Replication paper of "Gender Attitudes and Achievement Motivation Across Europa (the Evidence of ESS Data)" by Natalia Soboleva

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Abstract

This paper replicates Natalia Soboleva's study on gender attitudes, which aimed to reveal the association between gender attitudes, achievement motivation and realization of this achievement motivation among the working women in Europe. According to multilevel regression modelling on European Social Survey (2010) data on employed individuals, women and men with more egalitarian gender attitudes in general have higher achievement motivation and are more likely to be able to influence policy decisions in their organizations.

I use data from Round 11 of the European Social Survey (ESS, 2022), while the original paper used data from Round 5 (2010). The goal is to see if the same patterns still exist in today's society.

keywords: gender attitudes, gender differences, achievement motivation, cross-country analysis, labor market

Introduction

Gender equality in the labor market has become a central issue in contemporary social research. Although educational attainment has equalized across genders in Europe, significant disparities remain in employment outcomes, career progression, and leadership opportunities. One influential study by Natalia Soboleva (2019) explored the relationship between gender attitudes, achievement motivation, and the opportunity to influence decisions in the workplace. Using data from the 2010 European Social Survey (ESS Round 5), Soboleva demonstrated that egalitarian gender attitudes are positively associated with greater motivation to take initiative and with increased chances of influencing policy decisions, particularly among women. And in countries where Female labour participation rate is higher and unemployment rate is lower, these effects are more evident.

This replication paper aims to assess whether these relationships hold in more recent contexts by using data from the most recent ESS Round 11 (2022). Since social norms and labor market structures continue to evolve, this study provides a timely update and robustness test of Soboleva's findings. Specifically, the replication evaluates: (1) whether egalitarian gender attitudes still predict achievement motivation in the workplace, and (2) whether this motivation translates into real opportunities to influence organizational decisions, across different European countries. (3) If the effects are different according to the countries' status.

By following Soboleva's analytical framework and applying similar multilevel modeling techniques, this study contributes to the literature by testing the consistency of prior results with current data. It also adds empirical insight into how contextual factors such as female labor force participation may moderate the relationship between personal values and career outcomes.

literature review

Previous research has explored the relationship between gender attitudes and career achievement motivation from various perspectives. Eagly and Wood (2012) found that traditional gender norms typically associate men with breadwinner roles while expecting women to focus on caregiving, which significantly influences gender differences in career choices. Fortin's (2005) study further demonstrated that women with egalitarian gender attitudes tend to show higher labor force participation intentions, though they still face numerous obstacles in actual career development.

Regarding achievement motivation, Eccles' (1994) expectancy-value theory provides important insights for understanding gender differences. The theory suggests women's career motivation is often constrained by both social expectations and opportunity structures. Croson and Gneezy's (2009) research found that women with egalitarian gender attitudes do exhibit stronger career aspirations, but whether these aspirations translate into actual career achievements largely depends on the social environment.

Notably, institutional environments in different countries significantly influence the relationship between gender attitudes and career achievement. Inglehart and Norris' (2003) cross-national comparative study showed that in Nordic countries with well-established gender equality systems, egalitarian gender attitudes correlate with smaller gender gaps in careers. However, in more conservative societies, even individuals with progressive gender attitudes may struggle to achieve career goals due to structural barriers (Gornick & Meyers, 2003). Olivetti and Petrongolo (2016) particularly noted that in countries with higher female labor force participation rates, women's career motivation more easily translates into actual career development opportunities.

While existing studies have established basic connections between gender attitudes and labor market performance, several important gaps remain: First, few studies examine the mediating role of achievement motivation; second, there's limited understanding of how institutional environments moderate this relationship; and third, research on how men's gender attitudes affect workplace dynamics remains relatively scarce. This study aims to address these gaps by analyzing cross-national data to examine these relationships separately for men and women across different labor market environments.

Hypotheses

In her 2019 paper, Natalia Soboleva explored how individual gender attitudes are connected to women's motivation and career outcomes. She argued that more egalitarian views—such as believing that men and women should share work and family responsibilities equally—can shape a woman's internal drive and her chances to influence decisions at work. Soboleva also discussed how women's roles in the labor market are shaped not only by their own preferences, but also by social expectations and institutional conditions. She believed that women's values and opportunities at work are strongly related to their gender attitudes, but that this connection might not be as strong for men.

Based on these theoretical considerations, Soboleva developed the following hypotheses:

H1. Women with more egalitarian gender attitudes are more likely to see using initiative at one's job as an important work value.

H2. Women with more egalitarian gender attitudes tend to have jobs where they can influence the policy decisions of their organisations.

H3. There is no expected relationship between egalitarian gender attitudes and work values or influence at work for men, because career success is already seen as important for most men.

This replication follows the first two hypotheses for two reasons. First, they are clearly grounded in theory and previous research, making them a strong starting point for understanding gender dynamics in the workplace. Second, they allow for a meaningful comparison between the original 2010 context and the more recent data from ESS Round 11 (2022). By testing the same hypotheses with updated data and improved measurement (using eight gender attitude items instead of three), this study can reveal whether social change has influenced the link between gender beliefs and career outcomes—especially for women.

But there are some modification in the new ess quetionaire. For example, the question which tests the impotance of using initiatives at work is deleted, so I modify the hypothesis into following, and also add a hypothesis:

H1. Women with more egalitarian gender attitudes are more likely to have higher motivation.

H2. Women with more egalitarian gender attitudes tend to reach career achievement.

H3. There is no expected relationship between egalitarian gender attitudes and work values or influence at work for men, because career success is already seen as important for most men.

Since the data contains different countries, then the countries's status should also be contained. I also apply Soboleva's hypotheses, that is

H4. For women, the hypotheses H1 and H2 above
will be stronger in countries with a high female labor force participation
rate and lower female unemployment.

Data

I mainly followed the author's method. While the dataset was from the eleventh wave of the European Social Survey (2022).
The eleventh wave contains 28 countries: Italy, Greece, Germany, Austria, Bulgaria, Hungary, Ireland, Spain, France, Netherlands, United Kingdom, Montenegro, Belgium, Croatia, Finland, Serbia, Poland, Slovakia, Switzerland, Portugal, Lithuania, Norway, Latvia, Slovenia, Sweden, Israel, Iceland, Cyprus. A cross-cultural dataset allows us to disclose both individual- and country-level predictors of female and male achievement motivation and its realization.

The most important three variables are quite clear: Gender Attitude, Achievement Motivation and Career Achievement. The questions in the latest ESS11 questionnaire that measure these variables are quite different from those in the original ESS5 questionnaire.

(1)Gender Attitude:
In ESS5, there were only 3 questions that can measure the Gender Attitude, while in ESS Round 11 the number has increased to eight, and these questions can be divided into two types:
The first four questions measure whether people think gender equality is good for society.
The last four questions measure whether people support laws, punishment, or intervention when there is gender inequality.
The first four questions are:
eqwrkbg:Using this card, in general, how bad or good is it for family life in [country] if equal numbers of women and men are in paid work?
eqmgmbg:Bad or good for businesses in [country] if equal numbers of women and men are in higher management positions
eqpaybg:Bad or good for economy in [country] if women and men receive equal pay for doing the same work
eqpolbg:Bad or good for politics in [country] if equal numbers of women and men are in positions of political leadership
The last four questions are:
eqparep: Dividing the number of seats in parliament equally between women and men
eqparlv:Require both parents to take equal periods of paid leave to care for their child
freinsw:Firing employees who make insulting comments directed at women in the workplace
fineqpy:Making businesses pay a fine when they pay men more than women for doing the same work

But since there are 8 variables together measuring only variable, I need to make sure that it is effective that they can measure one variable at the same time, which means that I need to verify the relationship between these 8 variables
So first, I ran a spearsman correlation test between 8 variables.

Table 1 here

The Spearman correlation matrix revealed distinct patterns among the eight variables. The first four variables (equrkbg, eqmgmbg, eqpaybg, eqpolbg) exhibited strong intercorrelations (ranging from 0.48 to 0.81), suggesting they collectively measure a latent construct, potentially gender equity attitudes (e.g., perceptions of equality in management, politics, and pay).
The correlation analysis shows that the last four variables (eqparep, eqparlv, freinsw, fineqpy) work differently from the first four.
First, eqparep and eqparlv are somewhat connected (0.40), probably because they both ask about family and work-life balance. But they don't connect much with other questions (only 0.12-0.34).
Second, freinsw (maybe about freedom in society) doesn't connect strongly with most questions (0.20-0.26), except with fineqpy where it's 0.47.
Third, fineqpy (maybe about fair pay) connects a little with everything (0.23-0.47), but not very strongly. It seems to be a general background factor.
The big difference is that the first four questions connect very strongly (up to 0.81), while these last four connect much less. The reason is probably that they are measuring different things - like family policies and money values.
Overall, all eight questions show positive correlations with each other, which means they can be used together to measure gender attitudes.So I can add them up and get the independent variable Gender_Attitude.

(2) Achievement motivation
To calculate the Achievement motivation, I add up two questions:
ipsucesa: Important to be successful and that people recognise achievements
ipshabta: Important to show abilities and be admired
but these options are inversely related to career_motivation (on a scale from 1 "very much like me" to 6 "not like me at all"), so I invert the scores by subtracting them from 7 and then adding them up and get the variable Achievement motivation

(3)Career Achievement
The career achievement can be measured by summing these two variables：
wkdcorga: Allowed to decide how daily work is organized.
iorgact: Allowed to influence policy decisions about activities of organization.
They two are positively correlated to the career achievement, so I can simply add them up and get the result.

On the country level, I followed Soboleva's survey, used two measures of female involvement in the labor market, namely the female labor force participation rate and the female unemployment rate. Both measures were taken from 2010 via the World Bank website (https://data.worldbank.org/indicator). Soboleva chose the female labor force participation rate (LFPR) and female unemployment rate (UR) because these two indicators sufficiently characterize the labor market situation of women. LFPR shows the share of women who would like to work, and UR indicates how many women were not successful in finding a job. In contrast to measures reflecting labor market policy (such as paternal leave, etc.), LFPR and UR
exactly reflect female participation in the labor market, but not what is done to achieve it.
Since there are only two variables to add, I simply downloaded the data from worldbank and use vlookup to add them to my dataset.

Methods and Results

Now I start to testify the first three hypotheses, which are:

H1. Women with more egalitarian gender attitudes are more likely to have higher motivation.
H2. Women with more egalitarian gender attitudes tend to reach career achievement.

I calculated the Spearmen correlations between the variables measuring gender attitudes, achievement motivation and career achievement in 28 countries, filtering female.

Table 2 here

(1)Gender_Attitude & Achievement_Motivation_female
In most countries, there's a significant positive correlation - women who support gender equality more strongly tend to have higher achievement motivation.
Most correlation coefficients (ρ) are between 0.1 and 0.38 with significant p-values.
Central and Eastern Europe: Countries like Bulgaria, Hungary, Italy, and Slovenia show stronger positive links ($\rho > 0.25$).
Western and Northern Europe: like Germany, France, Switzerland, Austria, and Sweden have significant but weaker correlations (ρ about 0.1).
The reason might be that in countries with more traditional gender roles, women's belief in equality may drive their personal effort more strongly.
In countries with better gender equality systems, women may have strong motivation even without strong equality beliefs.

(2)Gender Attitude & Career Achievement_female
In some nations, there's a small but noticeable connection between women's gender attitude and their career achievement (numbers around 0.1-0.17), while other countries show no real link.
Western European countries like France, Belgium and Switzerland demonstrate this positive relationship, suggesting that gender equality attitudes might influence professional success.
However, Nordic countries like Sweden, Finland and Norway show very weak or slightly negative connections, indicating their strong social systems make individual attitudes less important for career outcomes.
Interestingly, Bulgaria and Hungary show small negative but not significant trends. This likely means that in some societies, believing in equality does not encourages women's actual career achievement, while in countries with excellent institutional

support (like the Nordics), women achieve career success regardless of their personal views about equality.

In conclusion, across 28 European countries, the correlation between gender attitudes and both motivation and career achievement is generally positive, especially in Central and Eastern Europe. In contrast, in Nordic countries where gender equality is more structurally embedded, women's achievement motivation is a more consistent predictor of career engagement than gender attitudes. This suggests that in egalitarian societies, institutional support might buffer the need for strong ideological endorsement of gender equality.

To testify Hypothesis 3,
H3 There is no expected relationship between egalitarian gender attitudes and work values or influence at work for men, because career success is already seen as important for most men. I ran a similar spearsman correlation test filtering male

Table 3 here

(1)Gender Attitude and Achievement Motivation_male
Overall, results reveal a positive and often significant association between men's gender equality attitudes and their achievement motivation. In other words, in many countries, men who more strongly support gender equality also report stronger personal motivation for success.
This relationship is particularly strong and statistically significant ($p < 0.05$) in Eastern and Southern European countries, including Montenegro($\rho = 0.29$, $p < 0.001$), Hungary ($\rho = 0.27$, $p < 0.001$), Bulgaria ($\rho = 0.22$, $p < 0.001$) and Greece($\rho = 0.22$, $p < 0.001$). This suggests that in socio-cultural contexts where gender equality is still evolving, men's support for equality may be closely tied to their personal ambition and drive.

Conversely, in several Western and Northern European countries such as Sweden, Normay and Belgium, the correlation negative. This may indicate a saturation effect in more gender-equal societies, where personal ambition is less contingent on gender-related beliefs.

(2) Gender Attitude and Career Achievement_male
The correlation between gender attitudes and career achievement is generally positive but less pronounced. Notably, significant positive associations are observed in countries such as Isreal ($\rho = 0.28$, $p < 0.001$), Iithuania ($\rho = 0.24$, $p < 0.001$), Croatia ($\rho = 0.21$, $p < 0.001$), and Poland($\rho = 0.17$, $p < 0.01$).

The relationship between men's support for gender equality and their career development actually depends on the specific circumstances of their country. In Eastern European countries like Hungary and Croatia, men who more strongly

support gender equality tend to show higher work motivation and career achievement. This is likely because in these transitioning societies, egalitarian views help men better adapt to modern workplaces. However, in countries like Sweden and Norway where gender equality is already well-established, this connection becomes much weaker or even reverses, suggesting that when equality becomes the social norm, it loses its distinctive impact on men's career advancement.

In essence, the research shows that men's support for gender equality isn't just about morality - in certain contexts, it can actually give them a career advantage. These findings provide valuable insights for policymaking, particularly in nations actively promoting gender equality, where encouraging more men to participate in equality initiatives could yield unexpected benefits. And the hypothesis 3 was proved wrong.

Hypothsis 4
Then I need to do the analysis on the country level, which is the multilevel analysis. First I include the variable Female labour force participation rate.

Table 4 here (Achievement_motivation- Female Labour Force Participation Rate)

The analysis shows a key difference from the original paper's findings. While the author expected that in countries with higher female working rate, gender-equal attitudes would strengthen achievement motivation, my model found the opposite—gender equality attitudes matter less in these countries.
This could mean two things:
(1)In equal societies, women may already have good opportunities, so personal beliefs don't affect motivation as much.
(2)In unequal societies, believing in equality pushes women to strive harder because they face more barriers.
This contradicts the original idea but matches some newer research suggesting that when laws and policies already support equality, individual attitudes play a smaller role.

To testify this result, I also run an interaction analysis

Table 5 here (Achievement_Motivation- Female Labour Force Participation Rate)

The graph reveals two distinct patterns: First, in societies with lower female workforce participation, gender attitudes show a strong positive relationship with achievement motivation, which suggests that egalitarian beliefs serve as a crucial driver when institutional support is limited. Conversely, in countries with higher female employment rate, the impact of personal gender attitudes diminishes significantly, indicating that robust systemic support can compensate for individual attitude variations. These findings challenge the original hypothesis of complementary effects, instead supporting a substitution effect where institutional progress reduces

the marginal importance of personal egalitarian views. The visualization effectively captures this dynamic through the flattening slope from left to right, providing empirical evidence that structural equality may eventually make individual attitude differences less consequential for motivation outcomes."

Table 6 and 7 here (Career_Achievement - Female Labour force participation rate)

The regression results indicate that female labor force participation and education level have significant positive effects on career achievement, while gender attitudes show no direct or interactive influence. Age has a nonlinear (inverted U-shaped) effect, initially increasing but eventually decreasing career achievement. The interaction between gender attitudes and female labor force participation is not statistically significant, confirming the parallel lines observed in the plot. The large sample size (N=24,595) supports the reliability of these findings.

Then I will start to include the variable Female Unemployment Rate

Table 8 and Table 9（Achievement_Motivation-Female Unempolyment Rate）

The outcome confirms the moderating effect of female unemployment rates on the impact of gender equality attitudes. The graphical analysis reveals that when female unemployment is high (+1 SD), gender equality attitudes have the most pronounced positive effect on motivation, which is evidenced by a steeper slope. In contrast, in low-unemployment environments (-1 SD), while the positive influence persists, its effect is relatively more moderate. This visual pattern aligns with the statistically significant interaction term in the regression analysis (coefficient=0.002, $p<0.01$), where the three non-parallel lines clearly demonstrate how unemployment levels modify the strength of gender equality's impact. Particularly in regions with severe employment challenges, enhancing gender equality attitudes can more effectively counteract the negative effects of unemployment and amplify positive outcomes. These results provide empirical support for developing targeted gender policies, suggesting that prioritizing gender equality initiatives in high female-unemployment areas may yield more significant social benefits.

Table 10 and Table 11（Career_Achievement-Female Unempolyment Rate）

First, gender attitudes demonstrate a significant positive effect on career achievement, while female unemployment shows a substantial negative impact. Second, demographic analysis indicates an inverted U-shaped relationship between age and career achievement (linear $\beta=0.021$, quadratic $\beta=-0.00002$), with education level exhibiting a small but significant positive effect ($\beta=0.001$, $p<0.01$). Notably, the gender attitude-unemployment interaction is non-significant ($\beta=0.002$, $p>0.1$), suggesting gender attitudes' influence remains consistent across unemployment levels. With robust sample size (N=24,595), these results demonstrate high reliability,

supported by good model fit indices, providing empirical evidence for understanding career achievement determinants.

The near-parallel lines in the interaction plot align perfectly with the non-significant interaction term ($p>0.1$) in regression output. While the high-unemployment (+1 SD) line appears slightly steeper, this visual difference lacks statistical significance, confirming that:

The positive effect of gender egalitarianism ($\beta=0.122^{***}$) remains consistent

This effect magnitude doesn't vary significantly across unemployment contexts

Female unemployment's independent negative effect ($\beta=-0.314^{***}$) persists universally.

Conclusion and Discussion

This replication study of Natalia Soboleva's (2019) "Gender Attitudes and Achievement Motivation in Europe" aims to examine whether the original conclusions regarding the relationship between gender attitudes, achievement motivation, and career success remain valid in the current social context (using Round 11 data from the 2022 European Social Survey). While maintaining the core analytical framework, this study has yielded both confirmatory and challenging new findings through methodological refinements. The summary will proceed from three perspectives: research breakthroughs, points of divergence, and implications.

The original study utilized 2010 data, whereas this replication employs 2022 data, capturing the evolution of gender norms and labor market dynamics over more than a decade. Notably, the measurement of gender attitudes has been expanded from 3 items to 8 items, allowing for a more comprehensive and multidimensional assessment of this social attitude.

I found a significant positive correlation between women's egalitarian attitudes and both achievement motivation (H1) and career success (H2), particularly pronounced in Eastern/Southern European countries. However, this relationship weakens or even reverses in Nordic nations (e.g., Sweden), suggesting that institutional equality may diminish the predictive power of individual attitudes.

Notably, the analysis uncovers a crucial reversal in the moderating effect of female labor force participation (FLPR). While the original 2010 study posited that FLPR strengthened the attitude-achievement linkage, my 2022 data demonstrate a substitution effect - when institutional safeguards are well-established, the role of individual egalitarian consciousness actually declines.

Regarding male part, my findings align substantially with the original study's results, collectively demonstrating the invalidity of Hypothesis 3. In transitional economies such as Hungary, I observed a statistically significant positive correlation between men's egalitarian attitudes and career achievement. This pattern likely reflects emerging workplace demands for adaptive value systems in contemporary professional environments.

The original study posited that female labor force participation (FLPR) would strengthen the attitude-achievement relationship among women. However, my findings demonstrate a conversed pattern: in nations with high FLPR (e.g., Norway), institutional support appears to diminish the significance of individual attitudes. This represents a fundamental shift from the 2010 paradigm, which emphasized the driving role of individual attitudes in contexts of gender inequality. The 2022 data reveal that in countries with well-established institutional equality, systemic gender equity has effectively decoupled gender attitudes from career achievement.

What’s more, men's gender attitudes significantly predict their career development, particularly in sectors with marked progress toward gender equality. This pattern likely reflects growing societal expectations for male engagement in gender equality

initiatives, suggesting that egalitarian attitudes are becoming increasingly valued as professional assets in progressive work environments.

The original research suggested intervening in women's attitudes, but the new findings indicate that at present, structural reforms (such as narrowing the gender gap in unemployment rates, encouraging women's employment, and stipulating more female-friendly policies in the workplace, such as paid parental leave for both parents) are more effective than attitude cultivation.

For men, promoting the values of equality helps enhance workplace collaboration efficiency.

Limitations are unmeasured variables: Cultural trends (such as the #MeToo movement) or the impact of the pandemic were not included. Future research could incorporate these unobserved variables.

This replication study reveals the dynamic nature of gender research. Although Soboleva's hypotheses still hold partially true for women in transitional societies, the evolution of the institutional environment has altered the underlying mechanisms of these relationships. This indicates that gender equality has shifted from being a "women's issue" to a capacity-building effort for the entire society. Future research should enhance intersectional analysis and policy impact assessment to consolidate existing progress.

Reference

Alwin DF, Braun M and Scott J (1992) The separation of work and the family: attitudes towards women's labour-force participation in Germany, Great Britain, and the United States. European Sociological Review 8(1): 13-37.
Babcock L and Laschever S (2003) Women Don't Ask: Negotiation and the Gender Divide. Princeton, NJ: Princeton University Press.
Batalova JA and Cohen PN (2002) Premarital cohabitation and housework: couples in cross-national perspective. Journal of Marriage and Family 64(3): 743–55.
Bergh J (2006) Gender attitudes and modernization processes. International Journal of Public Opinion Research 19(1): 5-23.
Bianchi SM, Milkie MA, Sayer LC and Robinson JP (2000). Is anyone doing the housework? Trends in the gender division of household labour. Social Forces 79(1): 191–228.
Bolzendahl C and Myers DJ (2004) Feminist attitudes and support for gender equality: opinion change in women and men, 1974-1998. Social Forces 83(2): 759-790.
Braun M and Gloeckner-Rist A (2011) Perceived consequences of female labour-force participation. A multilevel latent-class analysis across 22 countries. Obets. Revista de Ciencias Sociales 6(2): 163–84. Available at: https://rua.ua.es/dspace/bitstream/10045/20542/1/OBETS_06_02_01.pdf (accessed 25 June 2019).
Budig M and England P (2001) The wage penalty for motherhood. American Sociological Review 66(2): 204–25.
Choe MK, Bumpass LL, Tsuya NO and Rindfuss RR (2014) Nontraditional family-related attitudes in Japan: Macro and micro determinants. Population and Development Review 40(2): 241–71.
Clark AE, Oswald A and Warr P (1996) Is job satisfaction U-shaped in age? Journal of Occupational and Organizational Psychology 69(1), 57–81.

Appendices

Table 1

	eqwrkbg	eqmgmbg	eqpaybg	eqpolbg	eqparep	eqparlv	freinsw	fineqpy
eqwrkbg	1.0000000	0.5085616	0.4755007	0.5065173	0.2225249	0.1735326	0.1961962	0.2343604
eqmgmbg	0.5085616	1.0000000	0.6505225	0.8100670	0.3402141	0.1923260	0.2561532	0.3256397
eqpaybg	0.4755007	0.6505225	1.0000000	0.6081273	0.2255673	0.1209729	0.2550626	0.3433736
eqpolbg	0.5065173	0.8100670	0.6081273	1.0000000	0.3283223	0.1740433	0.2443525	0.3003772
eqparep	0.2225249	0.3402141	0.2255673	0.3283223	1.0000000	0.3992291	0.2360161	0.3171288
eqparlv	0.1735326	0.1923260	0.1209729	0.1740433	0.3992291	1.0000000	0.2047273	0.2299643
freinsw	0.1961962	0.2561532	0.2550626	0.2443525	0.2360161	0.2047273	1.0000000	0.4702230
fineqpy	0.2343604	0.3256397	0.3433736	0.3003772	0.3171288	0.2299643	0.4702230	1.0000000

Table 2

	cntry	Gender_Attitude & Achievement_Motivation	p_1	Gender_Attitude & Career_Achievement	p_2
1	AT	0.01421837	6.545096e-01	0.169007253	8.432674e-08
2	BE	-0.02506620	4.764861e-01	0.082817206	1.847443e-02
3	BG	0.22528551	1.039809e-13	-0.007878404	7.974199e-01
4	CH	0.01198882	7.520351e-01	0.062520282	9.909973e-02
5	CY	0.19798603	4.637087e-04	0.099023619	8.222925e-02
6	DE	0.02383608	4.066682e-01	-0.043936419	1.260126e-01
7	ES	-0.02415466	4.754824e-01	0.068669142	4.227991e-02
8	FI	0.06767326	6.052383e-02	0.050956126	1.577746e-01
9	FR	0.12417656	2.331507e-04	0.055221162	1.027977e-01
10	GB	0.09666511	5.484562e-03	0.122126665	4.421898e-04
11	GR	0.22030297	4.389728e-15	-0.045781885	1.072420e-01
12	HR	0.09713530	9.551802e-03	0.218573664	3.878946e-09
13	HU	0.27968714	1.799655e-16	-0.015912641	6.461209e-01
14	IE	0.15657058	2.185405e-06	0.134846827	4.663624e-05
15	IL	0.02998052	5.305093e-01	0.282856399	1.539681e-09
16	IS	0.03955229	4.199300e-01	0.041203149	4.007769e-01
17	IT	0.20188524	8.819863e-14	0.094102488	5.650293e-04
18	LT	0.19266374	8.589890e-06	0.247008897	9.423767e-09
19	LV	0.13458326	4.878778e-03	0.129290548	6.866083e-03
20	ME	0.29821367	2.881599e-19	-0.055245436	1.040371e-01
21	NL	0.01329065	6.999919e-01	0.026867579	4.359392e-01
22	NO	-0.03250698	3.998110e-01	0.045450563	2.389935e-01
23	PL	0.15121775	8.007570e-05	0.174667192	5.001829e-06
24	PT	0.07901933	5.761569e-02	0.109368456	8.498331e-03
25	RS	0.08612859	1.985887e-02	0.154959930	2.577247e-05
26	SE	-0.05327046	1.776330e-01	0.025203404	5.238295e-01
27	SI	0.08619628	3.358824e-02	0.082688377	4.153022e-02
28	SK	0.12731631	9.488495e-04	0.110817786	4.051913e-03

Table 3

	cntry	Gender_Attitude & Achievement_Motivation	p_1	Gender_Attitude & Career_Achievement	p_2	Achievement_Motivation & Career_Achievement	p_3
1	AT	0.01421837	6.545096e-01	0.169007253	8.432674e-08	0.134100206	2.239257e-05
2	BE	-0.02506620	4.764861e-01	0.082817206	1.847443e-02	-0.013636431	6.985502e-01
3	BG	0.22528551	1.039809e-13	-0.007878404	7.974199e-01	0.170370436	2.248420e-08
4	CH	0.01198882	7.520351e-01	0.062520282	9.909973e-02	0.078486123	3.830553e-02
5	CY	0.19798603	4.637087e-04	0.099023619	8.222925e-02	0.005029130	9.298399e-01
6	DE	0.02383608	4.066682e-01	-0.043936419	1.260126e-01	0.058063669	4.310346e-02
7	ES	-0.02415466	4.754824e-01	0.068669142	4.227991e-02	-0.031542079	3.513751e-01
8	FI	0.06767326	6.052383e-02	0.050956126	1.577746e-01	0.033380101	3.549590e-01
9	FR	0.12417656	2.331507e-04	0.055221162	1.027977e-01	-0.040631293	2.301474e-01
10	GB	0.09666511	5.484562e-03	0.122126665	4.421898e-04	0.117252748	7.453875e-04
11	GR	0.22030297	4.389728e-15	-0.045781885	1.072420e-01	-0.004481838	8.747722e-01
12	HR	0.09713530	9.551802e-03	0.218573664	3.878946e-09	0.109274803	3.529844e-03
13	HU	0.27968714	1.799655e-16	-0.015912641	6.461209e-01	0.128102193	2.060802e-04
14	IE	0.15657058	2.185405e-06	0.134846827	4.663624e-05	0.060412118	6.913377e-02
15	IL	0.02998052	5.305093e-01	0.282856399	1.539681e-09	0.032077467	5.021433e-01
16	IS	0.03955229	4.199300e-01	0.041203149	4.007769e-01	-0.065565057	1.809269e-01
17	IT	0.20188524	8.819863e-14	0.094102488	5.650293e-04	0.091973172	7.530058e-04
18	LT	0.19266374	8.589890e-06	0.247008897	9.423767e-09	0.228752403	1.130587e-07
19	LV	0.13458326	4.878778e-03	0.129290548	6.866083e-03	0.177183432	2.003775e-04
20	ME	0.29821367	2.881599e-19	-0.055245436	1.040371e-01	0.010181071	7.646688e-01
21	NL	0.01329065	6.999919e-01	0.026867579	4.359392e-01	0.033150041	3.363864e-01
22	NO	-0.03250698	3.998110e-01	0.045450563	2.389935e-01	-0.045877390	2.346066e-01
23	PL	0.15121775	8.007570e-05	0.174667192	5.001829e-06	0.102375013	7.771298e-03
24	PT	0.07901933	5.761569e-02	0.109368456	8.498331e-03	0.103299422	1.296386e-02
25	RS	0.08612859	1.985887e-02	0.154959930	2.577247e-05	0.112302559	2.359870e-03
26	SE	-0.05327046	1.776330e-01	0.025203404	5.238295e-01	-0.002004557	9.595710e-01
27	SI	0.08619628	3.358824e-02	0.082688377	4.153022e-02	0.081274249	4.515332e-02
28	SK	0.12731631	9.488495e-04	0.110817786	4.051913e-03	0.169836743	9.717492e-06

Table 4

	Dependent variable:
	Achievement_Motivation
Gender_Attitude	0.352***
	(0.057)
Laborforce_female	0.095
	(0.125)
agea	-0.040***
	(0.001)
I(agea2)	0.00004***
	(0.00000)
edulvlb	0.00003
	(0.00003)
Gender_Attitude:Laborforce_female	-0.006***
	(0.001)
Constant	2.794
	(5.837)
Observations	24,595
Log Likelihood	-56,088.560
Akaike Inf. Crit.	112,195.100
Bayesian Inf. Crit.	112,268.100
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 5

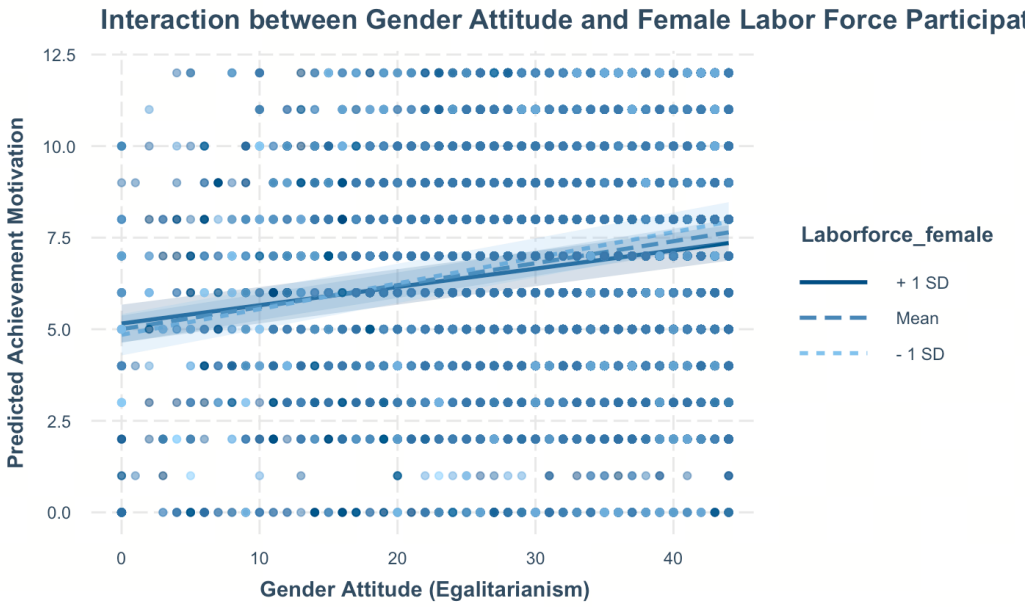

Table 6

	Dependent variable:
	Career_Achievement
Gender_Attitude	0.179
	(0.154)
Laborforce_female	0.570**
	(0.279)
agea	0.021***
	(0.002)
I(agea2)	-0.00002***
	(0.00000)
edulvlb	0.001***
	(0.0001)
Gender_Attitude:Laborforce_female	-0.001
	(0.003)
Constant	-23.686*
	(13.063)
Observations	24,595
Log Likelihood	-80,479.120
Akaike Inf. Crit.	160,976.200
Bayesian Inf. Crit.	161,049.200
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 7

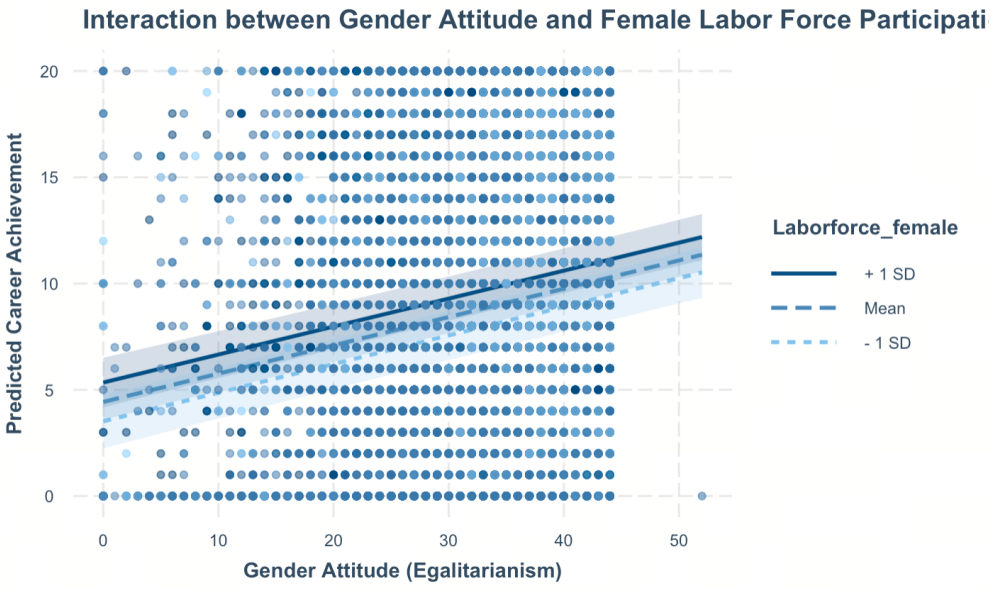

Table 8(Achievement_Motivation - Female Unemployment rate)

	Dependent variable:
	Achievement_Motivation
Gender_Attitude	0.045***
	(0.004)
Unemployment_female	-0.100*
	(0.055)
agea	-0.040***
	(0.001)
I(agea2)	0.00004***
	(0.00000)
edulvlb	0.00003
	(0.00003)
Gender_Attitude:Unemployment_female	0.002***
	(0.001)
Constant	7.869***
	(0.404)
Observations	24,595
Log Likelihood	-56,098.070
Akaike Inf. Crit.	112,214.100
Bayesian Inf. Crit.	112,287.100
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 9

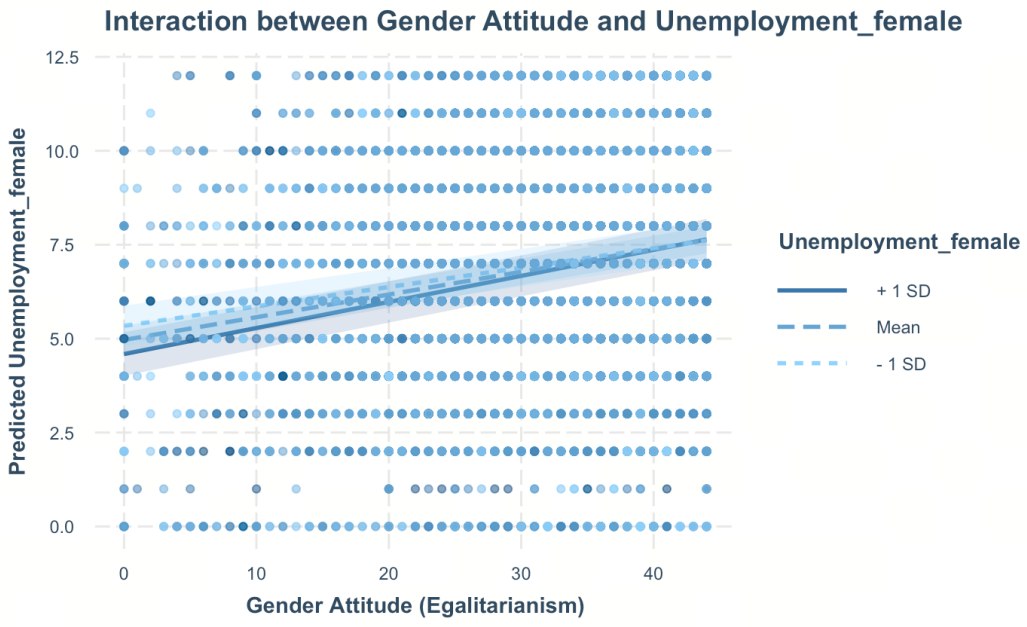

Table 10

	Dependent variable:
	Career_Achievement
Gender_Attitude	0.122***
	(0.012)
Unemployment_female	-0.314***
	(0.119)
agea	0.021***
	(0.002)
I(agea2)	-0.00002***
	(0.00000)
edulvlb	0.001***
	(0.0001)
Gender_Attitude:Unemployment_female	0.002
	(0.002)
Constant	4.974***
	(0.883)
Observations	24,595
Log Likelihood	-80,479.620
Akaike Inf. Crit.	160,977.200
Bayesian Inf. Crit.	161,050.200
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 11