### Women's Family-Formation Attitudes in Korea: Impacts of Life-Stage Transitions

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Women's attitudes towards family formation are key correlates of various family processes and outcomes, such as family formation and dissolution, childbearing and parenting, and division of household labor (Clarkberg, Stolzenberg, & Waite 1995; Sassler & Schoen 1999). Despite the important theoretical and policy implications, little is known about how these attitudes are formed. Without careful consideration for causal direction, researchers often presume that these attitudes determine behaviors, not the reverse. Based on the assumption that the attitudes are static, it is seldom examined how the attitudes change over time (Davis & Greenstein, 2009). Relatively, it is more documented that, at a given point in time, younger cohorts holds more liberal attitudes than older cohorts. Marriages, divorces, childbirths, school-to-work transitions, leaving parent's home, and parental deaths are important transitions that many people experience throughout their life time and the transitions may influence family attitudes (Amato & Booth 1991; Willoughby 2010; Willoughby, Hall, & Luczak 2013). Yet, few studies examined how these transitions affect the attitudes. Furthermore, most available evidence on these questions is from the West. Whether we can apply the findings to the very different context in the East is in question.

The lack of understanding is in part due to lack of data, especially longitudinal data at the individual level. Using individual-level panel data from South Korea, we fill these gaps in the literature. Specifically, we examine (1) how attitudes towards family formation differ across cohorts, (2) how the attitudes change over time, and (3) how important life-stage transitions explain the differences and the changes.

#### Data, Variables, and Analytic Strategy

Data for this study come from the Korean Longitudinal Survey of Women and Families, a nationally representative longitudinal survey of women in South Korea. 9,997 women aged between 19 and 64 were interviewed in 2007, and followed up in 2008, 2010, and 2012. This abstract presents preliminary results based on the first three waves. In the final paper, we plan to analyze data from all four waves, as the latest wave of data will become available early next year.

Our dependent variable, *attitudes towards family formation*, is based on women's attitudes towards four statements regarding family formation, "Marriage is a must," "It is good to marry early," "One must have a child", and "It is good to have children early when married." The responses for each item range from 1 (strongly agree) to 4 (strongly disagree). We sum responses for the four items to a composite scale, ranging from 4 to 16 (Cronbach's alpha = 0.727). Hence, a higher score indicates a more liberal attitude.

To examine the between-cohort differences in the attitudes, we use cross-sectional Ordinary Least Square (OLS) regressions at each wave. The unit of observation is each woman and the analysis sample includes 6,587 women in wave 1 and 6,828 women in wave 2 and 3. In the regressions, the key independent variables of interest are *cohorts*. Based on women's ages at wave 2, we divide our sample into five cohorts in 10-year intervals (below 26, 26-35, 36-45, 46-55, and 56-65). We create five binary variables that correspond to each cohort and remain constant over waves.

We compare regression results with and without controlling for life-course events to see how they mediate the relation between cohorts and attitudes. The covariates include marital status, number of children, educational attainment, work status, and parent-related factors (classified into 'parent(s) is alive and coresident,' 'parent(s) is alive and non-coresident,' and 'parent(s) is not alive'). To relieve the concern about reverse causality, we use lagged values for all covariates.

To estimate within-cohort change in the attitudes over time, for each cohort, we run OLS regressions with individual fixed effects (FE). For the analysis, we pool individual data over waves and, hence, each observation represents a woman-wave (N=13,416). The key independent variables here are dummy variables for each wave, *Wave 2* and *Wave 3*. We omit *Wave 2* as a reference group and, then, the coefficient of *Wave 3* captures the change in attitudes over the two-period between wave 2 and wave 3. Again, we compare the FE results with and without controlling for the lagged covariates to see the extent to which within-person changes in attitudes depend on important life-stage transitions.

### Preliminary Results

Table 1 presents the estimates of the cohort dummy variables and other covariates in the cross-sectional OLS regressions. Without controlling for the covariates, all older cohorts are on average more traditional than the youngest cohort age below 26. In addition, the older a cohort is, the more traditional its attitude is. After controlling for the covariates, some coefficients of cohorts 46-55 and 56-65 become non-significant and the size of the coefficients substantially reduces although their negative sign does not change. The coefficients of cohorts 26-35 and 36-45 become positive and statistically significant in wave 3. The changed results indicate that between-cohort differences in attitudes are mainly attributed to the impacts of differing life-stages. What life-stage transitions matter? Married and widowed women are more traditional than single women. In contrast, separated or divorced women are more liberal. Results also show that having more children is associated with more traditional attitudes. These relationships are consistent with findings from previous studies (Amato & Booth 1991; Liao & Cai 1995; Willoughby 2010; Willoughby, Hall, & Luczak 2013). Higher education is shown associated with more liberal attitudes. We find little impact of work status or parent-related factors.

Table 2 presents FE estimates on changes in the attitudes over time for five cohorts. Unlike other studies in the Western context over a longer time span (Gubernskaya 2010; Thornton 1989; Thornton & Young-DeMarco 2001), our FE results do not show women become more liberal over time. Instead, we find respondents aged 26-35 become more traditional at wave 3 than they were at wave 2. Controlling for covariates makes little change in FE estimates of changes in attitudes since covariates are hardly statistically significant.

Our findings provide important theoretical and policy implications. Past studies tend to consider family-related attitudes as one explanation for delay and decline in marriage and childbearing. We suggest marriage and fertility per se matter to family-related attitudes. It seems too early to conclude that attitudes do not change over time based on our FE estimation. Two years might be too short to observe any changes, and there is not much variation in covariates over the period. It remains an interesting question whether the results change as we add the next wave of data and track changes over a longer period of time.

	Wa	Wave 2		Wave 3	
	Without covariate	With covariates	Without covariate	With covariates	
Cohorts based on women's ages at Wave 2 (ref	erence: <26)				
26-35	-0.679***	0.153	-0.774***	0.332*	
36-45	(0.144) -0.853 <sup>***</sup>	(0.172) 0.220 (0.191)	(0.130) -0.852***	(0.161) $0.482^{**}$	
46-55	(0.140) -1.700 <sup>***</sup>	(0.181) -0.316 (0.101)	(0.125) -1.644 <sup>***</sup>	(0.170) -0.003 (0.180)	
56-65	(0.143) -2.655*** (0.144)	(0.191) -0.890 <sup>***</sup> (0.203)	(0.128) -2.478 <sup>***</sup> (0.129)	(0.180) -0.468 <sup>*</sup> (0.193)	
Lagged Covariates	(0.144)	(0.203)	(0.129)	(0.193)	
Marital status (reference: Single)					
Married	_	-0.746 <sup>****</sup> (0.165)	—	-1.354 <sup>***</sup> (0.170)	
Separated / divorced	_	0.548 <sup>**</sup> (0.209)	_	0.365 (0.210)	
Widowed	_	-0.543 <sup>**</sup> (0.200)	-	-1.238 <sup>****</sup> (0.202)	
Number of children	_	-0.225 <sup>***</sup> (0.030)	_	-0.188 <sup>***</sup> (0.030)	
Education (reference: ≤Middle school)					
High school	_	0.471 <sup>***</sup> (0.082)	—	$0.516^{***}$ (0.082)	
Polytechnics	_	$0.414^{***}$	_	$0.411^{***}$	
≥College	_	(0.113) 0.505 <sup>***</sup> (0.103)	_	$(0.112) \\ 0.405^{***} \\ (0.103)$	
Work	-	-0.032 (0.054)	-	-0.070 (0.053)	
Parents (reference: Alive and non-coresident)					
Not alive	_	-0.120 (0.072)	—	-0.137 (0.071)	
Alive and coresident	_	0.106 (0.147)	-	(0.071) -0.173 (0.152)	
Constant	10.023 <sup>***</sup> (0.132)	9.649 <sup>***</sup> (0.205)	9.949 <sup>***</sup> (0.116)	9.848 <sup>***</sup> (0.197)	
Observations R-squared	6,587 0.121	6,587 0.160	6,828 0.099	6,828 0.150	

# Table 1. Cross-sectional OLS regression analysis of attitudes towards family formation

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Standard errors in parentheses.

Source. Korean Longitudinal Survey of Women and Families 2007, 2008, and 2010

	Cohorts based on women's ages at Wave 2						
-	Below 26	26-35	36-45	46-55	56-65		
		<u>FE model</u>	without lagged	<u>covariates</u>			
Wave 3	-0.149	-0.181**	-0.080	-0.014	0.091		
	(0.166)	(0.068)	(0.053)	(0.063)	(0.065)		
		<u>FE mode</u>	el with lagged c	ovariates_			
Wave 3	-0.147	-0.200**	-0.095	-0.019	0.068		
	(0.187)	(0.074)	(0.055)	(0.064)	(0.067)		
Marital status (reference:	Single)						
Married	-0.866	0.013	3.961	$-2.014^{*}$	-1.216		
	(1.862)	(0.595)	(2.406)	(0.937)	(1.219)		
Separated / divorced	-1.719	0.504	2.124	-1.410	Omitted		
	(3.271)	(1.875)	(2.555)	(1.450)			
Widowed	Omitted	2.504	8.056*	Omitted	-1.493		
		(2.576)	(3.400)		(1.363)		
Number of children	0.700	0.243	0.624	Omitted	Omitted		
	(0.877)	(0.208)	(0.457)				
Education level (reference		ool)					
High school	1.360	-3.399	Omitted	-1.019	Omitted		
	(1.944)	(3.063)		(2.477)			
Polytechnics	0.934	$-5.200^{*}$	-2.067	Omitted	Omitted		
	(1.959)	(2.499)	(1.700)				
≥College	-0.335	Omitted	-2.472	Omitted	Omitted		
	(2.074)		(2.403)				
Work	0.687	-0.291	0.134	-0.077	0.174		
	(0.421)	(0.192)	(0.150)	(0.223)	(0.263)		
Parents (reference: Alive		,					
Not alive	Omitted	-0.272	0.210	0.075	0.519		
		(0.836)	(0.375)	(0.328)	(0.323)		
Alive and coresident	-0.672	0.118	0.084	$1.815^*$	0.301		
	(0.782)	(0.567)	(0.551)	(0.789)	(0.925)		

# Table 2. Fixed-effect regression analysis of attitudes towards family formation

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Standard errors in parentheses.

*Note*. Omitted categories due to no variation between wave 2 and wave 3 *Source*. Korean Longitudinal Survey of Women and Families 2007, 2008, and 2010