

RESEARCH ARTICLE

The Effect of Community Size on Women's Attitudes Toward Gender Equality

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Evidence points out that women's adoption of egalitarian attitudes depends on micro and macro conditions. Households' and women's characteristics, such as education level, number of children, and age, define their attitudes toward gender equality. Macro-social factors such as media, social programs, place of residence, religion, and institutions, also significantly influence women's attitudes toward gender equality. In addition, macro-social factors have been found to moderate the effects of a number of determinants of women's attitude toward gender equality. Communities provide the contexts that shape women's attitudes and define the meaning of their experiences and characteristics. Using hierarchical linear modeling this paper explores the nature of residential community size on women's development of egalitarian attitudes. Results indicate that community size moderates the impact of women's education, empowerment, and employment on their attitudes toward gender equality.

Keywords: community size; egalitarian attitudes; hierarchical linear modeling; women; gender equality

Introduction

Feminist theorists in general have argued that achieving gender equality requires not only favorable institutional and legal frameworks or changes in economic and political structures, but also changes in attitudes (Donovan, 2012; Herzog, 2007; United Nations, 2002). When women hold egalitarian attitudes, they are more likely to defend their rights and transform their resources into favorable outcomes for their lives. In contrast, women with a low support for egalitarianism are more likely to accept inequalities and transmit traditional ideas to their children (Klein, 1984). Promoting women's adoption of egalitarian attitudes is crucial and a necessary condition for improving their wellbeing. Egalitarian attitudes challenge traditional practices that confine women into the domestic sphere and promote inequalities between women and men (Gerson, 1987).

Evidence points out that women's adoption of egalitarian attitudes depends on micro and macro conditions. At the microlevel several individual level characteristics such as education level, number of children, and age, influence their attitudes toward gender equality (Baxter & Kane, 1995; Cassidy & Warren, 1996; Pampel, 2011; Thornton, Alwin & Camburn, 1983). Macro-social factors such as media, social programs, place of residence, religion, and institutions, also significantly influence women's attitudes toward gender equality (Bolzendahl & Myers,

2004). In addition, macro-social factors have been found to moderate the effects of a number of determinants of women's attitude toward gender equality (Fischer & Hout, 2006). Community characteristics are also found to shape women's attitudes toward gender equality (Grown, Gupta & Pande, 2005). Even though community characteristics are likely to play a crucial role in shaping women's attitudes toward gender equality, only a few studies have addressed the effect of residence community size on women's support for gender equality. Many Mexican communities characterized by high levels of social and economic diversity make excellent research sites for testing research hypotheses related to the role of community characteristic on women's attitudes toward gender equality.

In order to assess the role played by community characteristics in shaping women's attitudes toward gender equality, we explore the effect of residential community size on women's egalitarian attitudes using hierarchical linear modeling. This paper proceeds as follows. The next section explores how egalitarian attitudes are influenced through changes in socio-economic environments. Then, variables and methods are presented. The last section presents the results along with a discussion of our findings.

Women's attitudes toward egalitarianism

During the last century, Mexico experienced several socioeconomic and demographic transformations that increased people's education level and altered individuals' experiences and social interactions. These transformations were mainly a result of modernization (Parrado & Zenteno, 2005; Ribeiro, 1994). Industrialization brought about several compositional changes within households

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along side with profound socio-economic environmental changes influencing attitudes toward gender equality (Inglehart, 1990; Inglehart & Norris, 2003; Inglehart & Welzel, 2005).

Toward the end of the last century several Latin American countries turned away from the Import Substitution Industrialization model based on excessive government spending and rejection of laissez-faire economics (Vogel, 1974) to a new economic strategy for development labeled New Economic Model (NEM) (David, Dirven & Vogelgesang, 2000). NEM is based on the principles of Washington consensus that fully endorses the central role of free market forces in economic development policies (Reinhardt & Peres, 2000). Under NEM, Mexico experienced a rapid industrialization and urbanization that brought about massive transfer of labor to urban areas resulting in the incorporation of women into urban occupations (Cerrutti, 1997). During the last four decades most economies in Latin America have not only restructured but also increased their production capacity in response to higher levels of economic openness.

Strategies for economic development were based on trade liberalization. In 1985, Mexico joined the General Agreement on Tariffs and Trade (GATT) and in 1994 signed the North America Free Trade Agreement (NAFTA). As a consequence of economic liberalization there has been a significant proliferation of assembly manufacturing companies (the *maquila* sector) (Parrado & Zenteno, 2005). After the 1980s Mexican debt crisis (Buffie & Krause, 1989) the *maquila* sector rose into prominence as a source of female employment. In 1983, women represented 74.5% of the employees in the *maquila* sector (Parrado & Zenteno, 2005). The development of the service sector also promoted female participation in the labor market. In addition, the fertility decline that began in the 1960s gaining considerable momentum in the 1970s supported by strong state sponsored family planning facilitated women's entry into the labor market (Rendón, 2008). In sum, prevailing economic policies that promoted industrialization and market liberalization alongside with ongoing sociodemographic changes saw the emergence of expansive job opportunities in urban areas triggering massive migration to large localities. Furthermore, the strong forces of urbanization in Mexico and Latin America contributed to the redefinition of women's roles in society and career development (Ariza & De Oliveira, 2003).

According to modernization theories, in the face of changing situations people draw on new strategies for adaptation that alter their attitudes toward objects and situations (Chase, 2006; Chirot, 2012; Inglehart, 1990; Inglehart & Norris, 2003; Inglehart & Welzel, 2005). Two perspectives within modernization theories point to the process of development of women's egalitarian attitudes. Modernization processes that bring about the transition from an agrarian economy to industrial production result in economic improvements. The first perspective postulates that improvements in material circumstances such as economic security influence individuals' attitudes (Inglehart, 1990; Inglehart & Norris, 2003; Inglehart & Welzel, 2005). According to this perspective, people who

experience high levels of insecurity with respect to basic needs are more likely to be supportive of traditional gender roles and conservative religious beliefs (Inglehart & Norris, 2003). Individuals vulnerable to unemployment risks, insecurity, natural disasters, or health problems are more likely to hold these views (Inglehart, 1990). Several studies support the argument that economic progress is highly related to egalitarian beliefs (Inglehart, 1990; Fernández, 2011; Goldin, 1990). As values of equality and equity become codified in employment rules and regulations, attitude toward gender equality appear to improve over time (Littrell & Bertsch, 2013; Deere & Doss, 2006).

The second perspective suggests that modernization brings about a number of changes in non-material, social environments including values and norms that promote a growing emphasis on equality (Bell, 1976). With respect to the second perspective, Bell (1976) argues that changes in people's attitudes come about as a result of structural changes in sustenance activities, the strength of social institutions, and the emergence of new technology. According to Bell (1976), transformations in the socio-economic and technological environment produce profound modifications in individuals' conceptions of the world. In the presence of technology, people experience improvements in terms of control of their environmental conditions brought about by rational approaches as well as skilled use of material and non-material resources (Chirot, 2012). Rationality is at the core of modernity and becomes a means through which social coexistence is made possible and regulated (Martinelli, 2005). The development of rational and utilitarian approaches in turn promotes new ideals such as equality with respect to improvements in life chances in a modern world (Inglehart, 1990).

Perhaps one of the most important components in the expansion and sustenance of modernization process is the development of modern educational systems. Increases in economic security along with appreciation of modern values such as gender equality often result from improvements in proportion of the population with high levels of education (Inglehart, 1990; Inglehart & Norris, 2003; Pampel, 2011). With higher levels of education, individuals are exposed to new knowledge and egalitarian views (Bolzendahl & Myers, 2004). Exposure to new values and ideas may also come about as result of exposure to high level of secondary contacts as well as internalization of messages and information carried through various communication channels such as new paper and mass media. Opportunities for engaging in secondary relationships and exposure to mass media tend more likely to be obtained in urban areas than in the rural. In general, improvement in educational levels as well as urban residence are likely to be positively related to women's attitude toward gender equality in Mexico.

In Mexico, modernization brought about a large-scale migration to communities in volumes proportional to their size resulting in rapid growth of large cities and towns in the twentieth century (Sánchez & Pagán, 2001). The fast paced growth of large towns and cities considerably accelerated the spread of urbanism, altered the structure of traditional families, and facilitated the spread

egalitarian norms (Ribeiro, 1994) resulting in wide spread variations in socio-economic contexts affecting levels of gender equality. People residing in urban areas are more exposed to modern egalitarian gender norms compared to individuals who live in smaller localities (Bolzendahl & Myers, 2004). Larger localities facilitate a diversity of human interactions that proliferate the number of autonomous choices individual have to make decisions with respect to their well being and life chances (Inglehart, 1990). Therefore, urban environments are more likely to encourage the development of egalitarian attitudes than rural areas. Variations in environments and socioeconomic development among communities in Mexico are likely associated with disparities in the levels of gender equality (Ariza & De Oliveira, 2003).

Data and Variables

The information for this study comes from the National Survey on the Dynamics of Households Relationships (ENDIREH) 2011, a national level representative survey conducted in Mexico by the National Institute of Statistics and Geography (INEGI) and the National Institute for Women. It contains information of Mexican women regarding their opinions about their sex roles, decision making, intra-household division of labor, and socio-demographic characteristics. In this study, women's attitudes toward gender equality is the outcome variable and several socioeconomic characteristics, such as age, education, social interactions, and community size, are included as predictors.

Women's attitudes toward gender equality. Women's attitudes toward gender equality are measured through their opinions on female roles within and outside the household. This dimension comprises of 12 dichotomous variables representing agreement or disagreement stated in response to the following questions: (i) Does a good wife have to obey her husband in everything he orders? (ii) Can a woman choose her friends even if her husband does not like them? (iii) Does a woman have the same ability as a man to earn money? (iv) Is it a woman's duty to have sexual intercourse with her husband even if she does not want to? (v) Are women free to decide if they work outside the home? (vi) Should men and women share caregiving tasks? (vii) Do you agree that men and women should have the same rights to make their own decisions? (viii) Do you agree that men and women should have the same freedoms? (ix) Do you agree that women have the right to defend themselves and denounce any physical harm or aggression? (x) Do you agree that women have the chance to decide over their own life? (xi) Do you agree that women have the right to live a life free of violence? (xii) Do you agree that women should have the right to decide when and the number of children they have? If women responded with an egalitarian position, the answer was coded as 1, and 0 otherwise. The twelve items were added to create a scale, which varied from 0 to 12. Larger numbers indicate higher levels of support for gender equality.

Women's employment status. This is a dichotomous variable; 1 if they are employed and 0 otherwise.

Women's education. Women's education is indicated by the number of years of women's formal education. Women were asked their highest grade obtained and years of education in the next grade. This information was coded as the number of years that are required in Mexico to complete the grade plus additional years of education completed in pursuit of the next grade.

Women's age. This is a continuous variable measured in years.

Social interactions. To measure social interactions, respondents were asked six questions regarding their activities: if they (i) go out with friends?; (ii) talk with their neighbors?; (iii) meet their relatives?; (iv) attend meetings with organizations?; (v) practice a team sport? Other three questions if they had an emergency and had to borrow money, –excluding their partner– would you ask for money to your (vi) friends, (vii) neighbors, (viii) relatives. Responses of the eight items are dichotomous, with “yes” coded 1, and 0 otherwise. As religion is an institution that promotes traditional practices, the question (ix) do you attend religious ceremonies? This item is coded 1 if they responded “no”, and 0 otherwise. The nine items are added to create a composite scale.

Empowerment. This variable is a composite scale estimated using factor scores from principal components analysis. The empowerment variable is composed of four variables: housework, number of children, partner's education, and age at marriage. Each of the four variables had a factor loading above 0.60. Partner's education is indicated by the number of years of formal education. The variable ‘number of children’ is the total number of children alive. Regarding housework, respondents were asked about their and other household members' participation in domestic and caregiving tasks. There were four questions related to intrahousehold division of labor: usually (i) who takes care of girls or boys? (ii) who takes care of elderly people? (iii) who does the domestic chores? (iv) who pays utilities and do daily expenses? Possible responses are: the respondent, partner, both (the respondent and her partner), daughters, sons, a domestic worker, another household member, or a person who is not a household member. When women identified themselves as the primary undertakers of each of the many household activities specified, it is coded as 1 and 0 otherwise. Because this variable intends to measure women's burden inside the household, an additive scale is built.

Community size. The ENDIREH 2011 contains information regarding the state and population range of the community where women live. Community size is classified into six categories depending on the population size: i) less than 2,500 inhabitants; ii) between 2,500 and 5,000 inhabitants; iii) 5,000 or more, but less than 15,000 inhabitants; iv) 15,000 or more, but less than 50,000; v) between 50,000 and 100,000 inhabitants; vi) 100,000 or more inhabitants. The data set provided information on community size as well the state of residence of each respondent in the sample. There are 32 states and 6 population ranges. Because in the survey all states do not have communities with all population ranges, 177 groups were formed.

Method

Hierarchical linear modeling technique is widely regarded as an appropriate method for to analyze data structures where women (level 1) are nested within communities (level 2). The primary focus of the analysis is on the relationship between 'women's attitudes toward gender equality' and the level-1 predictors as well as community size (level 2). Level-1 predictors are women's age, years of education, employment status, social interactions, and empowerment level. Hierarchical linear model analysis was conducted in four stages: unconstrained model (null), random coefficients model, means as outcome model, and intercepts and slopes as outcomes model. Level-1 predictors were entered as group centered variables in order to obtain more accurate estimates of the intercept and to analyze the effects of the level-1 and level-2 predictor variables independently. In Equation 2a and 2b, community size is added as a grand centered predictor. Effects were estimated using restricted maximum likelihood.

Level-1 model, level-2 model, and mixed model were estimated using Equations 1 and 2. Equations 1 and 2 present the intercepts and slopes as outcomes model.

Level-1 model:

$$Y_{ij} = \beta_{0j} + \beta_{kj}X_{ij} + r_{ij} \quad (1)$$

where:

Y_{ij} = women's attitudes toward gender equality for woman i (level-1 unit) in community j (level-2 unit).

X_{ij} = values on the level-1 predictors for woman i in community j .

β_{0j} = intercept for community j .

β_{kj} = regression coefficients associated with predictor k for in community j .

r_{ij} = random error associated with woman i in community j .

Level-2 model:

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \gamma_{01}G_j + U_{0j} \quad (a) \\ \beta_{kj} &= \gamma_{k0} + \gamma_{k1}G_j + U_{kj} \quad (b) \end{aligned} \quad (2)$$

where:

β_{0j} = intercept for community j .

β_{kj} = slope of predictor k for community j .

G_j = community size in community j .

γ_{00} = overall mean intercepted adjusted for values on the predictors.

γ_{k0} = overall mean intercepted of predictor k adjusted for values on predictor k .

γ_{01} = regression coefficient associated with predictors relative to level-2 intercept.

γ_{k1} = regression coefficient associated with predictor k relative to level-2 intercept.

U_{0j} = random effects of community j adjusted for predictors on the intercept.

U_{kj} = random effects of community j adjusted for predictor k on the slope.

The unconstrained model:

Level-1 model:

$$Y_{ij} = \beta_{0j} + r_{ij} \quad (3)$$

Level-2 model:

$$\beta_{0j} = \gamma_{00} + U_{0j} \quad (4)$$

The random-intercepts model:

Level-1 model:

$$Y_{ij} = \beta_{0j} + \beta_{kj}X_{ij} + r_{ij} \quad (5)$$

Level-2 model:

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + U_{0j} \\ \beta_{kj} &= \gamma_{k0} + U_{kj} \end{aligned} \quad (6)$$

The means as outcome model:

Level 1 Model:

$$Y_{ij} = \beta_{0j} + r_{ij} \quad (7)$$

Level-2 model:

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \gamma_{01}G_j + U_{0j} \\ \beta_{kj} &= \gamma_{k0} + \gamma_{k1}G_j + U_{kj} \end{aligned} \quad (8)$$

Results

A fully unconstrained model was first estimated to determine whether there is significant variability in women's attitudes toward gender equality (see Equations 3 and 4). The chi-square value of the unconstrained model is statistically significant ($\chi^2 = 10,382.73$, $p < 0.001$). A significant chi-square reveals that there exists variance in women's attitudes toward gender equality by the community size groupings. The intra-class correlation (ICC) obtained from the unconstrained model was $0.0847 (\tau_{00}/(\tau_{00} + \sigma^2))$, suggesting that 8.47% of the variance in women's attitudes toward gender equality is between-localities and the rest is among women within a community. Given the existence of variance at both levels, predictor variables are included at each level in the subsequent phases of analysis.

To estimate the random coefficients model, level-1 predictors were included in the analysis and the variance component of the intercepts was assessed (see Equations 5 and 6). The estimated variance among the means is 0.1659 with a significant chi-square value ($\chi^2 = 12,404.26$, $p < 0.001$). These results indicate the presence of significant differences in the mean levels of women's attitudes

Table 1: Regression coefficients of women's attitudes toward gender equality (random coefficients model).

Fixed Effect	Coefficient	Standard Error	t-ratio	Approx. d.f.	p-value
Intercept, π_0					
Intercept, β_{00}	10.944451	0.031399	348.56	176	<0.001
Age slope, π_1					
Intercept, β_{10}	-0.013020	0.000589	-22.09	176	<0.001
Education slope, π_2					
Intercept, β_{20}	0.094892	0.002636	36.00	176	<0.001
Employment status slope, π_3					
Intercept, β_{30}	0.140313	0.012595	11.14	176	<0.001
Social interaction slope, π_4					
Intercept, β_{40}	0.080200	0.005335	15.03	176	<0.001
Empowerment slope, π_5					
Intercept, β_{50}	0.090117	0.006900	13.06	176	<0.001

Source: Own elaboration with information from the ENDIREH 2011.

Table 2: Variance components of the intercept and slopes (random coefficients model).

Random Effect	Standard Deviation	Variance Component	d.f.	χ^2	p-value
Intercept, r_0	0.40777	0.16628	176	12,683.20	<0.001
Age slope, r_1	0.00557	0.00003	176	381.71	<0.001
Education slope, r_2	0.02902	0.00084	176	845.33	<0.001
Employment slope, r_3	0.08770	0.00769	176	256.19	<0.001
Social interactions slope, r_4	0.04450	0.00198	176	333.27	<0.001
Empowerment slope, r_5	0.04290	0.00184	176	261.46	<0.001
level-1, e	1.20876	1.46109			

Source: Own elaboration with information from the ENDIREH 2011.

toward gender equality among the 177 localities. The next step in the analysis involved evaluating the variance components of the slopes as specified by the random coefficients model. **Table 1** presents the regression coefficient associated with each of the selected determinants of women's attitudes toward gender equality.

All the variables in the proposed model of women's attitudes toward gender equality are statistically significant at the 0.01 level. Women's age is negatively related to women's attitudes toward gender equality ($\beta = -0.013020$, $p < 0.001$). Meanwhile, women's education ($\beta = 0.094892$, $p < 0.001$), social interactions ($\beta = 0.080200$, $p < 0.001$), participation in the labor market ($\beta = 0.140313$, $p < 0.001$), and empowerment ($\beta = 0.090117$, $p < 0.001$) positively affects women's egalitarian attitudes.

Table 2 presents the variance components of the intercept and slopes. The results suggest that 18.16% ($(\sigma_{\text{null}}^2 - \sigma_{\text{random}}^2) / \sigma_{\text{null}}^2$) of the variance in women's attitudes is due to level-1 predictors when community size is held constant. As shown in **Table 2**, the variance of the slopes are

significant, which indicates that the relationship between the selected predictors and women's attitudes vary significantly across communities in Mexico.

In the next phase, community size variable was included in the level-2 model and level-1 predictors were removed (See Equations 7 and 8). In the random coefficients and means as outcomes model respectively, variables were entered independently. This model assesses whether the significant intercept variance found is related to community size. The regression coefficient relating community size to women's attitudes toward gender equality are provided in **Table 3**. Community size coefficient was positive and significant ($\beta = 0.171815$, $p < 0.001$). Thus, result from the means as outcomes model indicate that women's attitudes toward gender equality differ when women are grouped by the community size of their residence. Women in bigger localities are more likely to hold more egalitarian attitudes than women living in smaller localities. Community size explains 56.28% ($(\tau_{00} - \tau_{\text{MEANS}}) / \tau_{00}$) of the between measure variance in women's attitudes toward gender equality.

Table 3: Regression coefficients of women's attitudes toward gender equality (means as outcomes model).

Fixed Effect	Coefficient	Standard Error	t-ratio	d.f.	p-value
Intercept, π_0					
Intercept, β_{00}	10.941924	0.021562	507.45	175	<0.001
Community size, β_{01}	0.171815	0.012132	14.16	175	<0.001
$\sigma^2 = 1.78547$					
$\tau_{00} = 0.07227$					

Source: Own elaboration with information from the ENDIREH 2011.

Table 4: Regression coefficients of women's attitudes toward gender equality (intercepts and slopes as outcomes model).

Fixed Effect	Coefficient	Standard Error	t-ratio	Approx. d.f.	p-value
Intercept, π_0					
Intercept, β_{00}	10.943069	0.021743	503.280	175	<0.001
Community size, β_{01}	0.170896	0.012308	13.885	175	<0.001
Age slope, π_1					
Intercept, β_{10}	-0.013035	0.000608	-21.443	175	<0.001
Community size, β_{11}	0.000332	0.000304	1.090	175	0.277
Education slope, π_2					
Intercept, β_{20}	0.095729	0.002085	45.909	175	<0.001
Community size, β_{21}	-0.012335	0.001036	-11.910	175	<0.001
Employment status slope, π_3					
Intercept, β_{30}	0.144674	0.013494	10.721	175	<0.001
Community size, β_{31}	-0.022158	0.006192	-3.578	175	<0.001
Social interactions slope, π_4					
Intercept, β_{40}	0.080339	0.005424	14.813	175	<0.001
Community size, β_{41}	-0.004879	0.002622	-1.861	175	0.064
Empowerment slope, π_5					
Intercept, β_{50}	0.086193	0.007520	11.461	175	<0.001
Community size, β_{51}	-0.009236	0.003505	-2.635	175	0.009

Source: Own elaboration with information from the ENDIREH 2011.

Finally, the intercepts and slopes as outcomes model (see Equations 1 and 2) was estimated with all variables included simultaneously to test the interactions of the level-1 predictors with the level-2 community size variable. This model assesses whether the significant differences in intercepts and slopes of level-1 predictors are related to community size. **Table 4** presents the fixed effects of the intercepts and slopes as outcome model.

Community size is positively related to women's attitudes toward gender equality ($\beta = 0.170896$, $p < 0.001$). The interaction terms are significant only for women's education ($\beta = -0.012335$, $p < 0.001$), participation in the labor market ($\beta = -0.022158$, $p < 0.001$), and empowerment ($\beta = -0.009236$, $p < 0.009$). The significance of

the interaction terms provides empirical support to the presence of cross-level interaction of community size with women's education, participation in the labor market, and empowerment. It can be concluded that community size influences the strength of the relationships of variables such as women's education and participation in the labor market with their attitudes toward gender equality. The impact of female employment, women's education and empowerment is higher in smaller localities.

Table 5 presents the residual variance of the slopes. There is a reduction when comparing results from **Table 5** to the variance components in **Table 2**. The chi-square values of all variance components indicate that there is statistically significant residual variance in the slopes. In

Table 5: Variance components of the intercept and slopes (intercepts and slopes as outcomes model).

Random Effect	Standard Deviation	Variance Component	d.f.	χ^2	p-value
Intercept, r_0	0.27505	0.07565	175	2903.74421	<0.001
Age slope, r_1	0.00557	0.00003	175	374.44745	<0.001
Education slope, r_2	0.01809	0.00033	175	314.37194	<0.001
Employment status slope, r_3	0.07672	0.00589	175	228.60283	0.004
Social interactions slope, r_4	0.04362	0.00190	175	323.63117	<0.001
Empowerment slope, r_5	0.04848	0.00235	175	242.77608	<0.001
level-1, e	1.20873	1.46103			

Source: Own elaboration with information from the ENDIREH 2011.

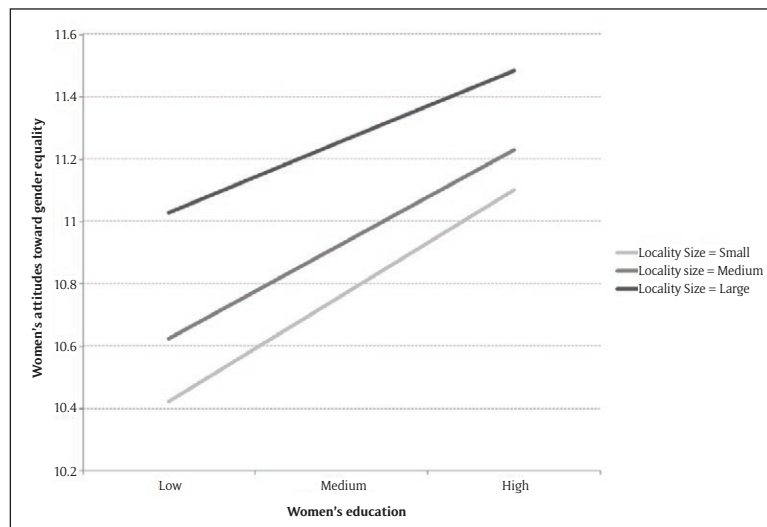


Figure 1: Women's attitudes toward gender equality, by community size and women's education.

Source: Own elaboration with information from ENDIREH, 2011.

addition, results suggest that 81.45% ($\tau_{00(\text{null})}/(\tau_{00(\text{null})} + \tau_{00(\text{fitted})})$) of the parameters variation in women's attitudes toward gender equality is explained by the community size variable.

Figures 1, 2 and 3 show the effect of women's education, employment status, and empowerment level, respectively, on their attitudes toward gender equality by community size. Women who live in large-sized localities hold in average more egalitarian attitudes than women who reside in smaller localities. The differences in the slopes show that the effect of women's education, employment and empowerment levels is higher among women living in smaller localities.

Conclusions

This paper examined the impact of several predictors and community size on women's attitudes toward gender equality in Mexico. Results from this paper highlight the importance of contextual factors in women's adoption of egalitarian ideas. Using hierarchical linear modeling we found that women's attitudes toward gender equality are defined by women's age, education, employment status, social interactions, and empowerment. Meanwhile, community size affects the extent to which women's educa-

tion, employment status, and empowerment affect their attitudes toward gender equality.

Women's attitudes toward gender equality are crucial to promoting their wellbeing. When women hold egalitarian attitudes, they are more likely to effectively allocate available resources to their wellbeing (Gerson, 1987). However, mean levels of predictors of women's egalitarian attitudes differ significantly among communities in Mexico. At the aggregate level, community size stimulates economic growth with a much larger share of their populations benefitting from higher levels of health and education. Similarly, a significantly higher proportion of women in small communities are more likely to have large proportion of children in poverty, and low levels of education than women residing in larger localities. In Mexican rural areas, only 28.5% of the economically active population are women. In contrast, in urban areas women represent 40.2% of the economically active population (INEGI, 2014). In both rural and urban areas, younger women are more likely to be economically active. Since age is negatively related to egalitarian ideas, it can be expected that as young cohorts replace older cohorts, women's attitudes toward gender equality is likely to increase in Mexico. However, younger women living in larger localities tend to

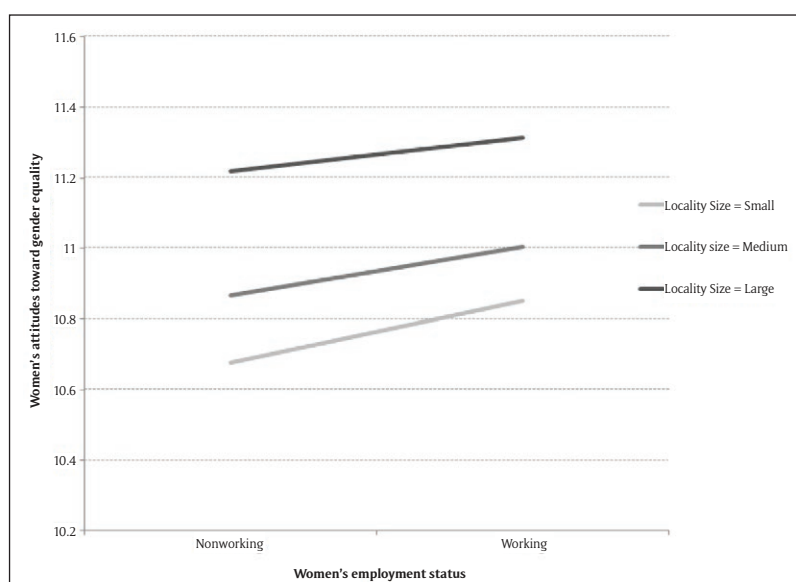


Figure 2: Women's attitudes toward gender equality, by community size and employment status.
Source: Own elaboration with information from ENDIREH, 2011.

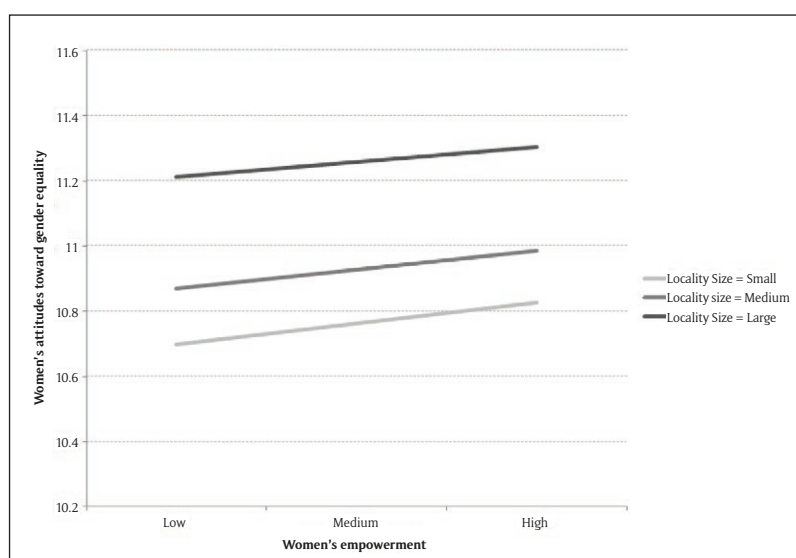


Figure 3: Women's attitudes toward gender equality, by community size and Empowerment.
Source: Own elaboration with information from ENDIREH, 2011.

gain egalitarian attitudes at a much faster pace than those residing in smaller localities. As a consequence, attitudinal gap in terms of support for gender equality may significantly widen as community size differences increase.

This study proposed an ecological framework to analyze egalitarian attitudes among women. At the individual level, women's characteristics determine their attitudes toward gender equality along with microsystem factors such as partner' and households' characteristics. At the macro-level, contexts such as urban significantly influence the extent to which individual characteristics and microsystem factors affect women's egalitarian attitudes toward gender equality than those in rural localities. From a policy perspective, individual demographic characteristics such as age, number of children, and age at marriage are far less manipulable than social characteristics including education, participation in the labor market, and social interactions that can be improved by increasing

access to social resources and enforcing labor laws. At the microsystem level, social policies should incorporate gender equality awareness programs that encourage the growth of egalitarianism among family members and coworkers. Regarding community characteristics, social policies should be geared toward ensuring all women's access to education, health services, and public institutions. The quality of public services should remain similar across localities. It is important to highlight that interventions at one any level can have multiplicative effects on women's attitudes toward gender equality and promote value and cultural change.

This paper analyzed the interaction between macro and micro determinants and increased the understanding on women's attitudes toward gender equality in Mexico. A challenge for future research is to explore and identify other variables related to contextual factors that influence women's egalitarian attitudes.

Competing Interests

The authors have no competing interests to declare.

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