-tested social assistance program (i.e., the National Basic Livelihood Security Act [NBLSA]), it is not sufficient for the basic financial security for many low-income families even after major amendments (Kim, 2014; Lee, 2011). Therefore, the NBLSA needs to be improved in various ways that better tailor benefits and programs to meet specific needs of low-income couples in Korea.

In addition, diverse services assisting married couples in poverty may be another urgent step to consider on a society level. Given that our study indicates that self-esteem and depressive symptoms have significant mediating effects between material hardship and marital well-being, there can be potential benefits of couples counseling focused on building self-esteem and targeting depression. Therefore, through programs such as educational and recreational trainings for emotional management and communication skills, low-income married couples may explore various activities together and identify common interests and understanding, which in turn can increase marital satisfaction (Kim & Park, 2013; Lee & Lee, 2012). Shin and Ok (2014) also reported that shared couple activities played a significant mediating role between economic hardship and marital quality. Moreover, services addressing mental health issues among married couples in poverty including their dependents may be needed; our findings on the mediating roles of self-esteem and depression in our low-income couples suggest that marital quality

may be improved by such mental health programs if provided appropriately and adequately (Kang, 2010).

The issue of growing poverty and income inequality is not an isolated problem in Korea. Our findings on the overall association between material hardship and marital quality, therefore, may relate to many low-income families in other countries that experience similar social and economic changes, especially with the trend in increasing divorce cases and rising poverty rate and inequality. Given the increasing divorce rate and family breakdown along with growing concerns for mental health around the globe (OECD, 2012), our findings may suggest the need of support for low-income families in both developing and developed worlds.

Authors' Note

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Notes

1. The crude divorce rate is the number of divorces occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year. For more information, see <https://stats.oecd.org/glossary/detail.asp?ID=492>.
2. The OECD well-being index includes income, subjective well-being, personal security, environment quality, civic engagement and governance, social connections, education and skills, health status, work and life balance, housing, and jobs and earnings. For more information, see http://www.oecd.org/eco/surveys/Overview_Korea_2014.pdf.
3. For instance, there are only 18 female-headed couples (1.9%) in the low-income sample of the KOWEPS data set.
4. While the level of marital satisfaction is known to be higher among husbands in general, some studies with longitudinal data also reported that this difference between men and women is insignificant (e.g., Lawrence et al., 2008).
5. Following prior research showing the weak association between income and material hardship (see, e.g., Heflin & Iceland, 2009; Sullivan, Turner, &

Danziger, 2008), we used the material hardship measure instead of an income-based measure, and also controlled for an income-to-needs ratio in all analyses.

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