The Role of Culture on Female Labor Supply: Evidence from Turkey

Pelin Akyol
Cagla Okten

I Z A Institute
of Labor Economics
Initiated by Deutsche Post Foundation

DISCUSSION PAPER SERIES

The Role of Culture on Female Labor Supply: Evidence from Turkey

Pelin Akyol
Bilkent University

Cagla Okten
Bilkent University and IZA

ABSTRACT

The Role of Culture on Female Labor Supply: Evidence from Turkey

This paper investigates the effect of culture on female labor market outcomes using new micro-level data on two distinct Muslim denominations in Turkey: Sunni and Alevi Muslims. We find a positive and significant effect of being an Alevi Muslim on female labor force participation and employment probability compared to a Sunni Muslim whereas there are no significant differences in male labor market outcomes between the two denominations. We provide evidence that Alevi Muslims have more gender equal views regarding the role of women in the labor market and argue that differences in gender views drive the results.

Corresponding author:
Cagla Okten
Department of Economics
Bilkent University
06800 Çankaya/Ankara
Turkey
E-mail: cokten@bilkent.edu.tr

1   Introduction

In recent years, an increasing number of papers combining sociology and economic outcomes have enriched the economic literature. The investigation of the relationship between religion and economic performance has been the focus of a number of these (McCleary and Barro (2006); Becker and Woessmann (2009); Iannaccone (1998); Noland (2005); Berman et al. (2018)). Both religion and social norms may play a major role in the formation of a country's culture; hence, economists also tried to understand the connection between culture and economic outcomes (Guiso et al. (2006); Tabellini (2008); Zhan (2015)), frequently finding a significant effect of culture. Moreover, social norms, religion and culture not only influence the economic development but also have an intergenerational transmission effect (Bisin et al. (2004); Hazan and Maoz (2002)).

In general, it is hard to evaluate whether observed variations in economic or social outcomes across countries or along time are attributable to differences in religious and cultural values since, besides religious and cultural norms, a range of economic and institutional factors tend to differ across time and space. This can explain some of the contradicting results in the literature (McCleary and Barro (2006); Noland (2005)).

Guiso et al. (2006) suggest that a necessary first step is to define culture in a sufficiently narrow way so that it becomes easier to identify a causal link from culture to economic outcomes. Some aspects of a specific religion such as its emphasis on a strong work ethic and honesty can be conducive to economic growth and some others such as its discouragement of female education, or labor supply can be an impediment to economic development. Hence broad categorizations of populations into large religious denominations such as Christian or Muslim and examining outcomes across countries and time may not be very helpful in understanding how religion and culture affect economic outcomes.

This study concentrates on Turkey, a predominantly Muslim country, and specifically aims to show the effect of social norms on female labor force participation rate (LFPR) and employment. Female labor force participation rate in Turkey, at 30 percent, is the lowest among OECD countries and has been relatively stagnant over time despite public policies that increased compulsory education (1997) and provided tax incentives to employers for hiring female workers (2008).

We argue that focusing on a single country such as Turkey has its advantages as labor market institutions, education system, language and economic conditions are uniform across the country at a given point in time. Despite this uniformity, there are two distinct Muslim denominations in Turkey: Sunni Muslims who are estimated to form about 80 percent of the population and Alevi Muslims who are estimated to form about 15 percent of the population.

Unfortunately, Turkish Household Labor Force Survey and Turkish Demographic Household Surveys do not have any information on religious affiliation. As a result, differences in the economic outcomes of these two Muslim groups have largely been unstudied in the literature. In this study, we use newly available and nationally representative individual level data with information on religious affiliation, ethnicity and all the relevant socio-demographic characteristics and labor market outcomes, collected by the Research and Consultancy company Konda in 2015.

Although there are no significant socio-demographic differences between the Alevi and Sunni Muslims, there are significant differences in their female labor force participation and employment rates in our data. Ours is the first study that quantifies differences in female labor force participation and employment rates of these two groups in Turkey. We find a positive and significant effect of being an Alevi Muslim compared to a Sunni Muslim on female labor force participation and employment probability controlling for age, age squared, education, marital status, household size, ethnicity, region of residence, region of birth, and metropolitan/urban/rural status of the current region whereas there is no significant difference in male labor market outcomes between the two denominations. Guiso et al. (2006) argue that in addition to defining culture, a necessary second step is to show a direct impact of culture on expectations and preferences and that those beliefs and preferences have an impact on economic outcomes. We provide evidence that Alevi Muslims have more gender-equal views than Sunni Muslims and argue that differences in their labor market outcomes are due to differences in their gender views.

The literature analyzing the relationship between social norms and female labor force participation (Scoppa and Stranges (2019); Burda et al. (2013); Fernández et al. (2004); Guiso et al. (2006); Vendrik (2003), Antecol (2000)) show that the influence of social norms is significant. Antecol (2000) finds that over half of the variation in the gender gap in labor force participation rate of immigrants is attributable to home country LFPR using data on immigrants to US. Scoppa and Stranges (2019) find that immigrants' female labor force participation rates at the host country can be explained by labor force participation rates of their home countries using data on immigrants to Italy. One caveat in these studies is that migration is an endogenous decision to labor market outcomes in the home countries, and that results are obtained for a selected sample and may not be completely representative of the underlying population.

Our study contributes to this literature by showing that religious identity is the basis of the social norm, and the social norm is the mechanism through which the religious beliefs manifest themselves in economic behavior. In our analysis, we do not have any sample selection issues since religious identity is determined at birth as children adopt the religious

identity of their parents and changing denominations in adulthood is extremely rare. Furthermore, the two religious identities analyzed have existed in their present form for centuries in Turkey. Our study, to our knowledge, is one of the first studies that defines culture in such a narrow way that institutions, language, religion and economic conditions are held constant. We find that an Alevi Muslim woman is 11.6 percentage point (ppt) more likely to participate in labor force than a Sunni Muslim women controlling for age, education, marital status, household size, ethnicity, region controls for birth place and residence.

In the next section, we describe the institutional and cultural background for education and labor market in Turkey. Section 3 presents our conceptual framework that motivates our empirical analysis. In Section 4, we describe the data used. Section 5 specifies our empirical methodology. Section 6 presents descriptive statistics and the results. In Section 7, we present robustness checks. Section 8 concludes.

2 Background

2.1 Alevis in Turkey

The Alevi Muslims comprise the second-largest faith community after Sunni Muslims in Turkey, estimated at about fifteen to twenty percent of the population (Erdemir (2005)). Alevism emerged in Turkey during the 10th century. Alevi Muslims believe that the Prophet Muhammad's nephew Ali Ibn Abi Talib was his rightful successor rather than the first three caliphs following the Prophet's death. Practicing Alevis, read from the same Islamic texts as Sunni Muslims, but worship in a cemevi, or prayer hall, rather than a mosque. The legal recognition of cemevis as places of worship has been a key demand of Alevis seeking equal citizenship and access to state resources as enjoyed by Sunni Muslims and mosques (Lord (2017)).

For centuries Alevis had to practice their rites in secret and have been victims of persecution during Ottoman times. Alevis in the secular Turkish Republic still have to struggle with distrust from some Sunni Muslims. By some metrics, however, the Alevis are safer now than at many points in their history. There are over 1000 cemevis in Turkey, and although they do not benefit from states resources, Alevi Muslims are free to practice their religion at cemevis. In 2007, President Erdogan, who is an overtly Sunni Muslim, began what was termed an "Alevi opening", a yearlong effort to discuss the improvement of Alevi rights. Mr. Erdogan spoke to a group of Alevi Muslims "We are all citizens of the Turkish republic. We are all hosts of this country, siblings without discrimination between you and us" (Kingsley (2017)).

In our data, about 88 percent of the population are Sunni Muslims, and 6 percent of the population are Alevi Muslims. The 6 percent is lower than some of the estimates in the literature. While it is possible that some of the survey respondents might have chosen to hide their religious affiliation, we would argue that in today's climate, in a survey conducted by a reputable research and consulting company, underreporting is not likely to be a major issue. In a 2006 Konda survey (Konda (2006)) on religious and ethnic identity, 53 percent of Alevis state that they live their religious identity freely, about 28 percent state that there are some problems, 14 percent state that there are legal impediments and only 4 percent state that there are societal/environmental impediments.

About a third of Alevis live in Istanbul while the rest predominantly live in middle Eastern Anatolia in cities such as Bingol, Elazig, Tunceli, Bitlis, Hakkari, Mus, Van and the Mediterranean region (Konda (2006)). Some of the predominantly Alevi cities like Bingol, Elazig and Tunceli are not in our data. That may be one of the reasons for the lower average in our sample compared to some of the estimates in the literature (Erdemir (2005)). However, we should point out that the estimates in the literature do not rely on official statistics. Since the Turkish Statistical Institute or any other government agency does not publish data on the religious denomination, the exact share of Alevis in the population is not known.

There are two major ethnic groups in Turkey: Turks and Kurds. About 80 percent of the population identify themselves as Turkish, and 20 percent identify themselves as Kurdish ethnically. Being an Alevi is a religious identity; hence, Alevis may belong to Turkish or Kurdish ethnic groups. Hence there no are significant physical differences between Alevi Muslims and Sunni Muslims. In general, there are also no significant differences in the given names and last names of the two groups. Therefore, it is not possible to identify whether a person is an Alevi Muslim or a Sunni Muslim simply by physical appearance or by name.

2.2 Gender Roles

Differences in gender roles have been offered as an explanation for observed gender differences in educational and labor market outcomes (Marianne (2011)). Fortin (2005) finds that evaluation of women's sense of self, as measured by agreement with the statements "when jobs are scarce, men should have more right to a job than women" or "being a housewife is just as fulfilling as working for pay", is closely associated with women's labor market outcomes in a study of 25 OECD countries. Many believe that views on gender roles are largely determined early in childhood. In some countries, children grow up in an environment in which son preference is strong (see, for example, Zhang et al. (2007) for China and Stash

and Hannum (2001) for Nepal). Even in countries that are not typically considered to have patrilineal family systems, female labor market outcomes may depend on parental views on gender roles. In Australia, females' attitudes towards working women are developed in their youth by their religious affiliation and their parents' education and labor market behavior (Vella (1994)). In the U.S., mothers with less traditional gender values are more likely to have working daughters and daughters-in-law (Farre and Vella (2013)).

In socially conservative parts of Turkey, a traditional view on gender roles prevails (Caner et al. (2016)). Indeed, several studies that have conducted face-to-face interviews with parents, teachers and local officials in Turkey report conservative views against girls' education as a major impediment (Alat and Alat (2011); Tunç (2009)). Conservative views on gender roles are also reflected in popular discourse. A few years ago, the Turkish Minister of Health has been quoted to say "Mothers should not put another career other than motherhood at the center of their lives" (Hurriyet Daily News (2015)).

Turkey combines modernity with traditionalism, and it displays a wide spectrum of gender views across its regions, as shown by a gender view indicator based on the degree to which the respondents agree with the statement "when jobs are scarce, men should have more right to a job than women". The regional averages (NUTS-1 level) of the indicator in Turkey vary between 3.22 in the most gender equal region and 4.12 in the most unequal region. By comparison, the average value of the indicator is about 3.23 in Chile, Romania, Spain and Great Britain, about 3.48 in China and Czech Republic, 3.59 in Russia, 3.78 in India and about 4 in Saudi Arabia and Algeria (Caner et al. (2016)). Anecdotal evidence suggests that Alevi Muslims have more gender equal views than Sunni Muslims. However, prior to our study, this also has not been established empirically in the literature.

3   Conceptual Framework

Weber (1904)'s main analysis in The Protestant Ethic viewed religiosity as an independent variable that could influence economic outcomes. Religious beliefs affect the economy by fostering traits such as work ethic, honesty, trust, thrift, charity, hospitality to strangers and so on. By enhancing these traits, greater religiosity could spur investment and economic growth. Wesley's (Wesley (1760)) views, cited by Weber (1904), are similar in some respects. Wesley (1760) famously urged his congregants to "gain all you can, save all you can, give all you can". However, he regretted that he had been more successful in promoting the first two tenets than the third. But the first two—akin to Weber's work ethic and thrift—are probably more important than charity as underpinnings of a productive economy (McCleary and Barro (2006)). A key point about religion in the Weberian framework is that religious beliefs are

what matter for economic outcomes. This approach contrasts with a social capital/cultural perspective, in which the networking associated with attendance at formal religious services could be what promotes growth. This alternative perspective trivializes religion by viewing participation in formal religion as just one of many ways to build social capital or to form a communal culture. For Weber, houses of worship were not merely forms of social clubs. The special feature of religion is its potential influence on beliefs that reinforce particular traits and values.

McCleary and Barro (2006) argue that promises or threats issued by religions are great motivators of behavior in this world. Beliefs in these compensators can raise productivity by fostering individual traits such as honesty, work ethic and thrift. In other contexts, the powerful force from afterlife beliefs can promote anti-social actions and even violence. In either context, the social capital and cultural aspects of religion - communal services, rituals, religious schools - are significant only to the extent that they influence beliefs and, hence, behavior. McCleary and Barro (2006) argue that believing relative to belonging (or attending) is the main channel through which religion matters for economic and other outcomes. McCleary and Barro (2006) then undertake a macro level cross country analysis where they show that belief in hell is positively associated with economic growth.

In this paper, our conceptual framework is similar to McCleary and Barro (2006) in the sense that we also argue that religious beliefs affect economic outcomes. Instead of a cross-country analysis, we focus on a single country, Turkey. Hence, we hypothesize that Alevi Muslim women are more likely to participate in the labor force than Sunni Muslim women because Alevis hold more gender equal views than Sunnis. In the Empirical Methodology section, we will describe how we will test this hypothesis.

There can be alternative explanations for higher labor force participation rates of Alevi women than the one we propose. First, Alevis and Sunnis might have different preferences for labor/leisure choice. Alevis might have a stronger taste for work. In the terminology of labor economics, perhaps the marginal rate of substitution of leisure for consumption is lower for Alevis, resulting in a lower reservation wage for them. Hence at a given market wage, probability of participating in the labor force is higher for an Alevi Muslim than a Sunni Muslim because the former has a lower reservation wage than the latter. Second, Alevis may have better employment opportunities than Sunnis. They may face higher market wages than Sunnis, perhaps because they are higher-skilled or find employment more easily because they have better social networks or even face positive discrimination. These differences in labor/leisure preferences and employment opportunities between the two religious denominations, if they exist, are likely to hold for men as well as women. Hence, we will test the hypothesis that observed differences in labor market outcomes are due to differences

in preferences and/or employment opportunities by examining whether there are differences in labor market outcomes of Alevi and Sunni men. If it is the gender view hypothesis that is driving the results, we should observe that an Alevi woman is more likely to participate in the labor force than a Sunni woman, but there should not be any significant differences between an Alevi man and a Sunni man in terms of their labor market outcomes. However, if an Alevi man is more likely to participate in the labor force or be employed than a Sunni man, this would mean that either Alevis as a group have a lower reservation wage and/or have better labor market opportunities.

In order to further examine whether there are differences in the labor market opportunities of Alevis and Sunnis, we will estimate whether there are significant differences in their unemployment rates and income levels. If Alevis have better social networks or simply are more productive/higher skilled, they may have an easier time finding employment and earn higher wages.

4   Data

The main data source for labor market studies in Turkey, the Turkish Household Labor Force Survey (HLFS) does not have any data on religious affiliation or ethnicity as Turkish Statistical Institute does not collect data on religious affiliation or ethnic identity. Turkish Demographic Household Survey (TDHS) also does not have any questions on religious affiliation. Hence, in order to study the effect of religious affiliation on female labor force participation and employment, we draw on a new survey conducted by Konda, Research and Consulting company in 2015. The sample was collected according to address based population system with stratified sampling according to the 2011 General Election Results. The survey is representative of adults (18 years old or older) at NUTS-1 regional level. There are 12 regions at NUTS-1 level in Turkey. The primary purpose of the survey was to gather views and opinions on gender roles and domestic violence.

Turkish HLFS asks an individual if she worked even one hour in order to earn income or as an unpaid family worker during the reference week. If the answer to this question is "yes" then the individual is classified as employed and hence in the labor force. In our survey, the individual is asked whether she is a paid employee, employer, own account worker, farmer, retired, student, housewife or unemployed. We classify an individual in labor force if she states that she is working as a paid employee, employer, own account worker, farmer or if she is unemployed. If an individual classifies herself as retired, housewife, student, or cannot work, we classify the individual as not in the labor force. Average female LFPR in our data is about 22 percent, which is lower than 30 percent that is computed using Turkish HLFS.

We believe that lack of unpaid family worker category might be the primary reason for our lower female participation rate. Since there is a farmer category, some women who work on the family farm as unpaid family workers might have classified themselves as farmers while others might have considered themselves as housewives. Since we are more interested in female labor force participation for monetary gain, we think ours is the more appropriate measure for our purposes. In addition to labor force participation, we also construct variables for employment and unemployment status of respondents.

The survey has a number of questions on gender views of respondents which we use to examine whether Alevis have more equal gender views. Survey respondents are asked whether they strongly disagree, disagree, agree or strongly agree with the following statements: 1. The main responsibility of a woman is to raise children and run a household; 2. Women are delicate, it is not appropriate for them to work in men's jobs; 3. Women entering the labor force leads to unemployment among men; 4. Women cannot be good managers by nature; 5. Women should be careful about their outfit. We construct dependent variables on gender views using this information.

5   Empirical Framework

We estimate the effect of being an Alevi Muslim on female labor market outcomes by estimating the following linear probability model:

$$L_{ir} = \alpha_i + \beta A_{ir} + \delta X_{ir} + \lambda_r + \lambda_i + \varepsilon_{ir} \tag{1}$$

where L_{ir} is the labor market outcome of individual i residing in region r. We have two labor market outcomes: Labor force participation and employment. Labor force participation is equal to 1 if individual i residing in region r is in labor force or zero otherwise. Employment is equal to 1 if individual i is in labor force and employed (not looking for a job), zero otherwise. The sample used in this estimation is composed of individuals $18 - 65$ years old. This is slightly different than working age population defined as $15 - 65$ years old because the survey is conducted to adults, aged 18 or older.

A_{ir} is equal to 1 if the individual is Alevi Muslim or zero otherwise. The coefficient will give us the percentage point difference in labor force participation and employment of an Alevi woman from a Sunni woman. X_{ir} is a vector of sociodemographic characteristics such as age, education, marital status, household size, ethnicity and urban/rural status. λ_r is a vector of dummies for the region of residence, λ_i is a vector of dummies for the region of birth.

We control for age, age squared, education and region of residence in order to control for differences in labor market opportunities of individuals. We control for marital status since married women have lower participation rates than single women due to their responsibilities at home. Women with children also have lower participation rates than women without children. Unfortunately, we do not have data on the number of children. As a proxy, we control for household size. Other than religious affiliation, the region of birth and ethnicity are socio-demographic characteristics that can influence social norms about work. Hence in our analysis, we also control for these variables. We do not have data on the hourly wage rate. However, we have data on household income. In order to check whether Alevi households have better income opportunities, we will also estimate equation (1) using household income as the dependent variable.

There can be alternative explanations for higher labor force participation rates of Alevi women than the one we propose. First, Alevis and Sunnis might have different preferences for labor/leisure choice. Alevis might have a stronger taste for consumption and thereby for work and have a lower reservation wage rate. Second, they may face a higher market wage. Hence, both Alevi women and men might be more likely to be in labor force or in employment than their Sunni counterparts. In order to examine this hypothesis, we will also estimate equation (1) with the male sample for comparison.

We will also examine the hypothesis that Alevis may find employment more easily; perhaps they have better social networks, or productivity levels or even face positive discrimination in the labor market. We will estimate equation (1) with unemployment as the dependent variable. Unemployed is defined as 1 if the individual is looking for work and 0 if the individual is employed. In this estimation, the sample is composed of those in the labor force.

After we establish the causal effect of being an Alevi on the probability of female labor participation and employment, we will examine the effect of being an Alevi on holding a more equal gender view and estimate equation (1) with an indicator dependent variable for gender view. The dependent variable is coded as 1 if the respondent strongly disagrees or disagrees with the following statement and coded 0 if the respondent agrees or strongly agrees with it: The main responsibility of a woman is to raise kids and run a household. Hence a positive and significant estimate of the coefficient on the Alevi variable implies that being an Alevi increases the probability of having a more gender equal view. We will use alternative dependent variables on gender views based on the following statements in the survey: Women are delicate, it is not appropriate for them to work in men's jobs; Women entering labor force leads to unemployment among men; Women cannot be good managers by nature; Women should be careful about their outfit. All the dependent variables are

coded as 1 if the respondent strongly disagrees or disagrees with the gender view statement. We estimate gender view regressions for males and females separately since gender views of husbands and fathers can also be important in determining the labor supply of women.

6 Descriptive Statistics and Regression Results

6.1 Descriptive Statistics

Table 1 presents descriptive statistics for variables of interest. We present averages and standard deviations of variables for men and women separately. We also test whether differences in averages between Alevis and Sunnis are statistically different and present the results. Average LFPR and employment rate of Alevi women are significantly higher than that of Sunni women by 20.5 and 19.8 percentage point (ppt), respectively. Whereas, there is no significant difference between either labor force participation rates or employment rates of Alevi and Sunni men.

Interestingly, there does not seem to be important differences in education levels between Alevis and Sunnis. Alevis are marginally less likely to have a primary school degree compared to Sunnis. Also, the average higher education attainment rate seems slightly higher for Alevi women compared to Sunni women; however the difference is not statistically significant. Hence given that there are some small differences between the education levels of the two groups, it is important to control for education in our estimations. We will also divide our sample into two groups primary/middle school graduates and high school/university graduates and estimate equation (1) for these two groups separately.

When we consider variables on gender views, we observe that both Alevi women and men are more likely to hold more gender equal views than their Sunni counterparts. As shown in Table 1, there are no significant socio-demographic differences between the two groups. However, the two groups have significant differences in their gender views. For instance, while 47.8 percent of Alevi Muslim women disagree with the statement that the main responsibility of a woman is to raise children and run a household, only 36.3 percent of Sunni Muslim women disagree with this statement. Similarly, Alevi Muslim men are 13.8 ppt more likely to disagree with the same statement than Sunni Muslim men.

6.2 Regression Results

6.2.1 Labor market outcomes

In Table 2, we present the estimation results of equation (1). In column 1 and 2, our dependent variable is labor force participation rate and is equal to one if the individual is in the labor force and zero otherwise. We observe that controlling for age, age squared, education, marital status, household size, ethnicity, region controls for birthplace and residence, an Alevi woman is 11.6 ppt more likely to participate in the labor force than a Sunni woman. In column 2, we estimate equation (1) for the male sample. Interestingly, the coefficient on the Alevi variable is not significant. Hence, there is no statistical difference between an Alevi man and a Sunni man in terms of their labor force participation. In columns 3 and 4, the dependent variable is employment; column 3 presents results for the female sample, and column 4 presents results for the male sample. Our results on employment are similar to results on labor force participation. An Alevi woman is 12.7 ppt more likely to be employed than a Sunni woman; however, there are no significant differences between an Alevi man and a Sunni man in terms of their employment outcomes. Since we do not find any significant differences between Alevi men and Sunni men in terms of their labor market outcomes, it is unlikely that differences in preferences for work or labor market opportunities can explain the observed differences in the labor market outcomes of Alevi women and Sunni women.

Alevis have a reputation for giving importance to education. In all regressions, we control for education. However, the process of selection into higher education might vary across the two groups. Perhaps we are finding the effect of an elite minority who is very engaged in both higher education and the labor market. In order to test whether our results hold for women with less than a high school degree, we divide our female sample into two groups. Column 5 presents results for high school or university graduates, and column 6 presents results for less than high school graduates. The coefficient on Alevi is not significant in the sample with at least a high school degree in column 5. However, in column 6, where we restrict the sample to those with less than high school degree we observe that the coefficient on Alevi is positive and significant. Hence, an Alevi woman with less than a high school degree is 16.7 ppt more likely to participate in the labor market than her Sunni counterpart. We know from earlier results in the literature that (Karaoglan and Okten (2015)), the average gender gap in labor outcomes decreases with education. Our result contributes to this finding in that education also decreases the gap in labor market outcomes between religious denominations.

As we mentioned earlier, we do not have data on hourly wage. However, we have data on household income. In order to further examine if there are differences in income opportunities between the two groups, we estimate equation (1) with household income as a dependent

variable. In columns 7 and 8, the dependent variable is the household income of females and males, respectively. We do not observe any effect of being an Alevi woman (man) relative to a Sunni woman (man) on household income in these regressions.

In addition to wages, difficulty or easiness of finding employment can also affect labor force participation. Perhaps Alevi women have an easier time finding employment than Sunni women because they have better social networks or face positive discrimination. As a result, Alevi women may have lower unemployment rates. In order to check this possibility, we estimate equation (1) with unemployment as the dependent variable. Unemployment is equal to 1 if individual is looking for work and 0 otherwise. In this estimation, the sample is composed of individuals who are in the labor force. Social networks may be more important in finding employment in metropolitan areas. Hence we estimate unemployment regressions with both the whole sample and the metropolitan sample. Table 3 presents these results. Column 1 and 2 present results for women and men respectively using the whole sample. Column 3 and 4 replicate the results in columns 1 and 2 for the metropolitan sample. Although the coefficient on the Alevi variable is negative it is not significant in any of these regressions. Hence, we do not find that unemployment rates are lower for Alevis.

6.2.2 Gender Views

In this section, we analyze the effect of being an Alevi on gender views. Survey respondents are asked whether they strongly disagree/disagree, agree or strongly agree/agree with the following gender biased statements: 1. The main responsibility of a woman is to raise children and run a household; 2. Women are delicate, it is not appropriate for them to work in men's jobs; 3. Women entering the labor force leads to unemployment among men; 4. Women cannot be good managers by nature; 5. Women should be careful about their outfit. We construct five dependent variables using these statements. Each dependent variable is coded as 1 if the respondent strongly disagrees or disagrees with a gender biased statement and coded 0 if the respondent strongly agrees or agrees with it. We estimate equation (1), using these dependent variables with the same controls. Hence, a positive and significant coefficient on Alevi variable indicates that an Alevi person holds a more gender equal view compared to her Sunni counterpart. Again, we estimate regression equations for men and women samples separately. It is important to consider gender views of men as well as women, since labor supply decisions of women might depend on gender views of their father and/or husbands.

Table 4 presents gender view regression results for the women sample. Our results show that Alevi women have more equal gender views than Sunni women. They are 9.8 ppt more likely to disagree with the statement of "The main responsibility of a woman is to raise

children and run a household". They are also 12.7 ppt and 21.3 ppt more likely to disagree with the statement of "Women entering the labor market leads to unemployment among men", and "Women should be careful about their outfit" than their Sunni counterparts. Our results on the gender views of men are even more striking. We present these results in Table 5. The results show that Alevi men have more equal gender views than Sunni men. Alevi men are significantly more likely to disagree with all the gender biased statements than Sunni men. Alevi men are 14.5 ppt more likely to disagree with the statement of "The main responsibility of a woman is to raise children and run a household" and they are 17.2 ppt more likely to disagree with the statement of "Women are delicate, it is not appropriate for them to work in men's jobs".

7   Robustness Checks

As we mentioned earlier, the share of Alevis in our sample seems to be lower than the estimates in the literature. This can be due to the absence of some of the predominantly Alevi cities in our sample. To refine our analysis, we restrict our sample to metropolitan areas where the share of Alevis is at 8.5 percent, higher than the average in the whole sample. We present results on the labor market outcomes for the restricted metropolitan sample in Table 6. Consistent with our earlier findings, while female LFPR of Alevi women is significantly higher than their Sunni counterparts (column 1), there is no significant difference in male LFPR between the two groups (column 2). We observe that controlling for age, age squared, education, marital status, household size, ethnicity, region controls for birthplace and residence, an Alevi woman living in a metropolitan area is 14.7 and 16.1 ppt more likely to participate in the labor force and be employed, respectively, than a Sunni woman living in a metropolitan area (Table 6, columns 1 and 3). According to the results presented in column 4, Alevi men are marginally more likely to be employed. Social networks may be more important in finding employment in metropolitan areas. This finding may be indicative of Alevis having better networks in these areas. We also present the results for the household income for the Metropolitan sample in column 5 and 6 of Table 6 for females and males, respectively. Consistent with our earlier results, there is no significant difference between Alevi and Sunni Muslims in terms of household income.

We next examine whether our results on gender views are robust to restricting our sample to metropolitan areas. Table 7 presents results for women. Our results show that in metropolitan areas, Alevi women have more equal gender views than Sunni women consistent with our earlier results. Metropolitan Alevi women are 8.2 ppt and 15.5 ppt more likely to disagree with the statements of "The main responsibility of the woman is to raise kids and

run a household", and "Women are delicate, it is not appropriate for them to work in men's jobs", respectively than their Sunni counterparts. Furthermore, metropolitan Alevi women are 20.2 and 22.8 ppt more likely to disagree with the statements of "Women cannot be good managers by nature" and "Women should be careful about their outfit", respectively. So our results on the gender view of women are consistent with the results in our whole sample regressions.

Once again, our results on the gender views of men are even more striking. We present these results in Table 8. The results show that Alevi men have more equal gender views than Sunni men. In fact, Alevi men are more likely to disagree with all the gender biased statements than Sunni men as coefficients on Alevi indicator is positive and significant in all gender view regressions. Alevi men living in metropolitan areas are 21.8 percentage points more likely to disagree with the statement of "The main responsibility of a woman is to raise children and run a household" and they are 13.1 ppt more likely to disagree with the statement of "Women are delicate, it is not appropriate for them to work in men's jobs" than Sunni men living in metropolitan areas (Table 8, columns 3 and 4).

8   Conclusion

We investigate the effect of culture on female labor market outcomes using new nationally representative data collected by Konda, Research and Consulting company, which includes information on the religious affiliations of the individuals in Turkey. There are two distinct Muslim denominations in Turkey: Sunni and Alevi Muslims. We show that, although they are exposed to the same labor market institutions, education system and economic conditions, Alevi Muslim women have better labor market outcomes compared to their Sunni counterparts. Alevi women are more likely to be in the labor force and be employed, whereas we do not find any difference in the labor market outcomes of Alevi and Sunni men.

We also investigate the channels through which culture can affect labor market outcomes of women. We test for three channels. First, we examine whether Alevis have a stronger taste for consumption and thereby for work and have a lower reservation wage rate. Second, Alevis might have better employment opportunities than Sunnis, which might be due to their better social network or positive discrimination against them. Third, Alevis might have a more equal gender view, which can influence their labor market outcomes. We eliminate the first two hypotheses as we do not find any effect of being Alevi on male LFPR, employment rate, and unemployment rate. Furthermore, we do not find any effect of being an Alevi on household income. Therefore, we reject that Alevis as a group have a lower reservation wage rate or have better employment opportunities hypotheses. We investigate the effect of being

an Alevi on gender views of both men and women. Our findings show that both Alevi men and women have more equal gender views regarding the role of women in the labor market than their Sunni counterparts.

Overall, our results imply that religious identity is the basis of the social norm, and the social norm is the mechanism through which the religious beliefs manifest themselves in economic behavior. Culture plays an important role in female labor supply. Given our finding, perhaps it is not surprising that female labor force participation rate in Turkey, at 30 percent, is still the lowest among OECD countries and has been relatively stagnant over time despite public policies that increased compulsory education in 1997 and provided tax incentives to employers for hiring female workers in 2008. Policymakers that aim to increase female labor supply need to consider how proposed policies will interact with existing gender views and gender roles. More research needs to be done on how existing social norms on gender views and gender roles can be modified towards more equality in the labor market.

References

Alat, Z. and Alat, K. (2011). A qualitative study of parental resistance to girls' schooling. *Educational Sciences: Theory and Practice*, 11(3):1369–1373.

Antecol, H. (2000). An examination of cross-country differences in the gender gap in labor force participation rates. *Labour Economics*, 7(4):409–426.

Becker, S. O. and Woessmann, L. (2009). Was weber wrong? a human capital theory of protestant economic history. *The Quarterly Journal of Economics*, 124(2):531–596.

Berman, E., Iannaccone, L. R., and Ragusa, G. (2018). From empty pews to empty cradles: Fertility decline among european catholics. *Journal of Demographic Economics*, 84(2):149–187.

Bisin, A., Topa, G., and Verdier, T. (2004). Religious intermarriage and socialization in the united states. *Journal of political Economy*, 112(3):615–664.

Burda, M., Hamermesh, D. S., and Weil, P. (2013). Total work and gender: facts and possible explanations. *Journal of population economics*, 26(1):239–261.

Caner, A., Guven, C., Okten, C., and Sakalli, S. O. (2016). Gender roles and the education gender gap in turkey. *Social Indicators Research*, 129(3):1231–1254.

Erdemir, A. (2005). Tradition and modernity: Alevis' ambiguous terms and turkey's ambivalent subjects. *Middle Eastern Studies*, 41(6):937–951.

Farre, L. and Vella, F. (2013). The intergenerational transmission of gender role attitudes and its implications for female labour force participation. *Economica*, 80(318):219–247.

Fernández, R., Fogli, A., and Olivetti, C. (2004). Mothers and sons: Preference formation and female labor force dynamics. *The Quarterly Journal of Economics*, 119(4):1249–1299.

Fortin, N. M. (2005). Gender role attitudes and the labour-market outcomes of women across oecd countries. *oxford review of Economic Policy*, 21(3):416–438.

Guiso, L., Sapienza, P., and Zingales, L. (2006). Does culture affect economic outcomes? *Journal of Economic perspectives*, 20(2):23–48.

Hazan, M. and Maoz, Y. D. (2002). Women's labor force participation and the dynamics of tradition. *Economics Letters*, 75(2):193–198.

Hurriyet Daily News (2015). Mothers' only career should be motherhood, turkish health minister says. *Hurriyet Daily News.*

Iannaccone, L. R. (1998). Introduction to the economics of religion. *Journal of economic literature*, 36(3):1465–1495.

Karaoglan, D. and Okten, C. (2015). Labor-force participation of married women in turkey: A study of the added-worker effect and the discouraged-worker effect. *Emerging Markets Finance and Trade*, 51(1):274–290.

Kingsley, P. (2017). Turkey's alevis, a muslim minority, fear a policy of denying their existence. *The New York Times*, 22.

Konda (2006). Toplumsal yapı araştırması 2006: Biz kimiz? *KONDA Araştırma ve Danışmanlık, İstanbul.*

Lord, C. (2017). Between islam and the nation; nation-building, the ulama and alevi identity in turkey. *Nations and Nationalism*, 23(1):48–67.

Marianne, B. (2011). New perspectives on gender. In *Handbook of labor economics*, volume 4, pages 1543–1590. Elsevier.

McCleary, R. M. and Barro, R. J. (2006). Religion and economy. *Journal of Economic perspectives*, 20(2):49–72.

Noland, M. (2005). Religion and economic performance. *World development*, 33(8):1215–1232.

Scoppa, V. and Stranges, M. (2019). Cultural values and decision to work of immigrant women in italy. *LABOUR*, 33(1):101–123.

Stash, S. and Hannum, E. (2001). Who goes to school? educational stratification by gender, caste, and ethnicity in nepal. *Comparative Education Review*, 45(3):354–378.

Tabellini, G. (2008). Institutions and culture. *Journal of the European Economic Association*, 6(2-3):255–294.

Tunç, A. İ. (2009). Kiz çocuklarinin okula gitmeme nedenleri van ili örneği. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 6(1):237–269.

Vella, F. (1994). Gender roles and human capital investment: The relationship between traditional attitudes and female labour market performance. *Economica*, pages 191–211.

Vendrik, M. C. (2003). Dynamics of a household norm in female labour supply. *Journal of Economic Dynamics and Control*, 27(5):823–841.

Weber, M. (1904). 1905 [1930]. *The Protestant Ethic and the Spirit of Capitalism*.

Wesley, J. (1760). The use of money, a sermon on luke, in sermons on several occasions.

Zhan, C. (2015). Money vs prestige: Cultural attitudes and occupational choices. *Labour Economics*, 32:44–56.

Zhang, Y., Kao, G., and Hannum, E. (2007). Do mothers in rural china practice gender equality in educational aspirations for their children? *Comparative Education Review*, 51(2):131–157.

Table 1: Descriptive Statistics

	Women				Men			
	Sunni (1) Mean (SE)	**Alevi** (2) Mean (SE)	**Observations**	**Difference (2)-(1)** (3) Estimate (SE)	**Sunni** (1) Mean (SE)	**Alevi** (2) Mean (SE)	**Observations**	**Difference (2)-(1)** (3) Estimate (SE)
Age	38.35 (0.385)	38.20 (1.422)	1,115	-0.147 (1.474)	38.28*** (0.415)	36.32*** (1.592)	1,189	-1.963 (1.645)
Labor Market Outcomes:								
Labor Force Participation	0.201 (0.0124)	0.406 (0.0595)	1,115	0.205*** (0.061)	0.689*** (0.0139)	0.709*** (0.0514)	1,189	0.020 (0.053)
Employment	0.164 (0.0115)	0.362 (0.0583)	1,115	0.198*** (0.059)	0.608*** (0.0147)	0.658*** (0.0537)	1,189	0.050 (0.056)
Educational Outcomes:								
Primary School	0.538 (0.0155)	0.420 (0.0599)	1,111	-0.118* (0.062)	0.288*** (0.0136)	0.203*** (0.0455)	1,185	-0.085* (0.047)
Middle School	0.138 (0.0107)	0.130 (0.0408)	1,111	-0.008 (0.042)	0.196*** (0.0119)	0.253*** (0.0492)	1,185	0.057 (0.051)
High School	0.218 (0.0128)	0.275 (0.0542)	1,111	0.058 (0.056)	0.321*** (0.0140)	0.380*** (0.0550)	1,185	0.059 (0.057)
University/Master/Ph.D.	0.106 (0.00952)	0.174 (0.0460)	1,111	0.068 (0.047)	0.195*** (0.0119)	0.165*** (0.0420)	1,185	-0.031 (0.044)
Ethnicity:								
Turkish	0.823 (0.0118)	0.855 (0.0427)	1,115	0.032 (0.044)	0.803*** (0.0120)	0.684*** (0.0527)	1,189	-0.119** (0.054)
Kurdish	0.133 (0.0105)	0.101 (0.0366)	1,115	-0.031 (0.038)	0.144*** (0.0105)	0.139*** (0.0392)	1,189	-0.005 (0.041)
Zaza	0.0105 (0.00316)	0 (0)	1,115	-0.011*** (0.003)	0.0108*** (0.00311)	0.0886*** (0.0322)	1,189	0.078** (0.032)
Arab	0.0134 (0.00355)	0.0145 (0.0145)	1,115	0.001 (0.015)	0.0117*** (0.00323)	0.0506** (0.0248)	1,189	0.039 (0.025)
Other	0.0172 (0.00402)	0.0290 (0.0203)	1,115	0.012 (0.021)	0.0279*** (0.00495)	0.0380* (0.0216)	1,189	0.010 (0.022)
Missing	0.00287	0	1,115	-0.003*	0.00270*	0	1,189	-0.003*

(continued on next page)

	Women				Men			
	Sunni	**Alevi**	**Observations**	**Difference (2)-(1)**	**Sunni**	**Alevi**	**Observations**	**Difference (2)-(1)**
	(1)	(2)		(3)	(1)	(2)		(3)
	Mean	Mean		Estimate	Mean	Mean		Estimate
	(SE)	(SE)		(SE)	(SE)	(SE)		(SE)
	(0.00165)	(0)		(0.002)	(0.00156)	(0)		(0.002)
Marital Status:								
Single	0.179	0.232	1,115	0.053	0.314***	0.354***	1,189	0.041
	(0.0119)	(0.0512)		(0.053)	(0.0139)	(0.0542)		(0.056)
Engaged	0.0163	0.0290	1,115	0.013	0.0108***	0.0380*	1,189	0.027
	(0.00391)	(0.0203)		(0.021)	(0.00311)	(0.0216)		(0.022)
Married	0.739	0.638	1,115	-0.101*	0.659***	0.570***	1,189	-0.090
	(0.0136)	(0.0583)		(0.060)	(0.0142)	(0.0561)		(0.058)
Widow	0.0516	0.0580	1,115	0.006	0.0108***	0.0380*	1,189	0.027
	(0.00684)	(0.0283)		(0.029)	(0.00311)	(0.0216)		(0.022)
Divorced	0.0124	0.0435	1,115	0.031	0.00450**	0	1,189	-0.005**
	(0.00343)	(0.0247)		(0.025)	(0.00201)	(0)		(0.002)
Missing	0.00191	0	1,115	-0.002	0.000901	0	1,189	-0.001
	(0.00135)	(0)		(0.001)	(0.000901)	(0)		(0.001)
Type of Residence:								
Rural	0.205	0.261	1,115	0.056	0.257***	0.127***	1,189	-0.130***
	(0.0125)	(0.0532)		(0.055)	(0.0131)	(0.0376)		(0.040)
Urban	0.278	0.0580	1,115	-0.220***	0.270***	0.152***	1,189	-0.118***
	(0.0139)	(0.0283)		(0.032)	(0.0133)	(0.0406)		(0.043)
Metropolitan	0.517	0.681	1,115	0.164***	0.473***	0.722***	1,189	0.249***
	(0.0155)	(0.0565)		(0.059)	(0.0150)	(0.0508)		(0.053)
Number in Household	4.626	4.971	1,115	0.345	4.571***	4.873***	1,189	0.302
	(0.0723)	(0.340)		(0.347)	(0.0755)	(0.333)		(0.341)
Household Income	1,869	2,123	1,043	253.485	2,151***	2,294***	1,125	143.329
	(44.25)	(150.4)		(156.8)	(56.27)	(171.1)		(180.157)
Gender View: Disagree with the Statement								
The main responsibility of the woman is to raise kids and run a household	0.363	0.478	1,109	0.115*	0.280***	0.418***	1,184	0.138**
	(0.0149)	(0.0606)		(0.062)	(0.0135)	(0.0558)		(0.057)
Women are delicate, it is not appropriate for them to work in men's jobs	0.367	0.441	1,110	0.075	0.210***	0.333***	1,181	0.123**

	Women				Men			
	Sunni (1) Mean (SE)	**Alevi** (2) Mean (SE)	**Observations**	**Difference (2)-(1)** (3) Estimate (SE)	**Sunni** (1) Mean (SE)	**Alevi** (2) Mean (SE)	**Observations**	**Difference (2)-(1)** (3) Estimate (SE)
	(0.0149)	(0.0607)		(0.062)	(0.0123)	(0.0537)		(0.055)
Women cannot be good managers by their nature	0.823	0.868	1,107	0.045	0.689***	0.810***	1,183	0.121***
	(0.0118)	(0.0414)		(0.043)	(0.0139)	(0.0444)		(0.047)
Women entering the labor market leads to unemployment among men	0.746	0.894	1,104	0.148***	0.646***	0.772***	1,184	0.126**
	(0.0135)	(0.0382)		(0.041)	(0.0144)	(0.0475)		(0.050)
Women should be careful about their outfit	0.197	0.464	1,104	0.267***	0.171***	0.397***	1,179	0.227***
	(0.0124)	(0.0605)		(0.062)	(0.0113)	(0.0558)		(0.057)

Note: The table presents the means, standard deviations, and number of observations. Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * $p<0.1$ ** $p<0.05$ *** $p<0.01$. Variables related to gender view are defined as a dummy variable equal to 1 if the respondent strongly disagrees or does not agree, 0 if the respondent somewhat agrees or strongly agrees. The higher value of the variables represents a more equal gender view.

Table 2: Labor Market Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Female LFPR	Male LFPR	Female Employment	Male Employment	Female LFPR High school or University Graduate	Female LFPR Primary or Middle School	Female Household Income	Male Household Income
Alevi	0.116**	0.050	0.127***	0.073	0.064	0.167**	61.397	27.066
	(0.053)	(0.043)	(0.049)	(0.045)	(0.082)	(0.072)	(162.216)	(156.349)
Base: Primary School								
Middle School	0.099***	0.075**	0.098***	0.069*		0.098***	226.977**	264.308**
	(0.035)	(0.034)	(0.035)	(0.038)		(0.034)	(89.612)	(121.473)
High School	0.080**	-0.064**	0.058*	-0.033			660.661***	525.352***
	(0.034)	(0.031)	(0.032)	(0.033)			(114.458)	(132.859)
University/Master/Ph.D.	0.523***	0.050	0.483***	0.081**	0.403***		2,027.683***	1,568.493***
	(0.051)	(0.034)	(0.050)	(0.035)	(0.053)		(204.993)	(171.535)
Age	0.036***	0.107***	0.031***	0.099***	0.088***	0.023***	14.675	16.874
	(0.007)	(0.007)	(0.006)	(0.007)	(0.017)	(0.007)	(22.424)	(29.761)
Age2	-0.000***	-0.001***	-0.000***	-0.001***	-0.001***	-0.000***	-0.171	-0.196
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.256)	(0.327)
Ethnicity								
Kurdish	-0.017	0.036	-0.007	0.055	-0.085	0.020	-201.326**	-98.050
	(0.036)	(0.043)	(0.033)	(0.043)	(0.102)	(0.034)	(99.980)	(184.746)
Zaza	0.006	-0.040	-0.065*	-0.061	-0.383***	0.047	465.414	-282.478
	(0.091)	(0.085)	(0.037)	(0.082)	(0.093)	(0.094)	(438.326)	(237.803)
Arab	-0.018	-0.051	-0.052	0.058	-0.401***	0.038	-125.706	71.986
	(0.069)	(0.095)	(0.039)	(0.089)	(0.124)	(0.072)	(211.351)	(340.839)
Other	0.001	0.098	-0.016	0.150**	-0.072	0.017	-128.589	166.570
	(0.083)	(0.066)	(0.068)	(0.068)	(0.105)	(0.112)	(195.525)	(215.763)
Missing	0.038	0.200**	0.039	-0.081	0.365***	-0.013	-412.608*	4.038
	(0.109)	(0.081)	(0.099)	(0.249)	(0.128)	(0.078)	(229.424)	(902.846)
Marital Status (base: Single)								
Engaged	0.028	0.117	-0.021	0.073	0.117	-0.327***	-304.677	548.181
	(0.103)	(0.090)	(0.113)	(0.119)	(0.123)	(0.091)	(251.119)	(496.250)
Married	-0.174***	0.093***	-0.085**	0.229***	-0.233***	-0.200***	157.560	-92.912

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Female LFPR	Male LFPR	Female Employment	Male Employment	Female LFPR High school or University Graduate	Female LFPR Primary or Middle School	Female Household Income	Male Household Income
	(0.043)	(0.032)	(0.040)	(0.045)	(0.061)	(0.074)	(153.948)	(198.916)
Widow	-0.048	-0.137	0.025	0.011	0.080	-0.110	171.475	-104.881
	(0.067)	(0.096)	(0.062)	(0.108)	(0.158)	(0.091)	(228.313)	(230.534)
Divorced	0.165	0.155	0.265**	0.127	-0.098	0.268*	-346.247	-505.977
	(0.111)	(0.147)	(0.112)	(0.248)	(0.107)	(0.156)	(340.864)	(668.191)
Missing	-0.402***	0.216**	-0.236**	0.379***		-0.411**	-392.803	-730.225**
	(0.135)	(0.087)	(0.114)	(0.093)		(0.184)	(981.278)	(334.919)
Type of Residence (base: Rural)								
Urban	-0.017	-0.056*	-0.052*	-0.072**	0.013	-0.019	64.913	97.899
	(0.031)	(0.033)	(0.030)	(0.036)	(0.076)	(0.034)	(123.903)	(132.516)
Metropolitan	0.007	-0.012	-0.016	-0.034	0.071	0.009	218.404*	286.777*
	(0.032)	(0.038)	(0.030)	(0.041)	(0.093)	(0.032)	(116.854)	(153.795)
Number in Household	-0.002	0.003	-0.006	-0.000	-0.000	-0.005	12.029	28.431
	(0.005)	(0.005)	(0.004)	(0.005)	(0.011)	(0.005)	(15.813)	(19.286)
Observations	1,111	1,185	1,111	1,185	368	743	1,039	1,121
Current Region Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Childhood Region Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * $p<0.1$ ** $p<0.05$ *** $p<0.01$. Standard errors are clustered by NUTS2 childhood region-age level. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence and the number of people in the household.

Table 3: Unemployment Regression Results

VARIABLES	(1)	(2)	(3)	(4)
	Whole Sample		Metropolitan	
	Female	Male	Female	Male
Alevi	-0.065	-0.033	-0.087	-0.049
	(0.087)	(0.039)	(0.100)	(0.049)
Base: Primary School				
Middle School	-0.090	-0.022	-0.090	-0.016
	(0.078)	(0.032)	(0.122)	(0.064)
High School	0.048	-0.013	-0.015	-0.068
	(0.095)	(0.030)	(0.135)	(0.048)
University/Master/Ph.D.	-0.086	-0.048	-0.194**	-0.099**
	(0.072)	(0.031)	(0.091)	(0.048)
Age	-0.008	-0.020**	0.003	-0.002
	(0.021)	(0.009)	(0.031)	(0.013)
Age2	0.000	0.000**	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Ethnicity				
Kurdish	-0.048	-0.034	-0.011	0.078
	(0.135)	(0.040)	(0.138)	(0.055)
Zaza	0.507**	0.022	0.245	0.004
	(0.237)	(0.090)	(0.329)	(0.168)
Arab	0.745***	-0.147***		-0.072
	(0.144)	(0.041)		(0.068)
Other	0.170	-0.102*	0.253	-0.032
	(0.239)	(0.061)	(0.237)	(0.066)
Missing	0.256*	0.255	0.083	0.469*
	(0.147)	(0.239)	(0.136)	(0.280)
Marital Status				
Engaged	0.051	0.004	0.182	0.012
	(0.134)	(0.114)	(0.154)	(0.139)
Married	-0.109	-0.174***	0.013	-0.136**
	(0.077)	(0.043)	(0.094)	(0.056)
Widow	-0.173**	-0.137	-0.138	
	(0.082)	(0.158)	(0.119)	
Divorced	-0.252**	0.105	-0.117	-0.294***
	(0.107)	(0.304)	(0.131)	(0.103)
Missing		-0.189**		
		(0.089)		
Type of Residence (base: Rural)				
Urban	0.295***	0.027		
	(0.084)	(0.034)		
Metropolitan	0.183**	0.030		
	(0.090)	(0.040)		
Number in Household	0.024**	0.005	0.015	-0.005
	(0.012)	(0.005)	(0.013)	(0.005)
Observations	238	818	145	398

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * p<0.1 ** p<0.05 *** p<0.01. Standard errors are clustered by NUTS2 childhood region-age level. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence and the number of people in the household. Column (1) and (2) present results for the whole sample and Column (3) and (4) present results for the metropolitan sample.

Table 4: Gender View Regression Results, Women

Variable	(1) Women entering the labor market leads to unemployment among men	(2) Women cannot be good managers by their nature	(3) The main responsibility of the woman is to raise kids and run a household	(4) Women are delicate, it is not appropriate for them to work in men's jobs	(5) Women should be careful about their outfit
Alevi	0.127***	0.060	0.098*	0.095	0.213***
	(0.042)	(0.041)	(0.059)	(0.059)	(0.057)
Base: Primary School					
Middle School	0.051	0.031	0.079*	-0.049	0.027
	(0.040)	(0.035)	(0.045)	(0.044)	(0.035)
High School	0.109***	0.046	0.131***	0.096**	0.113***
	(0.040)	(0.034)	(0.046)	(0.045)	(0.038)
University/Master/Ph.D.	0.165***	0.046	0.210***	0.030	0.206***
	(0.040)	(0.040)	(0.055)	(0.056)	(0.062)
Age	-0.002	0.003	0.012	-0.011	0.000
	(0.008)	(0.007)	(0.010)	(0.008)	(0.007)
Age2	0.000	-0.000	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethnicity					
Kurdish	0.021	0.046	0.038	-0.034	0.036
	(0.046)	(0.039)	(0.051)	(0.061)	(0.045)
Zaza	-0.246	0.088	0.207	-0.018	0.255*
	(0.154)	(0.123)	(0.150)	(0.169)	(0.147)
Arab	-0.200	-0.027	-0.203***	-0.191*	-0.067
	(0.138)	(0.114)	(0.066)	(0.108)	(0.054)
Other	-0.183	-0.019	0.034	-0.140	-0.005
	(0.114)	(0.082)	(0.106)	(0.107)	(0.086)
Missing	0.154	0.242**	-0.078	0.349	0.463*
	(0.115)	(0.102)	(0.186)	(0.288)	(0.260)
Marital Status					
Engaged	0.032	0.016	-0.051	0.023	-0.118
	(0.064)	(0.076)	(0.117)	(0.105)	(0.103)
Married	-0.055	-0.039	-0.138**	0.053	-0.079*
	(0.048)	(0.041)	(0.054)	(0.047)	(0.048)
Widow	-0.115	-0.051	-0.119	0.061	-0.109
	(0.073)	(0.071)	(0.084)	(0.092)	(0.070)
Divorced	-0.078	0.067	0.057	0.169	0.096
	(0.107)	(0.070)	(0.133)	(0.135)	(0.133)
Missing	0.174	0.072	-0.683***	-0.533***	-0.386**
	(0.125)	(0.092)	(0.167)	(0.146)	(0.157)
Type of Residence (base: Rural)					
Urban	-0.068*	0.012	0.128***	0.091**	0.070**
	(0.039)	(0.035)	(0.040)	(0.042)	(0.033)
Metropolitan	-0.050	-0.054	0.065	0.148***	0.071*
	(0.044)	(0.038)	(0.046)	(0.045)	(0.037)
Number in Household	0.004	0.000	-0.008	-0.012**	-0.014***
	(0.006)	(0.004)	(0.007)	(0.006)	(0.005)
Observation	1,100	1,103	1,105	1,106	1,100
Current Region Fixed Effect	Yes	Yes	Yes	Yes	Yes
Childhood Region Fixed Effect	Yes	Yes	Yes	Yes	Yes

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * p<0.1 ** p<0.05 *** p<0.01. Standard errors are clustered by NUTS2 childhood region-age level. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence, the number of people in the household. All dependent variables are defined as a dummy variable equal to 1 if the respondent strongly disagrees or does not agree, 0 if the respondent somewhat agrees or strongly agrees. The higher value of the variables represents

Table 5: Gender View Regression Results, Men

Variable	(1) Women entering the labor market leads to unemployment among men	(2) Women cannot be good managers by their nature	(3) The main responsibility of the woman is to raise kids and run a household	(4) Women are delicate, it is not appropriate for them to work in men's jobs	(5) Women should be careful about their outfit
Alevi	0.151***	0.153***	0.145***	0.172***	0.167***
	(0.052)	(0.049)	(0.055)	(0.056)	(0.053)
Base: Primary School					
Middle School	0.003	0.019	0.032	-0.027	-0.015
	(0.042)	(0.042)	(0.037)	(0.033)	(0.025)
High School	0.010	0.096***	0.110***	0.069*	0.069**
	(0.040)	(0.037)	(0.038)	(0.037)	(0.030)
University/Master/Ph.D.	0.069	0.053	0.179***	0.117***	0.154***
	(0.043)	(0.045)	(0.041)	(0.040)	(0.037)
Age	-0.014*	0.011	0.012	0.003	0.010
	(0.008)	(0.007)	(0.008)	(0.007)	(0.006)
Age2	0.000	-0.000	-0.000	-0.000	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethnicity					
Kurdish	0.149***	0.022	-0.021	-0.071*	-0.006
	(0.055)	(0.055)	(0.050)	(0.039)	(0.036)
Zaza	-0.016	0.015	-0.018	-0.171*	0.153
	(0.109)	(0.109)	(0.129)	(0.100)	(0.101)
Arab	0.069	-0.263**	-0.100	-0.274***	-0.139***
	(0.094)	(0.119)	(0.091)	(0.042)	(0.054)
Other	0.023	0.068	0.057	0.112	-0.123**
	(0.086)	(0.069)	(0.082)	(0.079)	(0.049)
Missing	0.354***	0.181***	-0.061	-0.260***	0.406
	(0.038)	(0.049)	(0.319)	(0.055)	(0.316)
Marital Status					
Engaged	0.084	-0.123	-0.114	-0.150*	-0.090
	(0.119)	(0.118)	(0.140)	(0.090)	(0.101)
Married	0.098**	-0.111**	-0.140***	-0.029	-0.124***
	(0.045)	(0.045)	(0.044)	(0.041)	(0.038)
Widow	-0.071	-0.208*	-0.117	0.163	0.035
	(0.145)	(0.108)	(0.109)	(0.138)	(0.109)
Divorced	0.018	0.011	-0.163	-0.029	-0.048
	(0.198)	(0.174)	(0.126)	(0.155)	(0.150)
Missing	0.367***	0.148	0.433***	0.692***	0.185
	(0.106)	(0.113)	(0.129)	(0.112)	(0.126)
Type of Residence (base: Rural)					
Urban	0.054	0.102***	0.083**	0.006	0.048
	(0.039)	(0.036)	(0.036)	(0.034)	(0.030)
Metropolitan	0.033	0.001	0.019	0.040	0.054
	(0.045)	(0.042)	(0.042)	(0.041)	(0.036)
Number in Household	-0.011*	-0.001	-0.001	-0.001	0.004
	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)
Observation	1,180	1,179	1,180	1,177	1,175
Current Region Fixed Effect	Yes	Yes	Yes	Yes	Yes
Childhood Region Fixed Effect	Yes	Yes	Yes	Yes	Yes

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * p<0.1 ** p<0.05 *** p<0.01. Standard errors are clustered by NUTS2 childhood region-age level. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence, the number of people in the household. All dependent variables are defined as a dummy variable equal to 1 if the respondent strongly disagrees or does not agree, 0 if the respondent somewhat agrees or strongly agrees. The higher value of the variables represents

Table 6: Labor Market Outcomes: Metropolitan Area

	(1)	(2)	(3)	(4)	(5)	(6)
	LFPR		Employment		Household Income	
	Female	Male	Female	Male	Female	Male
Alevi	0.147**	0.080	0.161***	0.108*	99.832	6.739
	(0.067)	(0.054)	(0.061)	(0.058)	(213.691)	(185.528)
Base: Primary School						
Middle School	0.153***	0.072	0.151***	0.068	171.597	298.600
	(0.052)	(0.047)	(0.052)	(0.060)	(129.220)	(190.964)
High School	0.108**	-0.041	0.071	0.013	617.112***	587.444***
	(0.049)	(0.047)	(0.045)	(0.048)	(124.589)	(218.333)
University/Master/Ph.D.	0.538***	0.121***	0.545***	0.179***	2,442.334***	1,584.517***
	(0.062)	(0.045)	(0.060)	(0.047)	(274.084)	(215.629)
Age	0.043***	0.121***	0.037***	0.105***	17.255	24.597
	(0.010)	(0.008)	(0.009)	(0.010)	(29.047)	(41.734)
Age2	-0.001***	-0.002***	-0.000***	-0.001***	-0.233	-0.342
	(0.000)	(0.000)	(0.000)	(0.000)	(0.337)	(0.469)
Ethnicity						
Kurdish	-0.040	0.081	-0.023	0.016	-389.529**	-361.722
	(0.045)	(0.059)	(0.040)	(0.059)	(151.497)	(310.623)
Zaza	0.002	-0.014	-0.060	-0.030	387.353	43.708
	(0.104)	(0.129)	(0.048)	(0.136)	(471.379)	(456.519)
Arab	-0.159	0.095	-0.130	0.168	-902.636***	1,104.448**
	(0.104)	(0.118)	(0.089)	(0.109)	(209.873)	(535.420)
Other	0.029	0.205**	-0.055	0.220**	360.222	109.636
	(0.126)	(0.092)	(0.072)	(0.089)	(382.065)	(324.876)
Missing	0.024	0.075	0.015	-0.388	-584.687**	-1,130.300
	(0.113)	(0.050)	(0.102)	(0.273)	(288.833)	(718.464)
Marital Status (base: Single)						
Engaged	-0.031	-0.004	-0.076	-0.021	-342.358	1,123.335**
	(0.149)	(0.110)	(0.113)	(0.154)	(437.566)	(444.204)
Married	-0.184***	0.029	-0.132**	0.144**	37.140	-175.999
	(0.058)	(0.038)	(0.052)	(0.057)	(222.177)	(291.170)
Widow	-0.001	-0.369***	0.062	-0.193	260.921	-40.637
	(0.089)	(0.137)	(0.086)	(0.146)	(350.323)	(422.605)
Divorced	0.039	0.083	0.118	0.235	-805.861	-218.400
	(0.114)	(0.305)	(0.114)	(0.334)	(548.108)	(445.569)
Missing	-0.266**		-0.217**		300.120	
	(0.111)		(0.105)		(455.910)	
Number in Household	0.001	0.003	-0.003	0.006	33.385	66.655**
	(0.007)	(0.006)	(0.007)	(0.006)	(22.785)	(30.179)
Observations	587	582	587	582	539	542
Current Region Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Childhood Region Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * p<0.1 ** p<0.05 *** p<0.01. Standard errors are clustered by NUTS2 childhood region-age level. Sample is restricted to Metropolitan Areas. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence, the number of people in the household. In column (1) and (2), the dependent variable is labor force participation rate. In column (3) and (4), the dependent variable is employment. In column (5) and (6), the dependent variable is the household income.

Table 7: Gender View Regression Results: Metropolitan Area, Women

Variable	(1) Women entering the labor market leads to unemployment among men	(2) Women cannot be good managers by their nature	(3) The main responsibility of the woman is to raise kids and run a household	(4) Women are delicate, it is not appropriate for them to work in men's jobs	(5) Women should be careful about their outfit
Alevi	0.097	0.202**	0.082*	0.155***	0.228***
	(0.073)	(0.079)	(0.043)	(0.050)	(0.076)
Base: Primary School					
Middle School	0.080	-0.035	0.069	0.059	0.018
	(0.068)	(0.067)	(0.047)	(0.057)	(0.053)
High School	0.154**	0.124**	0.086*	0.079	0.088*
	(0.063)	(0.061)	(0.046)	(0.056)	(0.053)
University/Master/Ph.D.	0.247***	0.100	0.084*	0.122**	0.212***
	(0.067)	(0.071)	(0.048)	(0.053)	(0.074)
Age	0.025*	0.004	0.017*	0.006	0.005
	(0.013)	(0.013)	(0.010)	(0.011)	(0.010)
Age2	-0.000*	-0.000	-0.000*	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethnicity					
Kurdish	0.024	-0.022	0.044	0.039	0.037
	(0.068)	(0.078)	(0.052)	(0.056)	(0.059)
Zaza	0.264*	0.020	0.119	-0.186	0.311**
	(0.159)	(0.181)	(0.125)	(0.160)	(0.156)
Arab	-0.126	-0.494***	0.246***	-0.147	-0.228*
	(0.166)	(0.098)	(0.065)	(0.220)	(0.128)
Other	0.072	-0.401***	0.006	-0.119	-0.051
	(0.174)	(0.119)	(0.115)	(0.181)	(0.144)
Missing	-0.136	0.331	0.159	0.164*	0.368
	(0.169)	(0.281)	(0.114)	(0.092)	(0.273)
Marital Status					
Engaged	-0.059	0.027	-0.010	-0.004	-0.358***
	(0.185)	(0.175)	(0.094)	(0.126)	(0.091)
Married	-0.190***	0.033	-0.065	-0.067	-0.105
	(0.066)	(0.066)	(0.050)	(0.060)	(0.064)
Widow	-0.160	-0.002	0.031	0.009	-0.101
	(0.117)	(0.122)	(0.093)	(0.100)	(0.108)
Divorced	-0.007	-0.010	0.150**	-0.147	0.134
	(0.174)	(0.178)	(0.064)	(0.156)	(0.206)
Missing	-0.660**	-0.211	-0.107	0.194	-0.282
	(0.263)	(0.276)	(0.086)	(0.246)	(0.268)
Number in Household	-0.017**	-0.017*	0.007	0.010	-0.019***
	(0.009)	(0.009)	(0.006)	(0.008)	(0.007)
Observation	580	579	580	578	575
Current Region Fixed Effect	Yes	Yes	Yes	Yes	Yes
Childhood Region Fixed Effect	Yes	Yes	Yes	Yes	Yes

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * p<0.1 ** p<0.05 *** p<0.01. Standard errors are clustered by NUTS2 childhood region-age level. Sample is restricted to Metropolitan areas. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence, the number of people in the household. All dependent variables are defined as a dummy variable equal to 1 if the respondent strongly disagrees or does not agree, 0 if the respondent somewhat agrees or strongly agrees. The higher value of the variables represents a more equal gender view.

Table 8: Gender View Regression Results: Metropolitan Area, Men

Variable	(1) Women entering the labor market leads to unemployment among men	(2) Women cannot be good managers by their nature	(3) The main responsibility of the woman is to raise kids and run a household	(4) Women are delicate, it is not appropriate for them to work in men's jobs	(5) Women should be careful about their outfit
Alevi	0.123**	0.110**	0.218***	0.131*	0.193***
	(0.060)	(0.055)	(0.074)	(0.068)	(0.068)
Base: Primary School					
Middle School	0.067	0.022	0.025	0.020	-0.055
	(0.063)	(0.064)	(0.062)	(0.061)	(0.049)
High School	0.044	0.152***	0.073	0.136**	0.057
	(0.059)	(0.048)	(0.060)	(0.054)	(0.051)
University/Master/Ph.D.	0.060	0.012	0.115*	0.168***	0.087
	(0.065)	(0.062)	(0.061)	(0.057)	(0.056)
Age	-0.003	0.020**	0.027**	0.013	0.015
	(0.010)	(0.008)	(0.011)	(0.010)	(0.010)
Age2	-0.000	-0.000*	-0.000***	-0.000	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethnicity					
Kurdish	0.066	-0.096	-0.085	-0.076	-0.001
	(0.074)	(0.073)	(0.079)	(0.060)	(0.057)
Zaza	-0.181	-0.019	-0.047	-0.184	0.203
	(0.138)	(0.146)	(0.192)	(0.188)	(0.146)
Arab	-0.206	-0.550***	-0.270	-0.348***	-0.156
	(0.202)	(0.164)	(0.167)	(0.081)	(0.149)
Other	-0.031	0.031	0.012	0.107	-0.154**
	(0.112)	(0.074)	(0.093)	(0.091)	(0.062)
Missing	0.317***	0.146***	-0.430***	-0.305***	0.119
	(0.058)	(0.051)	(0.151)	(0.075)	(0.340)
Marital Status					
Engaged	0.056	-0.181	-0.285**	-0.256***	-0.193*
	(0.150)	(0.145)	(0.111)	(0.085)	(0.107)
Married	0.039	-0.185***	-0.192***	-0.042	-0.178***
	(0.063)	(0.051)	(0.061)	(0.057)	(0.055)
Widow	-0.022	-0.394***	-0.240	0.064	0.004
	(0.230)	(0.112)	(0.186)	(0.230)	(0.208)
Divorced	-0.509***	-0.208	-0.277**	-0.201	-0.356***
	(0.113)	(0.346)	(0.121)	(0.141)	(0.093)
Missing					
Number in Household	-0.011	0.003	-0.007	0.003	0.007
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Observation	574	573	572	571	572
Current Region Fixed Effect	Yes	Yes	Yes	Yes	Yes
Childhood Region Fixed Effect	Yes	Yes	Yes	Yes	Yes

Note: Data are from 2015 KONDA Barometer collected by KONDA Research and Consultancy. * p<0.1 ** p<0.05 *** p<0.01. Standard errors are clustered by NUTS2 childhood region-age level. Sample is restricted to Metropolitan areas. Regressions include age, age squared, current region and birth region fixed effects, education categories, ethnicity, marital status, type of residence, the number of people in the household. All dependent variables are defined as a dummy variable equal to 1 if the respondent strongly disagrees or does not agree, 0 if the respondent somewhat agrees or strongly agrees. The higher value of the variables represents a more equal gender view.