How Do Gender Norms Shape Education and Domestic Work Outcomes? The Case of Syrian Refugee Adolescents in Jordan

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7 Factor analysis of gender role attitudes, domestic violence justification, decision-making, and mobility

We used exploratory factor analysis to combine the many individual questions into factors representing the constructs of gender role attitudes, justification of domestic violence, women's mobility, and decision-making. Since our variables are all binary or ordinal, we performed exploratory factor analysis reliant on inter-item polychoric correlations, rather than Pearson correlation coefficients (Kolenikov, 2004). This method has been previously used on measures of women's empowerment, gender role attitudes, and gender equity, including in the MENA region (Amankwah, 2015; Amaral, Woldetsadik, & Armenta, 2018; Asaolu, Alaofè, Gunn, et al., 2018; Batool, Ur Rehman, & Ashagar, 2020; Salem, Cheong, Miedema, & Yount, 2020). We use the user-written polychoric package in STATA (Kolenikov, 2004, version 1). Each group of variables revealed one latent factor with an Eigenvalue ranging from around four to seven, and additional factors had Eigenvalues less than one, making factor extraction straightforward.[16] We now present results of the factor analyses for gender role attitudes, domestic violence justification, decision-making, and mobility.

7.1 Gender role attitudes

Each gender role attitude item loads onto exactly one factor with an acceptable loading (greater than 0.3). All items loaded positively onto the first factor (Eigenvalue = 4.48). Table A4 displays the scoring coefficients, factor loadings, and uniquenesses of the ten gender role attitude questions.

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[16] *A priori*, we intended to use a combination of methods to determine the number of factors to retain: the Kaiser criterion (Eigenvalue ≥ 1), visual assessment of the scree plot of the Eigenvalues, and whether the number of factors makes sense given the topic and theory. Evaluating the number of factors in three ways ensures that the number retained does not depend solely on one test, each of which is imperfect (Costello & Osborne, 2005). Upon viewing the results of the factor analyses, however, it was evident that there was one factor in all of them.

Table A4. Gender role attitudes scoring coefficients, factor loadings, and uniquenesses

	Scoring coefficient	Factor loading	Uniqueness
Women work	0.143	0.772	0.371
Help with children	0.186	0.752	0.185
Help with chores	0.157	0.724	0.209
Girls prep for jobs	0.057	0.478	0.709
Work bad mom	0.085	0.499	0.453
Financial autonomy	0.141	0.720	0.353
Work bad wife	0.081	0.422	0.464
Leadership	0.167	0.777	0.303
Equal schooling	0.183	0.738	0.223
Equal treatment	0.133	0.689	0.268
Eigenvalues	4.484		

Source: Authors' calculations based on JLMPS 2016

Only one factor passes the Kaiser criterion, and the Eigenvalues of the other three factors (not shown) are much lower than Factor 1. The scree plot of the Eigenvalues supports one latent factor.

Table A5 below displays the interitem correlations of questions about gender role attitudes. All correlations are positive, but not as strong as for the other categories (mobility, decision making, and domestic violence justification), likely in part due to the greater number of items. The opinions that women's work interferes with her relationship with her husband and that women who work cannot be good mothers show weaker correlations with the other items.

Table A5. Gender role attitudes interitem correlations

	Women work	Help with children	Help with chores	Girls prep for jobs	Work bad mom	Financial autonomy	Work bad wife	Leadership	Equal schooling	Equal treatment
Women work	1.000	0.555	0.533	0.434	0.351	0.630	0.312	0.654	0.535	0.497
Help with children	0.555	1.000	0.851	0.252	0.371	0.446	0.340	0.490	0.436	0.414
Help with chores	0.533	0.851	1.000	0.280	0.299	0.457	0.287	0.499	0.399	0.357
Girls prep for jobs	0.434	0.252	0.280	1.000	0.250	0.413	0.267	0.388	0.340	0.298
Work bad mom	0.351	0.371	0.299	0.250	1.000	0.314	0.630	0.320	0.275	0.267
Financial autonomy	0.630	0.446	0.457	0.413	0.314	1.000	0.194	0.719	0.496	0.434
Work bad wife	0.312	0.340	0.287	0.267	0.630	0.194	1.000	0.213	0.174	0.185
Leadership	0.654	0.490	0.499	0.388	0.320	0.719	0.213	1.000	0.599	0.525
Equal schooling	0.535	0.436	0.399	0.340	0.275	0.496	0.174	0.599	1.000	0.813
Equal treatment	0.497	0.414	0.357	0.298	0.267	0.434	0.185	0.525	0.813	1.000

Source: Authors' calculations based on JLMPS 2016

7.2 Domestic violence justification

Table A6 displays the factor loadings of the six binary questions about when domestic violence is justified.

Table A6. Domestic violence justification scoring coefficients, factor loadings, and uniquenesses

	Scoring coefficient	Factor loading	Uniqueness
Burn food	0.103	0.983	0.026
Neglect children	0.125	0.984	0.026
Argue with him	0.348	0.990	0.011
Talk to other men	0.062	0.968	0.043
Waste money	0.200	0.987	0.018
Refuse sex	0.174	0.981	0.029
Eigenvalue	5.788		

Source: Authors' calculations based on JLMPS 2016

One underlying factor emerged, which we refer to as domestic violence justification. Items' factor loadings were fairly uniform around 0.98. Additionally, as shown in the interitem correlation matrix (Table A7), questions are highly correlated.

Table A7. Domestic violence justification interitem correlations

	Burn food	Neglect children	Argue with him	Talk to other men	Waste money	Refuse sex
Burn food	1.000	0.959	0.975	0.943	0.970	0.972
Neglect children	0.959	1.000	0.971	0.949	0.980	0.967
Argue with him	0.975	0.971	1.000	0.975	0.970	0.960
Talk to other men	0.943	0.949	0.975	1.000	0.944	0.940
Waste money	0.970	0.980	0.970	0.944	1.000	0.977
Refuse sex	0.972	0.967	0.960	0.940	0.977	1.000

Source: Authors' calculations based on JLMPS 2016

The factor analysis of the domestic violence items shows the questions measure one latent factor, which we refer to as justification of domestic violence.

7.3 Decision making

Table A8 displays the factor loadings, uniqueness, eigenvalues, and scoring coefficients for the six decision-making questions.

Table A8. Decision making scoring coefficients, factor loadings, and uniqueness

	Scoring coefficient	Factor loading	Uniqueness
Major purchases	0.206	0.896	0.100
Daily purchases	0.105	0.872	0.154
Visits	0.212	0.957	0.065
Food	0.088	0.919	0.147
Go to doctor	0.356	0.949	0.028
Buy clothes	0.095	0.897	0.068
Eigenvalue	5.030		

Source: Authors' calculations based on JLMPS 2016

The decision-making items load onto one factor and have high loadings and low uniqueness. The JLMPS questions on decision making together measure one underlying factor, which we refer to as decision-making. All items have high loadings, meaning there are not any ill-fitting questions. Decision-making questions are highly and positively correlated with one another, and the interitem correlations are all similar. Table A9 displays the polychoric interitem correlations of all decision-making items.

Table A9. Decision making interitem correlations

	Major purchases	Daily purchases	Visits	Food	Go to doctor	Buy clothes
Major purchases	1.000	0.896	0.889	0.800	0.760	0.705
Daily purchases	0.896	1.000	0.849	0.785	0.756	0.684
Visits	0.889	0.849	1.000	0.892	0.893	0.810
Food	0.800	0.785	0.892	1.000	0.887	0.839
Go to doctor	0.760	0.756	0.893	0.887	1.000	0.954
Buy clothes	0.705	0.684	0.810	0.839	0.954	1.000

Source: Authors' calculations based on JLMPS 2016

7.4 Mobility

Table A10 displays the factor loadings of the three categorical mobility questions. The exploratory factor analysis revealed one latent factor, which we refer to as mobility. All item loadings are high with little variation. Each question contributes similarly to the first factor, and all have low uniqueness. Differences are small, and all items load well. All items are highly correlated, shown in Table A11 below.

Table A10. Mobility scoring coefficients, factor loadings, and uniqueness: Women aged 15-49

	Scoring coefficient	Factor loading	Uniqueness
Local market	0.319	0.928	0.139
Doctor	0.454	0.947	0.102
Visit friends or family	0.235	0.903	0.184
Eigenvalues	2.574		

Source: Authors' calculations based on JLMPS 2016

Table A11. Mobility interitem correlations

	Local market	Doctor	Visits
Local market	1.000	0.902	0.848
Doctor	0.902	1.000	0.875
Visits friends or family	0.848	0.875	1.000

Source: Authors' calculations based on JLMPS 2016

8 Additional tables

Table A12. Figure 2 corresponding table: Mobility, decision-making, domestic violence justification, and gender role attitudes as outcomes: Jordanians

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Mobility (no controls)	**Mobility**	**Decision-making (no controls)**	**Decision-making**	**DV justification (no controls)**	**DV justification**	**GRAs (no controls)**	**GRAs**
Adolescent: adult omit.	-0.588***	-0.500***	-0.704***	-0.593***	-0.039	-0.041	0.048	0.007
	(0.041)	(0.042)	(0.052)	(0.043)	(0.053)	(0.047)	(0.025)	(0.028)
Mother's ed: illit. omit.								
Mth: Read & Write		-0.082*		-0.041		0.098*		-0.014
		(0.038)		(0.046)		(0.041)		(0.035)
Mth: Basic		-0.073		-0.135*		0.014		-0.010
		(0.062)		(0.064)		(0.056)		(0.038)
Mth: Secondary		-0.066		-0.174*		-0.026		0.063
		(0.084)		(0.069)		(0.040)		(0.044)
Mth: Higher Ed.		0.002		-0.309***		0.000		0.120*
		(0.084)		(0.066)		(0.053)		(0.054)
Father's ed: illit. omit.								
Fth: Read & Write		-0.180*		-0.084		0.145**		-0.009
		(0.077)		(0.050)		(0.054)		(0.031)
Fth: Basic		-0.272**		-0.047		0.030		0.039
		(0.085)		(0.061)		(0.054)		(0.047)
Fth: Secondary		-0.230**		-0.013		0.006		0.108*
		(0.086)		(0.072)		(0.060)		(0.052)
Fth: Higher Ed.		-0.320***		-0.161		0.039		0.007
		(0.081)		(0.086)		(0.059)		(0.055)
Father's emp status: wage worker omit.								
Fth: Employer		0.146		-0.141*		0.019		-0.126**
		(0.083)		(0.063)		(0.077)		(0.044)
Fth: Self-employed		-0.124*		-0.038		0.038		0.047
		(0.049)		(0.052)		(0.054)		(0.035)
Fth: Non-employed		-0.066		-0.150*		0.161*		-0.039

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Mobility (no controls)	**Mobility**	**Decision-making (no controls)**	**Decision-making**	**DV justification (no controls)**	**DV justification**	**GRAs (no controls)**	**GRAs**
		(0.046)		(0.059)		(0.063)		(0.034)
Geography: urban omit.								
Rural		-0.153*		-0.093		0.110		0.030
		(0.061)		(0.057)		(0.086)		(0.073)
Camps								-1.201***
								(0.123)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		-0.167		0.082		-0.057		-0.001
		(0.177)		(0.140)		(0.109)		(0.110)
3rd decile		-0.166		0.031		0.369*		-0.027
		(0.180)		(0.145)		(0.180)		(0.099)
4th decile		-0.194		0.101		0.270		0.021
		(0.175)		(0.160)		(0.154)		(0.094)
5th decile		-0.102		0.124		0.130		0.131
		(0.148)		(0.150)		(0.132)		(0.104)
6th decile		-0.087		0.117		-0.156		0.142
		(0.175)		(0.145)		(0.121)		(0.095)
7th decile		-0.050		0.208		-0.123		0.176
		(0.168)		(0.149)		(0.124)		(0.117)
8th decile		-0.045		0.135		-0.217		0.153
		(0.169)		(0.146)		(0.125)		(0.109)
9th decile		0.044		0.113		-0.207		0.219
		(0.168)		(0.143)		(0.122)		(0.116)
10th decile		0.010		0.152		-0.246*		0.243*
		(0.167)		(0.153)		(0.122)		(0.109)
Cluster level SES factor		0.104*		0.122**		0.134*		0.116**
		(0.049)		(0.039)		(0.052)		(0.040)
Cluster level average distance from primary schl (in mins)		0.009		-0.005		0.023		-0.036***
		(0.012)		(0.007)		(0.013)		(0.009)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Mobility (no controls)	**Mobility**	**Decision-making (no controls)**	**Decision-making**	**DV justification (no controls)**	**DV justification**	**GRAs (no controls)**	**GRAs**
Constant	0.090**	0.307	0.111***	0.230	0.011	-0.332	-0.006	0.233
	(0.032)	(0.211)	(0.021)	(0.158)	(0.036)	(0.179)	(0.029)	(0.139)
N obs.	8302	8126	8206	8029	8473	8291	19292	18819
R-sq.	.0591	.0919	.0888	.117	.000263	.0769	.000414	.0457

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

Table A13. Figure 2 corresponding table: Mobility, decision-making, domestic violence justification, and gender role attitudes as outcomes: Syrians

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
Adolescent: adult omit.	-0.850***	-0.703***	-0.709**	-0.591**	-0.246	-0.202	-0.014	0.011
	(0.163)	(0.150)	(0.208)	(0.199)	(0.138)	(0.151)	(0.117)	(0.123)
Mother's ed: illit. omit.								
Mth: Read & Write		0.067		-0.117		-0.244		0.053
		(0.250)		(0.091)		(0.215)		(0.148)
Mth: Basic		0.314		0.648***		-0.204		-0.138
		(0.210)		(0.121)		(0.225)		(0.138)
Mth: Secondary		0.848		0.556**		0.065		0.420
		(0.541)		(0.169)		(0.267)		(0.276)
Mth: Higher Ed.		0.662		0.720		-0.688		-0.057
		(0.599)		(0.474)		(0.399)		(0.317)
Father's ed: illit. omit.								
Fth: Read & Write		-0.345		-0.266*		0.570		0.098
		(0.213)		(0.104)		(0.285)		(0.144)
Fth: Basic		-0.360		-0.221*		-0.078		0.045
		(0.232)		(0.108)		(0.137)		(0.170)
Fth: Secondary		-0.730*		-0.496*		0.379		-0.281
		(0.306)		(0.219)		(0.315)		(0.309)
Fth: Higher Ed.		-0.177		-0.525		0.096		0.074
		(0.445)		(0.378)		(0.163)		(0.146)
Father's emp status: wage worker omit.								
Fth: Employer		-0.213		-0.430		0.334		-0.087
		(0.319)		(0.336)		(0.380)		(0.194)
Fth: Self-employed		0.032		0.080		-0.023		0.362
		(0.305)		(0.112)		(0.123)		(0.229)
Fth: Non-employed		-0.142		0.015		0.056		0.024
		(0.247)		(0.162)		(0.173)		(0.199)
Geography: urban omit.								

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
Rural		-0.334		-0.599		-0.252		0.172
		(0.437)		(0.387)		(0.207)		(0.301)
Camps		0.540		0.988*		1.116**		0.652
		(0.375)		(0.367)		(0.389)		(0.500)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		0.033		0.107		-0.016		0.122
		(0.326)		(0.219)		(0.206)		(0.211)
3rd decile		-0.180		0.081		0.188		-0.132
		(0.342)		(0.235)		(0.190)		(0.322)
4th decile		0.021		0.074		0.078		0.040
		(0.430)		(0.266)		(0.269)		(0.242)
5th decile		-0.574		-0.688**		-0.106		0.016
		(0.462)		(0.211)		(0.255)		(0.246)
6th decile		-0.197		-0.202		-0.257		-0.034
		(0.580)		(0.315)		(0.216)		(0.362)
7th decile		1.365*		0.796		0.212		-0.340
		(0.658)		(0.504)		(0.269)		(0.417)
8th decile		0.052		-0.272		-0.080		-0.518
		(0.556)		(0.204)		(0.242)		(0.323)
9th decile		0.996		0.137		-0.625*		1.002***
		(0.527)		(0.453)		(0.289)		(0.269)
10th decile		-0.720		-1.062*		-0.821**		0.087
		(0.674)		(0.441)		(0.298)		(0.362)
Cluster level SES factor		0.224		0.393**		0.432*		0.294
		(0.163)		(0.120)		(0.169)		(0.168)
Cluster level average distance from primary schl (in mins)		-0.015		0.009		0.107*		-0.037
		(0.038)		(0.035)		(0.052)		(0.067)
Constant	0.216*	0.671	0.163*	0.352	0.010	-1.129*	-0.009	0.332
	(0.084)	(0.587)	(0.066)	(0.349)	(0.141)	(0.486)	(0.150)	(0.747)

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
N obs.	673	661	653	643	700	688	1467	1439
R-sq.	.0797	.257	.082	.286	.00979	.258	.0000301	.145

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

Table A14. Figure 3 corresponding table: Gender role attitudes as outcome, by nationality and age group

	(1) Jordanian adults (no controls)	(2) Jordanian adults	(3) Jordanian adolescents (no controls)	(4) Jordanian adolescents	(5) Syrian adults (no controls)	(6) Syrian adults	(7) Syrian adolescents (no controls)	(8) Syrian adolescents
Female: male omit.	0.352***	0.355***	0.351***	0.363***	0.275**	0.255**	0.179	0.377*
	(0.021)	(0.022)	(0.055)	(0.051)	(0.093)	(0.090)	(0.237)	(0.163)
Mother's ed: illit. omit.								
Mth: Read & Write		-0.009		-0.079		0.142		-0.114
		(0.037)		(0.118)		(0.174)		(0.244)
Mth: Basic		-0.007		-0.024		-0.207		0.110
		(0.041)		(0.126)		(0.134)		(0.193)
Mth: Secondary		0.077		-0.042		0.382*		0.100
		(0.051)		(0.116)		(0.186)		(0.356)
Mth: Higher Ed.		0.074		0.165		-0.224		0.828**
		(0.056)		(0.128)		(0.326)		(0.288)
Father's ed: illit. omit.								
Fth: Read & Write		0.002		0.014		-0.029		1.260***
		(0.028)		(0.106)		(0.163)		(0.300)
Fth: Basic		0.043		0.063		-0.028		0.937***
		(0.054)		(0.106)		(0.173)		(0.216)
Fth: Secondary		0.091		0.205		-0.559		0.721**
		(0.053)		(0.118)		(0.434)		(0.195)
Fth: Higher Ed.		0.037		-0.008		0.135		0.557
		(0.059)		(0.111)		(0.154)		(0.294)
Father's emp status: wage worker omit.								
Fth: Employer		-0.115**		-0.118		-0.071		0.115
		(0.043)		(0.106)		(0.211)		(0.221)
Fth: Self-employed		0.071		-0.034		0.366		0.301
		(0.039)		(0.098)		(0.228)		(0.195)
Fth: Non-employed		-0.044		0.013		-0.000		0.242
		(0.038)		(0.042)		(0.231)		(0.191)
Geography: urban omit.								
Rural		0.014		0.066		-0.042		0.322

	(1) Jordanian adults (no controls)	(2) Jordanian adults	(3) Jordanian adolescents (no controls)	(4) Jordanian adolescents	(5) Syrian adults (no controls)	(6) Syrian adults	(7) Syrian adolescents (no controls)	(8) Syrian adolescents
		(0.068)		(0.103)		(0.284)		(0.348)
Camps		-1.183***				0.479		0.890
		(0.122)				(0.544)		(0.562)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		-0.004		0.070		-0.039		0.760
		(0.107)		(0.187)		(0.290)		(0.449)
3rd decile		-0.032		0.079		-0.237		0.519
		(0.096)		(0.218)		(0.376)		(0.502)
4th decile		0.037		0.036		-0.056		0.769
		(0.091)		(0.183)		(0.336)		(0.494)
5th decile		0.138		0.175		-0.182		1.110*
		(0.100)		(0.208)		(0.331)		(0.513)
6th decile		0.155		0.177		-0.263		0.694
		(0.092)		(0.180)		(0.426)		(0.518)
7th decile		0.192		0.148		-0.846*		1.104
		(0.108)		(0.227)		(0.394)		(0.606)
8th decile		0.156		0.230		-0.673		-0.361
		(0.101)		(0.208)		(0.388)		(0.727)
9th decile		0.243*		0.221		0.837*		1.997**
		(0.108)		(0.210)		(0.384)		(0.671)
10th decile		0.249*		0.302		-0.130		1.840*
		(0.101)		(0.208)		(0.391)		(0.710)
Cluster level SES factor		0.119**		0.085		0.267		0.225
		(0.039)		(0.064)		(0.183)		(0.159)
Cluster level average distance from primary schl (in mins)		-0.034***		-0.041**		-0.059		0.104
		(0.008)		(0.014)		(0.063)		(0.071)
Constant		0.019	-0.132**	0.059	-0.158	0.609	-0.099	-2.751*
		(0.133)	(0.048)	(0.263)	(0.179)	(0.736)	(0.225)	(1.040)
N obs.		15942	2979	2877	1195	1180	272	259

	(1) Jordanian adults (no controls)	(2) Jordanian adults	(3) Jordanian adolescents (no controls)	(4) Jordanian adolescents	(5) Syrian adults (no controls)	(6) Syrian adults	(7) Syrian adolescents (no controls)	(8) Syrian adolescents
R-sq.		.0856	.044	.113	.0198	.179	.00908	.464

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

Table A15. Figure 4 corresponding table: Gender role attitudes as outcome, by sex and age group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Adult males (no controls)	**Adult males**	**Adult females (no controls)**	**Adult females**	**Adolescent males (no controls)**	**Adolescent males**	**Adolescent females (no controls)**	**Adolescent females**
Syrian: Jordanian omit.	0.024	0.154	-0.053	0.033	0.033	0.263	-0.140	0.094
	(0.175)	(0.189)	(0.131)	(0.127)	(0.228)	(0.208)	(0.214)	(0.189)
Mother's ed: illit. omit.								
Mth: Read & Write		-0.023		0.035		-0.139		-0.059
		(0.061)		(0.047)		(0.163)		(0.110)
Mth: Basic		-0.037		-0.033		-0.042		-0.042
		(0.068)		(0.044)		(0.173)		(0.122)
Mth: Secondary		0.039		0.122		0.166		-0.135
		(0.075)		(0.066)		(0.173)		(0.117)
Mth: Higher Ed.		0.080		0.033		0.245		0.031
		(0.086)		(0.072)		(0.198)		(0.123)
Father's ed: illit. omit.								
Fth: Read & Write		-0.010		-0.012		0.274		0.319*
		(0.048)		(0.043)		(0.216)		(0.153)
Fth: Basic		0.030		-0.018		0.239		0.345*
		(0.083)		(0.067)		(0.194)		(0.152)
Fth: Secondary		0.046		-0.062		0.459		0.385*
		(0.090)		(0.097)		(0.243)		(0.169)
Fth: Higher Ed.		0.063		-0.043		0.168		0.255
		(0.084)		(0.071)		(0.186)		(0.138)
Father's emp status: wage worker omit.								
Fth: Employer		-0.135		-0.077		0.042		-0.303**
		(0.087)		(0.055)		(0.201)		(0.104)
Fth: Self-employed		0.108		0.134**		-0.015		0.022
		(0.059)		(0.049)		(0.125)		(0.088)
Fth: Non-employed		0.061		-0.115**		0.076		-0.018
		(0.064)		(0.042)		(0.080)		(0.054)
Geography: urban omit.								

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Adult males (no controls)	**Adult males**	**Adult females (no controls)**	**Adult females**	**Adolescent males (no controls)**	**Adolescent males**	**Adolescent females (no controls)**	**Adolescent females**
Rural		0.019		0.002		0.053		0.164
		(0.083)		(0.062)		(0.107)		(0.121)
Camps		0.306		0.366		0.407		0.336
		(0.252)		(0.254)		(0.413)		(0.321)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		0.006		0.031		0.524		-0.119
		(0.156)		(0.142)		(0.362)		(0.191)
3rd decile		-0.177		0.001		0.463		-0.181
		(0.170)		(0.159)		(0.385)		(0.218)
4th decile		-0.026		0.028		0.408		-0.101
		(0.164)		(0.144)		(0.368)		(0.207)
5th decile		0.039		0.130		0.745*		-0.138
		(0.148)		(0.140)		(0.361)		(0.213)
6th decile		0.041		0.171		0.488		0.040
		(0.160)		(0.138)		(0.367)		(0.210)
7th decile		0.076		0.190		0.654		-0.183
		(0.169)		(0.140)		(0.373)		(0.233)
8th decile		-0.010		0.167		0.541		0.099
		(0.159)		(0.143)		(0.372)		(0.224)
9th decile		0.162		0.255		0.550		0.071
		(0.168)		(0.142)		(0.372)		(0.204)
10th decile		0.151		0.248		0.739*		0.104
		(0.163)		(0.140)		(0.375)		(0.201)
Cluster level SES factor		0.172**		0.141**		0.081		0.195*
		(0.060)		(0.049)		(0.091)		(0.082)
Cluster level average distance from primary schl (in mins)		-0.033***		-0.042***		-0.028		-0.043**
		(0.009)		(0.009)		(0.015)		(0.016)
Age minus 10		-0.007		0.003		0.183		0.300
		(0.005)		(0.004)		(0.237)		(0.243)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Adult males (no controls)	**Adult males**	**Adult females (no controls)**	**Adult females**	**Adolescent males (no controls)**	**Adolescent males**	**Adolescent females (no controls)**	**Adolescent females**
(Age minus 10) squared		0.000		-0.000		-0.011		-0.020
		(0.000)		(0.000)		(0.017)		(0.017)
Constant	-0.183***	0.179	0.169***	0.499*	-0.132**	-1.458	0.219***	-0.615
	(0.032)	(0.223)	(0.029)	(0.193)	(0.048)	(0.871)	(0.051)	(0.851)
N obs.	8688	8473	8820	8649	1678	1610	1573	1526
R-sq.	.000067	.0411	.000549	.0769	.000171	.105	.00369	.127

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

Table A16. Figure 5 corresponding table: Mobility, decision-making, domestic violence justification, and gender role attitudes as outcomes by age group (female only): Total

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
Syrian: Jordanian omit.	0.099	0.177	0.060	0.094	-0.033	-0.181	-0.066	0.048
	(0.094)	(0.104)	(0.079)	(0.091)	(0.119)	(0.111)	(0.126)	(0.119)
Mother's ed: illit. omit.								
Mth: Read & Write		-0.114*		-0.112*		0.035		0.034
		(0.049)		(0.051)		(0.060)		(0.047)
Mth: Basic		-0.133		-0.168*		-0.026		-0.003
		(0.070)		(0.080)		(0.061)		(0.044)
Mth: Secondary		-0.150		-0.285***		-0.070		0.076
		(0.092)		(0.083)		(0.053)		(0.064)
Mth: Higher Ed.		-0.119		-0.411***		-0.047		0.088
		(0.099)		(0.080)		(0.062)		(0.067)
Father's ed: illit. omit.								
Fth: Read & Write		-0.224***		-0.123**		0.208**		0.043
		(0.067)		(0.042)		(0.070)		(0.044)
Fth: Basic		-0.350***		-0.145*		0.029		0.054
		(0.083)		(0.056)		(0.051)		(0.065)
Fth: Secondary		-0.359***		-0.153		0.047		0.046
		(0.078)		(0.078)		(0.077)		(0.092)
Fth: Higher Ed.		-0.326***		-0.251***		0.051		0.016
		(0.087)		(0.074)		(0.059)		(0.065)
Father's emp status: wage worker omit.								
Fth: Employer		0.082		-0.174*		0.093		-0.115*
		(0.088)		(0.072)		(0.107)		(0.052)
Fth: Self-employed		-0.138*		-0.067		0.021		0.116*
		(0.063)		(0.046)		(0.055)		(0.047)
Fth: Non-employed		-0.133*		-0.203***		0.142*		-0.101**
		(0.052)		(0.055)		(0.059)		(0.037)
Geography: urban omit.								

	(1) **Mobility (no controls)**	(2) **Mobility**	(3) **Decision-making (no controls)**	(4) **Decision-making**	(5) **DV justification (no controls)**	(6) **DV justification**	(7) **GRAs (no controls)**	(8) **GRAs**
Rural		-0.172**		-0.131*		0.097		0.039
		(0.058)		(0.057)		(0.085)		(0.071)
Camps		0.294		0.598***		0.632***		0.362
		(0.198)		(0.156)		(0.158)		(0.246)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		-0.083		0.083		-0.032		0.034
		(0.162)		(0.112)		(0.099)		(0.135)
3rd decile		-0.164		0.072		0.361*		-0.007
		(0.165)		(0.122)		(0.146)		(0.150)
4th decile		-0.096		0.133		0.260		0.035
		(0.162)		(0.127)		(0.138)		(0.138)
5th decile		-0.048		0.116		0.112		0.118
		(0.139)		(0.116)		(0.115)		(0.135)
6th decile		-0.017		0.128		-0.176		0.171
		(0.167)		(0.115)		(0.100)		(0.132)
7th decile		0.074		0.242*		-0.135		0.166
		(0.170)		(0.120)		(0.103)		(0.141)
8th decile		0.064		0.190		-0.230*		0.177
		(0.169)		(0.117)		(0.107)		(0.140)
9th decile		0.129		0.127		-0.231*		0.258
		(0.174)		(0.116)		(0.108)		(0.136)
10th decile		0.072		0.144		-0.275*		0.249
		(0.170)		(0.128)		(0.108)		(0.137)
Cluster level SES factor		0.163***		0.199***		0.179**		0.133**
		(0.048)		(0.038)		(0.065)		(0.047)
Cluster level average distance from primary schl (in mins)		0.006		-0.003		0.028*		-0.042***
		(0.012)		(0.007)		(0.012)		(0.009)
Constant	-0.013	0.286	-0.007	0.218	0.004	-0.368*	0.177***	0.439**
	(0.032)	(0.205)	(0.022)	(0.136)	(0.036)	(0.164)	(0.031)	(0.159)

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
N obs.	8975	8787	8859	8672	9173	8979	10393	10175
R-sq.	.00126	.0557	.000503	.0606	.000153	.0833	.000845	.0718

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

Table A17. Figure 5 corresponding table: Mobility, decision-making, domestic violence justification, and gender role attitudes as outcomes by age group (female only): Adolescents

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
Syrian: Jordanian omit.	-0.136	-0.300*	0.046	-0.074	-0.209**	-0.557**	-0.140	0.096
	(0.166)	(0.147)	(0.220)	(0.222)	(0.070)	(0.172)	(0.214)	(0.191)
Mother's ed: illit. omit.								
Mth: Read & Write		0.091		-0.031		0.048		-0.047
		(0.149)		(0.202)		(0.134)		(0.110)
Mth: Basic		0.022		-0.118		-0.134		-0.031
		(0.128)		(0.144)		(0.137)		(0.121)
Mth: Secondary		0.106		-0.334		-0.118		-0.132
		(0.146)		(0.180)		(0.140)		(0.118)
Mth: Higher Ed.		0.190		-0.236		0.059		0.039
		(0.163)		(0.201)		(0.186)		(0.123)
Father's ed: illit. omit.								
Fth: Read & Write		-0.448*		0.002		0.172		0.307*
		(0.192)		(0.170)		(0.148)		(0.148)
Fth: Basic		-0.534**		0.150		-0.046		0.329*
		(0.184)		(0.230)		(0.162)		(0.148)
Fth: Secondary		-0.476*		0.181		-0.067		0.371*
		(0.208)		(0.185)		(0.135)		(0.167)
Fth: Higher Ed.		-0.631**		0.114		-0.008		0.242
		(0.201)		(0.264)		(0.151)		(0.134)
Father's emp status: wage worker omit.								
Fth: Employer		0.107		-0.008		0.251		-0.292**
		(0.150)		(0.186)		(0.185)		(0.106)
Fth: Self-employed		-0.082		0.204		0.265		0.026
		(0.091)		(0.117)		(0.148)		(0.090)
Fth: Non-employed		0.148*		0.108		-0.022		-0.023
		(0.072)		(0.084)		(0.052)		(0.054)
Geography: urban omit.								

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
Rural		-0.101		-0.164		0.226		0.166
		(0.092)		(0.099)		(0.203)		(0.121)
Camps		0.745*		-0.028		1.013***		0.343
		(0.303)		(0.350)		(0.235)		(0.321)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		-0.222		-0.579*		0.328		-0.108
		(0.299)		(0.259)		(0.172)		(0.195)
3rd decile		-0.035		-0.401		0.601**		-0.169
		(0.339)		(0.299)		(0.211)		(0.217)
4th decile		0.020		-0.618*		0.260		-0.091
		(0.319)		(0.261)		(0.228)		(0.207)
5th decile		-0.251		-0.639		0.388		-0.125
		(0.329)		(0.346)		(0.275)		(0.212)
6th decile		-0.047		-0.651*		0.018		0.042
		(0.330)		(0.327)		(0.144)		(0.209)
7th decile		-0.211		-0.478		0.111		-0.173
		(0.322)		(0.275)		(0.173)		(0.227)
8th decile		-0.064		-0.491		0.061		0.111
		(0.334)		(0.304)		(0.150)		(0.224)
9th decile		-0.187		-0.663*		0.022		0.084
		(0.327)		(0.301)		(0.162)		(0.203)
10th decile		-0.134		-0.528		-0.027		0.112
		(0.319)		(0.332)		(0.155)		(0.202)
Cluster level SES factor		0.164**		0.119		0.098		0.195*
		(0.057)		(0.104)		(0.072)		(0.082)
Cluster level average distance from primary schl (in mins)		0.005		-0.023		0.017		-0.042**
		(0.012)		(0.016)		(0.019)		(0.016)
Constant	-0.498***	-0.060	-0.593***	0.220	-0.027	-0.427	0.219***	0.434
	(0.044)	(0.341)	(0.049)	(0.307)	(0.060)	(0.309)	(0.051)	(0.255)

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
N obs.	1513	1470	1474	1429	1564	1517	1573	1526
R-sq.	.00365	.0992	.000232	.0369	.00644	.129	.00369	.124

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

Table A18. Figure 5 corresponding table: Mobility, decision-making, domestic violence justification, and gender role attitudes as outcomes by age group (female only): Adults

	(1) Mobility (no controls)	(2) Mobility	(3) Decision-making (no controls)	(4) Decision-making	(5) DV justification (no controls)	(6) DV justification	(7) GRAs (no controls)	(8) GRAs
Syrian: Jordanian omit.	0.126	0.228*	0.051	0.119	-0.002	-0.125	-0.053	0.051
	(0.088)	(0.098)	(0.071)	(0.076)	(0.135)	(0.123)	(0.131)	(0.124)
Mother's ed: illit. omit.								
Mth: Read & Write		-0.069		-0.034		0.042		0.046
		(0.052)		(0.052)		(0.060)		(0.048)
Mth: Basic		-0.048		-0.043		0.012		-0.006
		(0.069)		(0.068)		(0.072)		(0.042)
Mth: Secondary		-0.049		-0.032		-0.045		0.153*
		(0.088)		(0.070)		(0.063)		(0.071)
Mth: Higher Ed.		0.025		-0.232**		-0.092		0.068
		(0.125)		(0.076)		(0.057)		(0.074)
Father's ed: illit. omit.								
Fth: Read & Write		-0.208**		-0.139**		0.207**		0.016
		(0.068)		(0.052)		(0.071)		(0.040)
Fth: Basic		-0.289***		-0.136*		0.039		0.017
		(0.077)		(0.055)		(0.051)		(0.063)
Fth: Secondary		-0.312***		-0.159*		0.076		-0.023
		(0.079)		(0.073)		(0.088)		(0.092)
Fth: Higher Ed.		-0.235*		-0.297***		0.049		-0.006
		(0.094)		(0.070)		(0.056)		(0.068)
Father's emp status: wage worker omit.								
Fth: Employer		0.109		-0.186*		0.063		-0.082
		(0.082)		(0.083)		(0.113)		(0.057)
Fth: Self-employed		-0.109		-0.078		-0.025		0.127**
		(0.067)		(0.045)		(0.047)		(0.049)
Fth: Non-employed		-0.129*		-0.206**		0.188*		-0.124**
		(0.055)		(0.063)		(0.076)		(0.042)
Geography: urban omit.								
Rural		-0.177**		-0.112		0.076		0.007

	(1) **Mobility (no controls)**	(2) **Mobility**	(3) **Decision-making (no controls)**	(4) **Decision-making**	(5) **DV justification (no controls)**	(6) **DV justification**	(7) **GRAs (no controls)**	(8) **GRAs**
		(0.060)		(0.060)		(0.064)		(0.062)
Camps		0.188		0.624***		0.590***		0.343
		(0.200)		(0.161)		(0.171)		(0.252)
Deciles of household wealth: 1st (poorest) omit.								
2nd decile		-0.004		0.214		-0.066		0.043
		(0.169)		(0.128)		(0.114)		(0.142)
3rd decile		-0.143		0.168		0.351*		0.016
		(0.168)		(0.121)		(0.157)		(0.159)
4th decile		-0.103		0.233		0.278		0.048
		(0.171)		(0.136)		(0.152)		(0.144)
5th decile		0.021		0.226		0.084		0.149
		(0.156)		(0.118)		(0.127)		(0.140)
6th decile		0.018		0.249*		-0.191		0.191
		(0.175)		(0.116)		(0.117)		(0.138)
7th decile		0.133		0.338**		-0.152		0.214
		(0.176)		(0.127)		(0.117)		(0.142)
8th decile		0.084		0.262*		-0.255*		0.188
		(0.175)		(0.124)		(0.125)		(0.143)
9th decile		0.229		0.245*		-0.255*		0.276
		(0.182)		(0.119)		(0.124)		(0.142)
10th decile		0.113		0.213		-0.295*		0.264
		(0.177)		(0.120)		(0.130)		(0.141)
Cluster level SES factor		0.120*		0.166***		0.187**		0.123*
		(0.049)		(0.039)		(0.069)		(0.048)
Cluster level average distance from primary schl (in mins)		0.002		-0.001		0.029*		-0.041***
		(0.012)		(0.007)		(0.013)		(0.009)
Constant	0.090**	0.279	0.111***	0.128	0.011	-0.372*	0.169***	0.428**
	(0.032)	(0.217)	(0.021)	(0.137)	(0.036)	(0.178)	(0.029)	(0.161)
N obs.	7462	7317	7385	7243	7609	7462	8820	8649
R-sq.	.00204	.0442	.000427	.0461	3.69e-07	.0879	.000549	.0715

Source: Authors' calculations based on JLMPS 2016
Notes: *p<0.05; **p<0.01; ***p<0.001

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