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Attitudes toward Women's Education in Afghanistan: Empirical Evidence from a Nationwide Survey

Abstract

This study investigates men's attitudes toward women's education in Afghanistan, focusing on primary, secondary, and tertiary levels, as well as studying in another province or abroad, through the lens of identity theory and the intra-household bargaining framework. We use data from Afghan surveys conducted by the Asia Foundation from 2014 to 2021 across 34 provinces and apply multivariate regression analysis with a comprehensive set of covariates. Our findings reveal that men's attitudes toward women's education are predominantly negative, notably in rural areas. However, women's contributions to household income significantly mitigate these negative attitudes, particularly toward secondary education, followed by tertiary education, and studying in other provinces or abroad. Moreover, fear of insecurity in society amplifies the negative attitudes of men toward women's education. This research underscores the potential of increased financial contributions by women to transform gender attitudes and promote educational equality in Afghanistan.

JEL-Codes: C830, D630, I240, I250, J160.

Keywords: education, gender gap, attitudes, education inequality, security, Afghanistan, survey.

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1. Introduction

Afghanistan is currently the only country in the world enforcing a prohibition on women's education at both secondary and tertiary levels. This prohibition has been in place since the Taliban's resurgence in 2021. The restriction replicates a previous ban that was in place from 1996 to 2001, during the Taliban's earlier administration (Noury & Speciale, 2016). This restriction explicitly contrasts with the nation's turbulent yet rich history of gender policies. During the late 1920s, King Amanullah Khan's progressive vision for women's education and rights faced resistance from traditional tribal factions, illustrating early challenges to gender reform. The communist regimes of the 1950s and 1960s furthered these efforts by advocating co-education and women's workforce participation, only to be rolled back by the Mujahidin and the Taliban in the 1990s, who prioritized conservative interpretations of Islamic principles. Post-2003, Afghan women glimpsed progress, balancing between the influences of moderate and traditional approaches to education (Zulfacar, 2006) and seeking liberation from hierarchical and patriarchal control (Rostami-Povey, 2007).

Many development programs were employed in Afghanistan from 2001 to 2021, focused on women's empowerment. However, as noticed by Beath et al. (2013), the role of women in promoting their own rights did not significantly improve during this period. Although there were some improvements in women's education during this period, the achievements have been sharply curtailed by the decrees issued after 2021. This regression has drawn global condemnation and spotlighted Afghanistan as a focal point in the international human rights discourse.

The United Nations Sustainable Development Goals (SDGs), particularly Goal 4 on Quality Education and Goal 5 on Gender Equality, emphasize the imperatives of universal education and gender parity. Yet, empirical research specific to gender equality in Afghanistan's educational sector remains sparse. Key areas lacking exploration include the role of entrenched gender norms in shaping educational opportunities, the determinants of these perceptions, and the variations in attitudes between men and women within households. Furthermore, given the patriarchal nature of the Afghan society, men traditionally make decisions for women's education in the households. This greatly complicates the ability of women to obtain education. Hoodfar (2007) also refers to this issue, noting that many traditional social institutions in Afghanistan are detrimental to gender equity.

This study aims to fill these gaps by first investigating men's attitudes toward women's education across primary, secondary, and tertiary levels and exploring their views on women studying in other provinces or abroad, considering rurality and urbanity. Second, we examine how women's economic contributions to their households could moderate men's attitudes toward their education. Third, we seek to understand how security concerns impact these attitudes. To achieve these objectives, we analyze data from a

comprehensive survey conducted by the Asia Foundation, which includes 148,196 observations collected from 2014 to 2021.¹

The structure of this paper is as follows: Section 2 presents a literature review. Section 3 explains the data and methodological approach. In Section 4, we present the results of our analysis. Section 5 discusses the implications of these findings. Finally, Section 6 concludes the paper.

2. Literature Review

2.1. Men's attitudes toward women's education

According to the identity theory articulated by Akerlof and Kranton (2000), a person's decision-making is influenced by their "sense of self," which is integrated into their utility function. This "sense of self" is formed by influences from their family and cultural norms, providing a framework of expected behaviors for the individual. Traditionally, Afghan society has been patriarchal, with men often holding positions of authority and decision-making power within households (Moghadam, 2002), and this is still the case. In such a context, there have been historical barriers to women's education, including socio-demographic and cultural norms that prioritize men's education over women's. Manganaro & Alozie (2011) revealed that men have a predominant role in, and are more conservative about, women's education in the household; though, women have a comparatively more liberal view of their own rights. The authors believe that differences are based on socio-demographic and ecological factors.

2.2. Women's bargaining roles in the households

According to the intra-household-bargaining model, women's decisions in the household are affected by various factors such as age, education, health, children, and labor hours (Anderson et al., 2017). Moreover, the difference between men's and women's decision-making power in the household depends on the context of their countries (Seymour & Peterman, 2018). Seymour and Peterman examine these differences using data from Bangladesh and Ghana, which are culturally distinct. Following the intra household decision-making model, Kochar et al. (2022) argue that financial distribution has a positive impact on women's authority in the household. They examine the impact of financial inclusion on women's authority in India.

Cunningham (2008) found that women's employment and education were negatively associated with support for traditional gender roles. In other words, women's employment and education have a positive association with egalitarian attitudes. The author explores the pattern of change in attitudes toward male breadwinners and female homeworkers over time in the United States.

In West Africa, mothers' education has a significant impact on girls' education compared to no significant impact on boys' (Glick & Sahn, 2000). In this study, the authors investigate the effect of

¹ We use a portion of these overall observations due to data availability of included variables in the regression sample.

parental education, income, and household structure on girls and boys schooling. Overall, an increase in household income led to more investment in girls' education compared to boys.

Bertrand et al., (2015) show how income differences between husbands and wives affect various aspects of family life in households. In the United States, they found that, when wives earn more than their husbands, there are often negative consequences due to social norms and expectations. Further, the authors found that when wives earn more income than men, it changes the traditional gender roles and behaviors of the couples at home. Later, Gök et al., (2019) investigate the impact of higher education on unemployed Turkish people's attitudes toward gender. Their results show that females are more egalitarian compared to their male counterparts in terms of gender. However, they could not find any evidence for the interaction effects of gender and college degree on either gender attitudes or dual earning.

Magda et al., (2024) examine how women's contributions to household income relate to the distribution of housework among partners, taking into consideration their attitudes toward gender roles. The authors found that reducing disparities in gender pay could be a significant stride toward fostering greater equality, not just in the workplace but also within households. They use data from the Generation and Gender Survey for Poland.

2.3. Fear of insecurity and women's education

In countries facing conflict, education is in bad shape, especially for girls. Poverty and worries about safety, like sexual violence and attacks from groups against girls going to school, make it hard for girls to get an education (UNESCO, 2011). For example, in Tajikistan girls' attendance in mandatory schooling periods are less likely in conflict affected areas compared to relatively in secure regions (Shemyakina, 2011). Further, according to Singh & Shemyakina (2016), the association between conflict and female education attainment is strongly negative and statistically significant. The authors examine the long run effect of Punjab insurgency on the education attainment of adults during 1981 – 1993. The authors emphasize that in conflict affected environments, due to safety concerns such abuses and rape on their way to school, females are more vulnerable than males.

The fear of insecurity is one of the main concerns for heads of households when allowing female members to attend school or university. Burrige et al. (2016) reveal that Afghan women face significant and enduring obstacles in pursuing higher education, including cultural resistance, limited access to opportunities, and societal barriers. Despite some progress, challenges persist, indicating the need for further action to address gender disparities in secondary and higher education in Afghanistan.

3. Hypotheses, Data and Methodology

3.1. Hypotheses and Data

This study tests the following four hypotheses in the context of Afghanistan:

H1: Men generally hold conservative attitudes toward women's education, especially when it is about higher levels of schooling.

H2: Rural men have more conservative attitudes toward women's education than urban men.

H3: Men's attitudes toward women's education are influenced by women's income contributions within the household. When women contribute financially, it tends to reduce men's negative attitudes toward women's education.

H4: In the presence of fear of insecurity, women's income contributions mitigate men's negative attitudes toward women's education.

This study's analysis derives from a nationwide survey carried out by the Asia Foundation: an international nonprofit organization dedicated to development. This survey seeks to examine the perspectives and viewpoints of Afghans concerning security, political engagement, the economy, governance, and various socio-economic factors. The data gathering process involved conducting face-to-face interviews with participants across all 34 provinces, 400 districts, cities, and villages in Afghanistan. A carefully crafted stratified-random sampling technique was utilized for selection. The sample composition aimed to accurately reflect the political, socio-economic, and demographic makeup of the Afghan populace. As highlighted by the Asia Foundation (2021), this survey is the longest-standing indicator of public opinion in Afghanistan since 2001. To analyze the data, we use a linear probability model (LPM) with fixed effects. Moreover, for sensitivity check, we apply logit regressions with fixed effects. The results are shown in Table A2 in the Appendix.

Dependent Variables

In this study, we have five dependent variables based on five survey questions. These questions represent respondents' opinions about women's education over seven waves (2014–2021). The prompt was: “Some people say that women should have equal opportunities like men in education.” Respondents were asked to provide their opinions on whether they “strongly agree,” “somewhat agree,” “strongly disagree,” or “somewhat disagree” with this statement. For analysis purposes, we combined “strongly agree” and “somewhat agree” into “agree,” coded as 1, and “strongly disagree” and “somewhat disagree” into “disagree,” coded as 0.

More specifically, the original questions in the survey are as follows:

Q1: Should women have the same opportunities as men in primary education?

Q2: Should women have the same opportunities as men in secondary education?

Q3: Should women have the same opportunities as men going to tertiary education?

Q4: Should women have the same opportunities as men to study in another province?

Q5: Should women have the same opportunities as men in education and study abroad?

The above questions indicate two important issues regarding attitudes toward women's education. Q1, Q2, and Q3 describe how men behave toward women's education level, while Q4 and Q5 explain these attitudes toward women's education in another province or studying abroad.

According to the education system in Afghanistan, primary education covers grades 1 through 6, with children typically starting formal school between the ages of six and eight. Secondary education is divided into two three-year cycles. The first cycle, covering grades 7 to 9, is known as lower secondary education, while the second cycle, encompassing grades 10 to 12, is referred to as higher secondary education (Wes, 2016).

Studying in another province allows women to pursue education when there is no university in their own province or when the programs of interest are not available locally.

Studying abroad becomes an option for women when educational opportunities like scholarships or admission to universities outside of Afghanistan arise. Afghan women often encounter challenges when seeking to study in another province or abroad, primarily due to the requirement of having a "Mahram²," which complicates their educational pursuits.

Key Explanatory Variables

The explanatory variables of interest in this study are "gender" and "women's income contribution."

Gender is a binary variable which is 1 for males and 2 for females. We re-scaled it to 1 for men and 0 for women.

Women's income contribution is also a binary variable. Respondents were asked whether female members of the household contribute to household income. The original scoring for this variable is "yes," equal to 1, or "no," equal to 0.

² Derived from the word "*Haraam*" which means something prohibited, "*mahram*" in Islamic jurisprudence refers to a person one cannot marry. This prohibition arises from a close blood relationship, breastfeeding, or being related through marriage (GIWPS, 2022). A *mahram* can be a husband, father, brother, or son.

Key Control Variables

To reduce the risk of omitted variable bias, we have controlled for a set of other relevant variables, explained as follows.

Education level: The original dataset categorized education into five groups: no education, primary education, secondary education, high school, and university. For simplicity, we recoded these into four categories: no education, primary education, secondary education, and tertiary education

Income level of the household: The participants were asked to provide their average total family monthly income, initially classified into nine distinct categories, ranging from less than 2,000 AFN to 40,000 AFN or more (28.5 USD³ to 571.4 USD). To facilitate analysis, we consolidated these nine categories into three broader groups, represented by binary variables: Category 1 (Low Income): Assigned a value of 1 if the income is below 10,000 AFN (142.8 USD), and 0 otherwise. Category 2 (Medium Income): Assigned a value of 1 for incomes between 10,001 and 20,000 AFN (142.8 USD and 285.7 USD), and 0 otherwise. Category 3 (High Income): Assigned a value of 1 for incomes above 20,000 AFN (285.7 USD), and 0 otherwise. This categorization was determined through a combination of contextual knowledge, survey data insights, and the need for a practical analytical framework.

Fear of Insecurity: Participants were asked how often they fear for their personal safety or security, as well as that of their family. The variable was originally scored in four categories: 4 (never fear), 3 (rare fear), 2 (sometimes fear), and 1 (often fear). For analysis purposes, the scores were re-scaled: 4 (never fear) and 3 (rare fear) were combined and re-coded to 0, representing no fear; 2 (sometimes fear) and 1 (often fear) were combined and re-coded to 1, representing fear.

Being a victim of violence: The other crucial control variable under consideration is whether individuals have personally experienced violence. Participants were questioned if they or any of their family members had been subjected to violence or a criminal act in their home or community within the past year. This variable is originally scored on a binary scale, with 0 indicating "No" and 1 indicating "Yes."

Figure 1 illustrates the proportions of male and female respondents in Afghanistan with positive attitudes toward women's education from 2014 to 2021. The data reveals that while both men and women generally support equal opportunities for women's education at the primary level, significant disparities emerge at the secondary and tertiary levels.

For secondary education, men show an agreement rate 5 percentage points (pp) lower compared to women. This disparity increases to 11 pp at the tertiary level. The gap becomes even more noticeable when considering women's education studying in another province or abroad. Men's support drops by 14 pp for women studying outside their province compared to those studying locally.

³ We use the average exchange rate of 1 USD = 70 AFN over the period from 2014 to 2021 (Da Afghanistan Bank, 2024).

Moreover, Figure 1 highlights a decline in positive attitudes toward women's education as the level of education increases and as the possibility of studying abroad from home grows. This decline is more substantial among men than women.

Figure 1: Positive attitudes toward women's education in Afghanistan

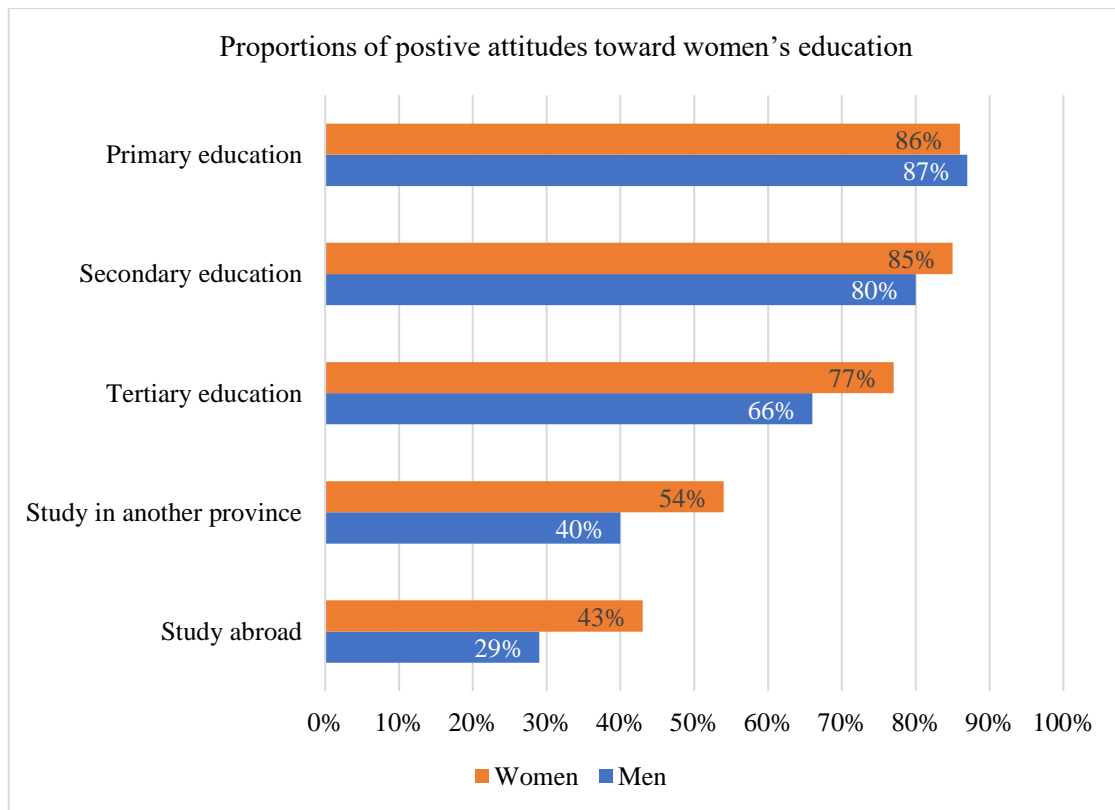


Figure 2 illustrates the trends in positive attitudes toward women's education in Afghanistan from 2014 to 2021. The graph presents a slight improvement in the proportion of respondents expressing positive views on women's education in the latest survey year, 2021. One possible reason for this positive development could be the impact of education development programs implemented by organizations such as UNESCO, UNICEF, and the World Bank. For instance, the Global Partnership for Education (GPE) initiative between 2012–2015 and 2017 may have played a role (Ministry of Education, 2024). As stated above in Figure 1, disparities in attitudes become evident when examining responses concerning different levels of education (such as primary, secondary, and higher education) and study in another province or abroad.

Figure 2: Positive attitudes toward women’s education in Afghanistan across time (2014–2021)

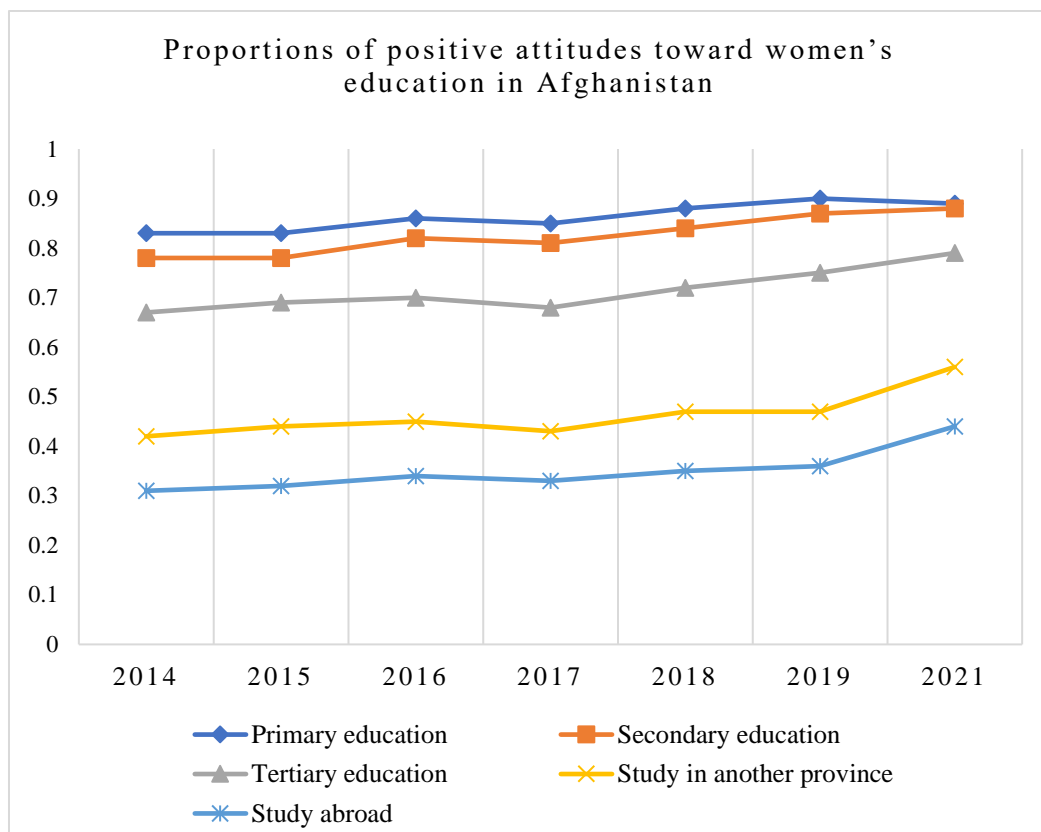


Table 1 presents the summary statistics for both the main dependent variables and the explanatory variables. This study analyzes a sample of 69,694 observations drawn from the original representative survey, which collected 148,196 observations between 2014 and 2021. The table also shows that the mean gender is 54.9 percent for men and 45.1 percent for women.

Table 1: Summary statistics

Variable	Observations	Mean	Min	Max
Primary education	69,694	.868	0	1
Secondary education	69,694	.829	0	1
Tertiary education	69,694	.717	0	1
Study in another province	69,694	.468	0	1
Study abroad	69,694	.354	0	1
Men	69,694	.549	0	1
Women	69,694	.451	0	1
Women’s income contributions	69,694	.221	0	1
Fear of insecurity	69,694	.705	0	1
Urban	69,694	.226	0	1
Rural	69,694	.774	0	1

Note: The complete summary statistics are presented in Table A1 in the Appendix.

3.2. Methodology

To estimate Equation 1, we use fixed effects LPM and a logit model. Fixed effects control for unobserved factors that are constant over time but may impact the outcome. The outcome variables are binary (0 and 1) attitudes. The LPM can be estimated using ordinary least squares (OLS) regression, which is straightforward and computationally simpler than the maximum likelihood estimation required for logit models. In the LPM, the coefficients are directly interpretable as changes in the probability of the dependent variable being 1 given a one-unit change in the independent variable. The estimated coefficients with LPM are close to marginal effects following logit estimations.

$$Attitude_{it} = \alpha + \beta_1.men_{it} + \beta_2.female_income_{it} + \beta_3.(men_{it} \times female_income_{it}) + \beta_4.Z_{it} + \varepsilon_{it} \quad (1)$$

In the above equation, attitude denotes the attitude of an individual i over a period t . β_1 denotes the coefficient for men, expected to be negative, implying that men are associated with negative attitudes toward women's education, especially for higher levels of education and mobility in the case study of Afghanistan. β_2 denotes the coefficient for women's income, expected to be positive, indicating that women's income is associated with positive attitudes toward women's education. β_3 denotes the coefficient of interaction effect of men and income of women, which is expected to be positive. In other words, the negative attitudes of men toward education of women are mitigated in the case of the existence of a women's income contribution in the household. β_4 denotes the coefficient of Z_{it} control variables and ε_{it} is the error term.

4. Results

4.1. Attitudes toward women's education with LPM

We examine whether men have positive or negative attitudes toward women's education in households. Table 2 shows the estimates of a LPM with fixed effects of men's attitudes toward women's education. The dependent variable is binary, and it takes a value of 1 if men agree with women achieving education at different levels, study in another province, or study abroad.

According to the results in Table 2 Model 1, the probability of men having positive attitudes toward women's primary education increases by 0.1 percentage points (pp), although this increase is not statistically significant. One interpretation could be that there is no significant difference between men's and women's attitudes toward primary education for women.

Model 2 shows that the probability of men having positive attitudes toward women's secondary education decreases by approximately 6.8 percentage points (pp) when the outcome is related to an equal chance for women's education at the secondary school level.

Model 3 indicates that the probability of men having positive attitudes toward women's tertiary education decreases by approximately 13.3 pp. This implies that, as the questions refer to higher levels of women's education, the likelihood of men having positive attitudes toward women's education decreases more significantly, controlling for other individual characteristics. In Afghanistan, men hold patriarchal power within households, which determines whether the females in the household attend school or pursue tertiary education. Most of these attitudes are influenced by cultural and ecological factors, as supported by Manganaro & Alozie (2011).

Model 4 shows that the probability of men having positive attitudes toward women's education decreases by approximately 15.8 percentage points (pp) if women are supposed to travel to another province for educational purposes, such as attending a public or private university. This leads the men of the households (fathers, grandfathers, husbands, or elder brothers) to have conservative attitudes toward women's studies in another province because they are afraid of insecurity.

Model 5 indicates that the probability of men's positive attitudes toward women's education decreases by approximately 16 percentage points when women are supposed to study abroad. This decline is particularly significant given the additional challenges Afghan women face when traveling alone, primarily due to the requirement of a Mahram, as mentioned earlier. These negative impacts on women's education at the secondary and tertiary levels, whether they study in another province or abroad, reveal a consistent pattern of more conservative attitudes among Afghan men toward women's educational rights. Thus, our results support Hypothesis 1.

For a robustness test, we also examine the results of Table 2 using fixed effects logit models (Guiso & Zaccaria, 2023; Timoneda, 2021), which are presented in Table A2 of the appendix.

Table 2: Attitudes toward women's education, full sample, LPM with fixed effects

Dependent variable: Positive attitude toward women's...					
	(1) Primary education	(2) Secondary education	(3) Tertiary education	(4) Studying in another province	(5) Study abroad
Gender					
Men	0.001 (0.428)	-0.068*** (-18.968)	-0.133*** (-32.443)	-0.158*** (-34.671)	-0.160*** (-36.912)
<i>Ref. group: (women)</i>	.	.	.	.	.
Household income					
Women's income contributions	-0.003 (-0.905)	0.010*** (2.628)	0.031*** (6.754)	0.066*** (12.754)	0.064*** (12.760)
<i>Respondents' socio-economic characteristics</i>					
Medium income	0.006* (1.759)	0.011*** (2.976)	0.008* (1.860)	-0.011** (-2.298)	-0.016*** (-3.395)
High income	0.019*** (2.952)	0.036*** (5.142)	0.052*** (6.348)	0.044*** (4.688)	0.051*** (5.644)
<i>Ref. group: (low income)</i>	.	.	.	.	.
Education level					
Primary education	0.004 (0.783)	0.027*** (5.488)	0.039*** (6.840)	0.019*** (2.999)	0.014** (2.384)
Secondary education	0.023*** (4.001)	0.054*** (8.594)	0.081*** (11.059)	0.040*** (4.766)	0.031*** (3.956)
Tertiary education	0.027***	0.074***	0.116***	0.097***	0.096***

	(6.356)	(15.702)	(20.939)	(15.324)	(15.932)
<i>Ref. group: (No education)</i>	.	.	.	.	.
Fear of insecurity	-0.035*** (-11.045)	-0.049*** (-13.937)	-0.058*** (-13.914)	-0.026*** (-5.421)	0.008* (1.800)
Being a victim of violence	-0.008** (-1.969)	-0.030*** (-6.583)	-0.049*** (-9.616)	-0.036*** (-6.671)	-0.015*** (-2.935)
Ethnicity group					
Pashtun	-0.011* (-1.795)	-0.037*** (-5.226)	-0.042*** (-5.000)	-0.032*** (-3.478)	-0.027*** (-3.122)
Tajik	-0.008 (-1.305)	0.001 (0.203)	0.010 (1.224)	0.003 (0.281)	0.001 (0.117)
Uzbek	-0.006 (-0.714)	0.024*** (2.823)	0.038*** (3.725)	0.033*** (2.779)	0.023** (2.019)
Hazara	-0.009 (-1.202)	0.042*** (5.302)	0.099*** (10.472)	0.183*** (16.208)	0.193*** (17.517)
<i>Ref. group: (Turkmen)</i>	.	.	.	.	.
Marital status (Married=1)	-0.010** (-2.046)	-0.012** (-2.529)	-0.027*** (-4.554)	-0.026*** (-3.880)	-0.018*** (-2.676)
Age					
Age 18-25	-0.009 (-1.341)	-0.024*** (-3.260)	-0.021** (-2.296)	-0.016 (-1.547)	-0.013 (-1.414)
Age 26-35	-0.009 (-1.373)	-0.020*** (-2.824)	-0.012 (-1.462)	-0.012 (-1.245)	-0.006 (-0.691)
Age 36-45	-0.019*** (-2.874)	-0.025*** (-3.502)	-0.017* (-1.936)	-0.010 (-1.081)	-0.012 (-1.283)
Age 46-55	-0.006 (-0.911)	-0.022*** (-2.773)	-0.014 (-1.465)	-0.023** (-2.236)	-0.023** (-2.347)
<i>Ref. group: (age over 55)</i>	.	.	.	.	.
Household size					
Household size 5-8	-0.000 (-0.088)	-0.001 (-0.120)	0.009 (1.444)	0.027*** (3.678)	0.032*** (4.474)
Household size 9-12	0.007* (1.798)	0.013*** (3.329)	0.018*** (3.833)	0.011** (2.068)	0.005 (1.057)
Household size over	0.005 (1.228)	0.008 (1.612)	0.006 (1.055)	0.002 (0.255)	0.005 (0.949)
<i>Ref. group: (Household size 1-4)</i>	.	.	.	.	.
Urban	0.015*** (3.761)	0.049*** (11.457)	0.094*** (18.419)	0.086*** (14.118)	0.084*** (13.968)
<i>Ref. group: (Rural)</i>	.	.	.	.	.
Regions					
East	0.110*** (11.548)	0.098*** (9.156)	0.080*** (6.462)	0.005 (0.352)	-0.034*** (-2.622)
North	0.097*** (11.745)	0.079*** (8.986)	0.124*** (12.070)	0.081*** (7.311)	0.011 (1.047)
South	0.041*** (4.625)	-0.035*** (-3.644)	-0.055*** (-5.173)	-0.073*** (-6.645)	-0.069*** (-6.688)
Kabul central	0.100*** (11.200)	0.089*** (9.218)	0.117*** (10.587)	0.009 (0.733)	-0.004 (-0.359)
Central highlands	0.164*** (14.850)	0.130*** (11.490)	0.203*** (15.516)	0.214*** (14.120)	0.235*** (15.276)
<i>Ref. group: (West)</i>	.	.	.	.	.
Waves (2014 – 2021)	Yes	Yes	Yes	Yes	Yes
Observations	70,031	69,898	69,938	69,855	69,694

Note: The dependent variable is binary, with 1 indicating a positive attitude and 0 indicating a lack of positive attitude. Significance levels: ** p < 0.05, *** p < 0.01. The t-statistics in parentheses are based on robust standard errors, clustered at the individual level.

4.2. Attitudes toward women's education in rural and urban

Tables 3 and 4 present the results of a LPM with fixed effects, analyzing men's attitudes toward women's education in rural and urban areas. This investigation is crucial because, as highlighted in the summary statistics, approximately 77.8% of the survey respondents reside in rural areas while 22.2% live in urban areas. By exploring these attitudes across different settings, we uncover notable differences and similarities between rural and urban outlooks.

Several empirical studies, including those by Ahmed & Sen (2018), Wang et al. (2024), and Zeng et al., (2014), have found varying results concerning gender inequality in education across rural and urban areas.

In Table 3, Model 1, we find that men's attitudes toward women's primary education are generally negative in rural areas; this finding is statistically significant. One of the primary reasons for these negative attitudes could be the reliance on child labor in rural areas of Afghanistan. Tasks such as weaving carpets, caring for younger siblings, tending to family livestock, and cooking bread often take precedence over formal education for girls in these areas (Save the Children, 2022).

In contrast, Table 4, Model 1, indicates that men's attitudes toward women's primary education are positive and statistically significant in urban areas. This positive outlook in urban households can be attributed to their generally better economic conditions and the better opportunities for children, including girls, to attend school.

However, it is important to note that, in both rural and urban settings, men's attitudes toward women's education tend to be more negative and significant overall. Interestingly, the negative coefficients regarding attitudes toward women's secondary education are almost four and for tertiary education two times larger in rural areas compared to urban areas. Several factors contribute to the conservative attitudes of Afghan men toward women's education. These include child marriage, poverty, and social barriers. Such factors are more pronounced in rural areas, leading to a stronger resistance to women's education, at the secondary and tertiary levels (Blum et al., 2019).

Table 3: Attitudes toward women's education, rural sub-sample, LPM with fixed effects

Dependent variable: Positive attitude toward women's...					
	(1) Primary education	(2) Secondary education	(3) Tertiary education	(4) Studying in another province	(5) Study abroad
Gender					
Men	-0.011*** (-2.725)	-0.079*** (-18.265)	-0.149*** (-30.491)	-0.169*** (-32.538)	-0.155*** (-31.675)
<i>Ref. group: (women)</i>	.	.	.	.	.
Household income					
Women's income contributions	-0.004 (-0.885)	0.012** (2.509)	0.040*** (7.416)	0.071*** (11.888)	0.064*** (11.134)
<i>Respondents' socio-economic characteristics</i>					
Medium income	0.008* (1.954)	0.011** (2.545)	0.008 (1.441)	-0.014** (-2.558)	-0.015*** (-2.907)
High income	0.020** (2.388)	0.037*** (3.927)	0.055*** (5.188)	0.047*** (4.124)	0.058*** (5.336)
<i>Ref. group: (low income)</i>	.	.	.	.	.
Education level					
Primary education	0.006 (1.101)	0.029*** (4.874)	0.037*** (5.499)	0.025*** (3.565)	0.019*** (2.905)
Secondary education	0.038*** (5.377)	0.063*** (8.187)	0.091*** (10.184)	0.045*** (4.590)	0.032*** (3.599)
Tertiary education	0.035*** (6.713)	0.086*** (14.617)	0.129*** (18.919)	0.100*** (13.567)	0.094*** (13.298)
<i>Ref. group: (No education)</i>	.	.	.	.	.
Fear of insecurity	-0.038*** (-10.231)	-0.050*** (-11.744)	-0.058*** (-11.595)	-0.022*** (-4.040)	0.005 (1.009)
Being a victim of violence	-0.008* (-1.646)	-0.029*** (-5.559)	-0.055*** (-9.278)	-0.037*** (-6.093)	-0.011** (-1.998)

Ethnicity group					
Pashtun	-0.006 (-0.860)	-0.040*** (-4.814)	-0.034*** (-3.488)	-0.023** (-2.197)	-0.005 (-0.501)
Tajik	-0.002 (-0.312)	0.010 (1.283)	0.021** (2.175)	0.008 (0.727)	0.012 (1.162)
Uzbek	-0.012 (-1.380)	0.028*** (2.828)	0.057*** (4.751)	0.063*** (4.585)	0.052*** (4.004)
Hazara	-0.011 (-1.217)	0.044*** (4.713)	0.110*** (9.874)	0.203*** (15.845)	0.210*** (16.910)
<i>Ref. group: (Turkmen)</i>	.	.	.	.	.
Marital status (Married=1)	-0.012** (-2.046)	-0.017*** (-2.790)	-0.025*** (-3.433)	-0.025*** (-3.067)	-0.016** (-2.041)
Age					
Age 18-25	-0.007 (-0.842)	-0.024*** (-2.633)	-0.012 (-1.110)	-0.004 (-0.305)	0.003 (0.259)
Age 26-35	-0.003 (-0.395)	-0.016* (-1.862)	-0.005 (-0.525)	-0.002 (-0.222)	0.007 (0.679)
Age 36-45	-0.011 (-1.419)	-0.021** (-2.441)	-0.007 (-0.649)	0.003 (0.244)	0.001 (0.094)
Age 46-55	0.001 (0.108)	-0.018* (-1.894)	-0.006 (-0.518)	-0.010 (-0.836)	-0.013 (-1.130)
<i>Ref. group: (age over 55)</i>	.	.	.	.	.
Household size					
Household size 5-8	0.005 (0.800)	0.001 (0.095)	0.003 (0.414)	0.015 (1.635)	0.021** (2.489)
Household size 9-12	0.003 (0.600)	0.010** (1.985)	0.017*** (2.956)	0.006 (0.927)	-0.003 (-0.446)
Household size over	0.005 (1.060)	0.009 (1.530)	0.011 (1.602)	0.004 (0.628)	0.010 (1.534)
<i>Ref. group: (Household size 1-4)</i>	.	.	.	.	.
Regions					
East	0.111*** (9.685)	0.100*** (7.547)	0.089*** (5.985)	0.000 (0.001)	-0.040*** (-2.642)
North	0.117*** (11.967)	0.097*** (9.224)	0.153*** (12.607)	0.103*** (7.983)	0.022* (1.784)
South	0.037*** (3.772)	-0.027** (-2.484)	-0.033*** (-2.753)	-0.061*** (-4.974)	-0.075*** (-6.566)
Kabul central	0.097*** (9.036)	0.079*** (6.565)	0.110*** (8.220)	-0.009 (-0.658)	-0.054*** (-4.055)
Central highlands	0.163*** (13.129)	0.115*** (8.713)	0.180*** (11.961)	0.183*** (10.851)	0.211*** (12.578)
<i>Ref. group: (West)</i>	.	.	.	.	.
Waves (2014 – 2021)	Yes	Yes	Yes	Yes	Yes
Observations	54,255	54,143	54,168	54,097	53,957

Note: The dependent variable is binary, with 1 indicating a positive attitude and 0 indicating a lack of positive attitude. Significance levels: ** p < 0.05, *** p < 0.01. The t-statistics in parentheses are based on robust standard errors, clustered at the individual level.

The results in Tables 3 and 4, specifically Models 4 and 5, show that the probability of men's attitudes toward women's education who study in another province or study abroad is negative. These findings reinforce the arguments presented in Models 2 and 3, suggesting that Afghan men are generally less supportive of women's education.

Table 4: Attitudes toward women's education, urban sub-sample, LPM with fixed effects

Dependent variable: Positive attitude toward women's...					
	(1) Primary education	(2) Secondary education	(3) Tertiary education	(4) Studying in another province	(5) Study abroad
Gender					
Men	0.071*** (7.323)	-0.022*** (-2.624)	-0.073*** (-6.982)	-0.081*** (-5.271)	-0.192*** (-13.043)
<i>Ref. group: (women)</i>	.	.	.	.	.
Household income					
Women's income contributions	-0.010 (-0.926)	0.006 (0.601)	0.008 (0.742)	0.083*** (4.926)	0.098*** (5.989)
<i>Respondents' socio-economic characteristics</i>					
Medium income	-0.011 (-1.020)	-0.012 (-1.248)	-0.008 (-0.723)	-0.006 (-0.347)	-0.026 (-1.624)
High income	0.003 (0.185)	-0.007 (-0.577)	-0.005 (-0.333)	-0.001 (-0.039)	0.003 (0.140)
<i>Ref. group: (low income)</i>	.	.	.	.	.
Education level					
Primary education	-0.030** (-2.166)	0.024* (1.824)	0.038** (2.497)	-0.011 (-0.506)	-0.017 (-0.791)
Secondary education	-0.034** (-2.217)	0.029** (2.149)	0.053*** (3.025)	0.018 (0.747)	0.028 (1.185)
Tertiary education	-0.026** (-2.249)	0.035*** (3.316)	0.062*** (4.812)	0.055*** (2.900)	0.091*** (5.076)
<i>Ref. group: (No education)</i>	.	.	.	.	.
Fear of insecurity	-0.013 (-1.334)	-0.029*** (-3.494)	-0.033*** (-3.208)	-0.029* (-1.903)	0.012 (0.813)
Being a victim of violence	-0.002 (-0.188)	-0.018 (-1.452)	-0.015 (-1.015)	-0.031 (-1.594)	-0.023 (-1.194)
Ethnicity group					
Pashtun	-0.094*** (-4.408)	-0.057*** (-3.020)	-0.070*** (-3.093)	-0.065* (-1.946)	-0.104*** (-3.135)
Tajik	-0.085*** (-4.209)	-0.036** (-2.079)	-0.028 (-1.360)	-0.035 (-1.117)	-0.062** (-2.015)
Uzbek	-0.043 (-1.478)	-0.002 (-0.060)	-0.026 (-0.855)	-0.157*** (-3.709)	-0.126*** (-3.024)
Hazara	-0.077*** (-3.353)	-0.009 (-0.440)	0.030 (1.337)	0.093** (2.537)	0.113*** (3.140)
<i>Ref. group: (Turkmen)</i>	.	.	.	.	.
Marital status (Married=1)	-0.026** (-2.282)	-0.001 (-0.105)	-0.023* (-1.727)	0.005 (0.268)	-0.002 (-0.093)
Age					
Age 18-25	-0.011 (-0.653)	-0.030* (-1.939)	-0.042** (-2.176)	-0.059** (-2.021)	-0.048* (-1.743)
Age 26-35	-0.007 (-0.471)	-0.026* (-1.869)	-0.022 (-1.319)	-0.037 (-1.339)	-0.021 (-0.796)
Age 36-45	-0.015 (-0.948)	-0.020 (-1.402)	-0.036** (-1.976)	-0.068** (-2.401)	-0.061** (-2.263)
Age 46-55	0.001 (0.063)	-0.008 (-0.491)	-0.008 (-0.385)	-0.071** (-2.250)	-0.056* (-1.846)
<i>Ref. group: (age over 55)</i>	.	.	.	.	.
Household size					
Household size 5-8	-0.012 (-1.121)	-0.020** (-2.049)	-0.001 (-0.070)	0.036* (1.946)	0.010 (0.550)
Household size 9-12	0.014 (1.367)	0.026** (2.576)	0.012 (1.008)	0.007 (0.388)	0.027 (1.642)
Household size over	-0.001 (-0.084)	-0.013 (-0.996)	-0.010 (-0.586)	0.006 (0.259)	0.003 (0.154)
<i>Ref. group: (Household size 1-4)</i>	.	.	.	.	.
Regions					
East	0.141*** (4.910)	0.112*** (3.500)	0.076* (1.682)	0.059 (1.011)	0.061 (1.085)
North	0.017 (0.610)	0.025 (0.919)	0.066* (1.715)	0.065 (1.539)	0.060 (1.439)
South	0.064** (2.070)	-0.022 (-0.682)	-0.034 (-0.735)	-0.087* (-1.812)	0.006 (0.122)

Kabul central	0.074*** (3.093)	0.079*** (3.285)	0.083** (2.300)	0.063 (1.544)	0.129*** (3.212)
Central highlands	0.084 (1.440)	0.153*** (2.862)	0.250*** (4.130)	0.221** (2.514)	0.304*** (3.248)
<i>Ref. group: (West)</i>	.	.	.	.	.
Waves (2014 – 2021)	Yes	Yes	Yes	Yes	Yes
Observations	15,776	15,755	15,770	15,758	15,737

Note: The dependent variable is binary, with 1 indicating a positive attitude and 0 indicating a lack of positive attitude. Significance levels: ** p < 0.05, *** p < 0.01. The t-statistics in parentheses are based on robust standard errors, clustered at the individual level.

4.3. Interaction Effects

4.3.1. Women's contributions to the household's income

In this section, we examine how women's income contributions in the household affect men's attitudes toward women's education. Figure 3 presents the results of men's attitudes toward women's education at primary, secondary, and tertiary, as well as study in another province or abroad, considering the moderating role of women's income with LPM and fixed effects.

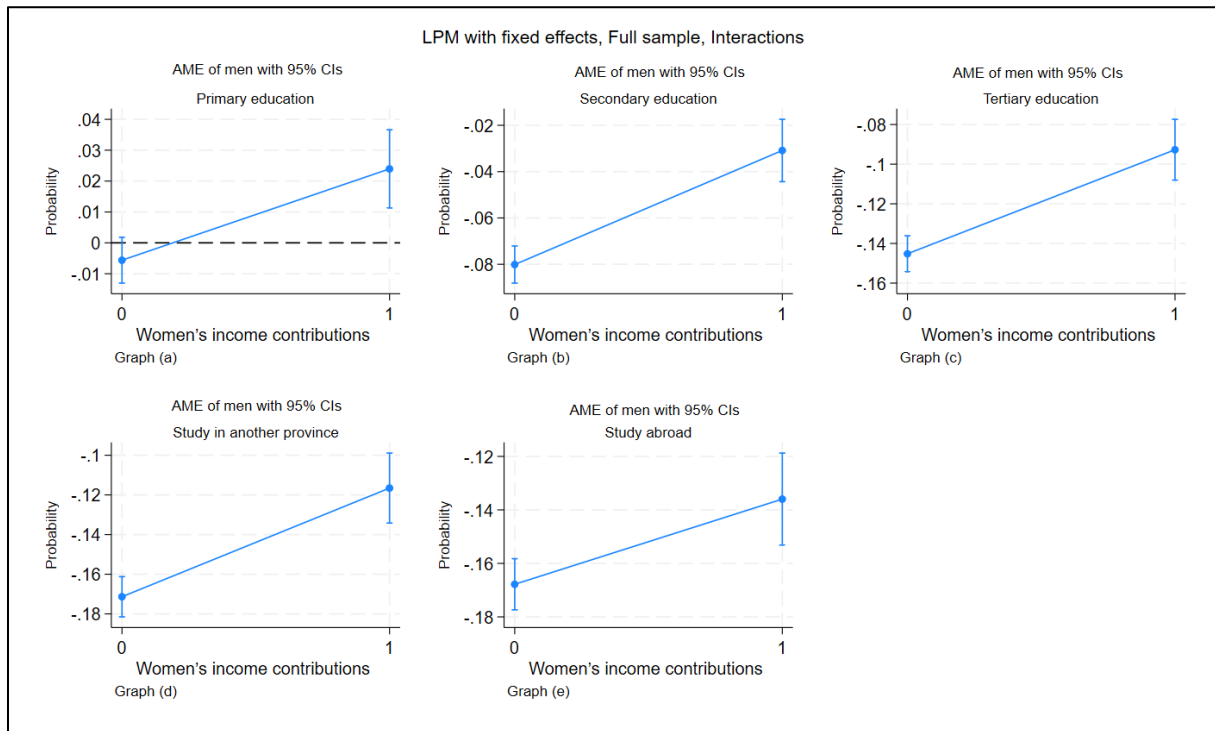
The results in Figure 3, Graph (a), show that the probability of men's attitudes toward women's primary education is positive and significant at the presence of women's income contribution. Conversely, Graph (b), shows that men's attitude toward secondary school education of women is mostly negative at the absence of income contribution by women in the household. However, this negative attitude becomes weaker (but still negative) at the presence of income contribution from women. Women's income contribution reduces the probability of negative attitudes of men occurring by about 7 pp.

Moreover, in Graph (c), the probability of men's negative attitudes toward women's education at the tertiary level occurring decreases by 4.8 percentage points in the case of existence of women's income contribution. These results indicate that although the association between men and attitudes toward women's education is negative, women's income contribution reduces this negative perception. These results are supported by the intra-household financial decision model proposed by Guiso and Zaccaria (2023).

Further, we are also interested in finding out how women's income contribution moderates the association between men's attitudes toward women's education when they study in another province or study abroad. Graph (d) shows women's income contributions mitigate men's negative attitudes toward women's education in another province in Afghanistan by 5.2 pp. Graph (e) shows that the men also have negative attitudes toward study abroad by women, but this negative perception becomes weaker in the case of women's income contribution.

For robustness checks, we also examined Figure 3 with logit fixed effects, for which we have the same results as presented in Figure A1 in the Appendix.

Figure 3: Men’s attitudes toward women’s education: The moderating role of women’s income contribution



4.2.2. Fear of insecurity

In this section, we aim to examine the effects of fear of insecurity on men's attitudes toward women's education. Our focus is on the prevalent concern among Afghan men regarding the safety of women in the household when they attend school or university.

Figures 4 and 5 show the effect of men’s attitudes toward women's education in the presence or absence of women's income contributions, within subsamples of “no fear of insecurity” and “fear of insecurity,” respectively.

In both cases, we observe that men's attitudes toward women's education are mostly negative when there is no income contribution from women. This negative attitude is more pronounced in the sample of respondents with fear of insecurity. In the sample with no fear of insecurity, the extent of negative attitudes is significantly lower, regardless of women's income contributions. However, in both subsamples, women's income contributions reduce the negative attitudes of men toward women's education.

We also examine both Figures 4 and 5 with logit models with fixed effects, as presented in Figures A2 and A3 in the Appendix.

Figure 4: Men's attitudes toward women's education: Moderating role of women's income contribution (in subsample without fear of insecurity)

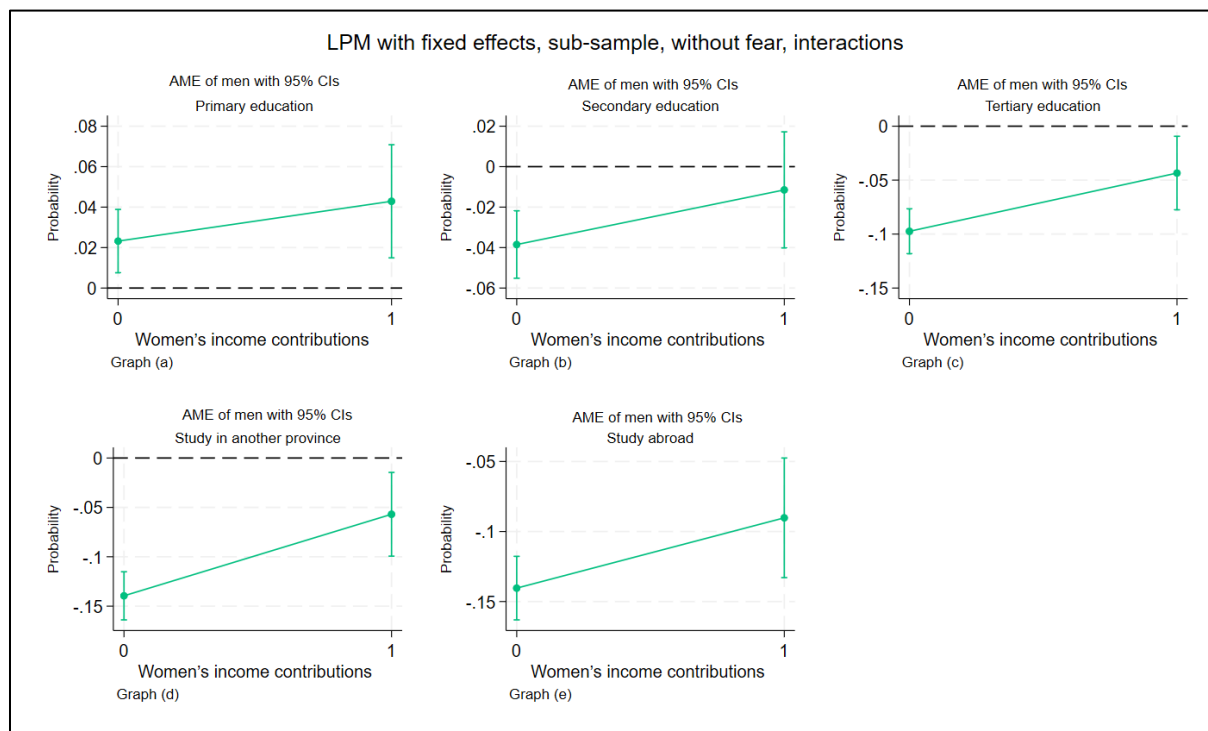
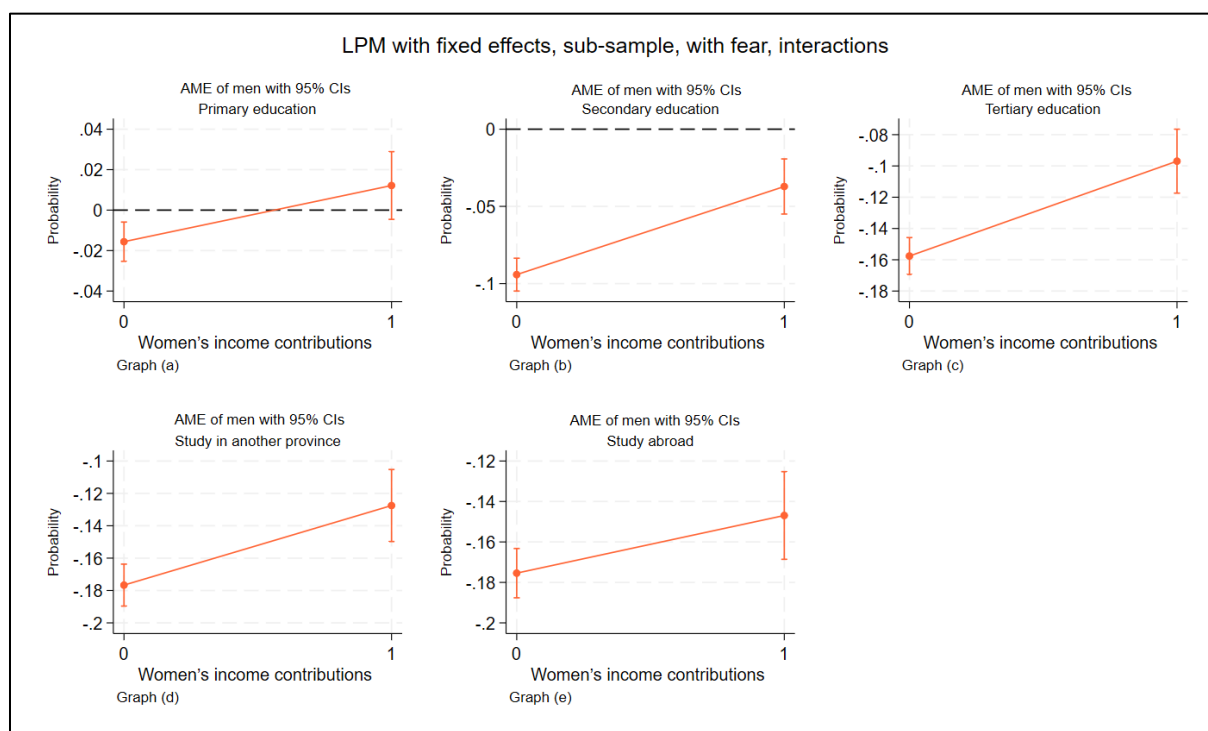


Figure 5: Men's attitudes toward women's education: Moderating role of women's income contribution (in subsample with fear of insecurity)



5. Discussion

Our empirical findings reveal that men's conservative attitudes toward women's education in Afghanistan support our first hypothesis. Hypothesis 1 is rooted in identity theory (Akerlof & Kranton, 2000), which suggests that an individual's "sense of self" is influenced by cultural traditions and societal values that outline a framework of expected behaviors. Furthermore, we show that the patriarchal structure, upheld by men, poses a significant barrier to women's education in Afghanistan. This is despite the substantial investment by the international community in promoting gender equality in education in Afghanistan from 2001 to 2021⁴. Our findings fill a significant gap left by the study of Manganaro & Alozie (2011), which explored socio-demographic and ecological factors influencing gender role attitudes in Afghanistan using data from the Asia Foundation's 2004 dataset. Manganaro & Alozie (2011) did not examine women's education, as the dataset at that time did not include questions about women's education in Afghanistan or men's attitudes toward it. Our research, by addressing these overlooked aspects, provides a more comprehensive understanding of gender role attitudes in the context of women's education in Afghanistan.

Regarding hypothesis 2, our study finds that rural men in Afghanistan exhibit more conservative attitudes toward women's education compared to their urban counterparts, as shown in Tables 3 and 4. The disparity between urban and rural perspectives is a widespread phenomenon globally, influenced by societal, economic, and political factors; Afghanistan is no exception. This finding aligns with the results of several previous studies (Ahmed & Sen, 2018; Du et al., 2021; Singh & Shemyakina, 2016; Wang et al., 2024).

Hypothesis 3 suggests that women's financial contributions can alleviate men's negative views on women's education at different educational levels, including pursuing studies in other provinces or abroad, as illustrated in Figure 3. Our results validate this hypothesis, demonstrating that when women contribute to household income, men are more likely to support women's educational endeavors, at different levels of education. According to the intra-household bargaining model, both men and women can influence decisions regarding the education levels attained by household members. Despite the strong influence of the patriarchy on educational attainment decisions in Afghan households, women's income contributions significantly impact men's attitudes toward women's education. Kochar et al. (2022) use data from India's National Rural Livelihoods Survey and argue that women's financial empowerment significantly influences household outcomes, such as education and health.

Regarding hypothesis 4, our study finds that women's income contributions mitigate men's negative attitudes toward women's education, even in the presence of fear of insecurity. This is illustrated in Figures 4 and 5. In Afghanistan, a major concern for household heads is the safety of the environment

⁴ For example, see DAAD evaluation report of Germany Afghanistan portfolio:
https://static.daad.de/media/daad_de/der-daad/kommunikation-publikationen/daadevaluationafgexecutivesummaryeng.pdf

between home and school. These concerns intensify as women progress from primary to secondary and tertiary education, or if they study in another province or abroad. Our results align with these observations and are supported by the findings of (Shemyakina, 2011; Singh and Shemyakina, 2016).

6. Conclusion

We examine men's attitudes toward women's education at primary, secondary, and tertiary levels, as well as studying in other provinces or abroad. We do this through the lens of identity theory and the intra-household bargaining model. We apply fixed effects LPM and logit regression, using nationwide survey data from the Asia Foundation (2014–2021). Our study reveals the significant role of women's contributions to household income and the fear of insecurity in shaping men's attitudes toward women's education in Afghanistan. While men generally exhibit negative attitudes, particularly toward tertiary education and studying abroad, women's financial contributions weaken these negative attitudes. Moreover, rural men are more conservative toward women's education than urban men. Notably, even in the presence of fear of insecurity, women's income contributions reduce men's negative attitudes toward women's education. These findings underscore the interactions between women's economic empowerment, security considerations, and gender attitudes in rural and urban areas.

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Reference

- Ahmed, T., & Sen, B. (2018). Conservative outlook, gender norms and female wellbeing: Evidence from rural Bangladesh. *World Development*, *111*, 41–58.
<https://doi.org/10.1016/j.worlddev.2018.06.017>
- Akerlof, G. A., & Kranton, R. E. (2000). Economics and Identity. *Quarterly Journal of Economics*, *115*(3), 715–753. <https://doi.org/10.1162/003355300554881>
- Anderson, C. L., Reynolds, T. W., & Gugerty, M. K. (2017). Husband and Wife Perspectives on Farm Household Decision-making Authority and Evidence on Intra-household Accord in Rural Tanzania. *World Development*, *90*, 169–183. <https://doi.org/10.1016/j.worlddev.2016.09.005>
- Beath, A., Christia, F., & Enikolopov, R. (2013). Empowering Women through Development Aid: Evidence from a Field Experiment in Afghanistan. *American Political Science Review*, *107*(3), 540–557. <https://doi.org/10.1017/S0003055413000270>
- Bertrand, M., Kamenica, E., & Pan, J. (2015). Gender Identity and Relative Income within Households*. *The Quarterly Journal of Economics*, *130*(2), 571–614.
<https://doi.org/10.1093/qje/qjv001>
- Blum, R. Wm., Li, M., Pasha, O., Rao, C., & Natiq, K. (2019). Coming of Age in the Shadow of the Taliban: Education, Child Marriage, and the Future of Afghanistan From the Perspectives of Adolescents and Their Parents. *Journal of Adolescent Health*, *64*(3), 370–375.
<https://doi.org/10.1016/j.jadohealth.2018.09.014>
- Burridge, N., Maree Payne, A., & Rahmani, N. (2016). ‘Education is as important for me as water is to sustaining life’: Perspectives on the higher education of women in Afghanistan. *Gender and Education*, *28*(1), 128–147. <https://doi.org/10.1080/09540253.2015.1096922>
- Cunningham, M. (2008). Changing Attitudes toward the Male Breadwinner, Female Homemaker Family Model: Influences of Women’s Employment and Education over the Lifecourse. *Social Forces*, *87*(1), 299–323. <https://doi.org/10.1353/sof.0.0097>
- Da Afghanistan Bank. (2024). *Annual Report*. <https://dab.gov.af/publications?page=2>
- Du, H., Xiao, Y., & Zhao, L. (2021). Education and gender role attitudes. *Journal of Population Economics*, *34*(2), 475–513. <https://doi.org/10.1007/s00148-020-00793-3>
- GIWPS. (2022). *Mahram: Women’s Mobility in Islam*. <https://giwps.georgetown.edu/wp-content/uploads/2022/08/Mahram-Womens-Mobility-in-Islam.pdf>
- Glick, P., & Sahn, D. E. (2000). Schooling of girls and boys in a West African country: The effects of parental education, income, and household structure. *Economics of Education Review*, *19*(1), 63–87. [https://doi.org/10.1016/S0272-7757\(99\)00029-1](https://doi.org/10.1016/S0272-7757(99)00029-1)
- Gök, E., Aydın, B., & Weidman, J. C. (2019). The impact of higher education on unemployed Turkish people’s attitudes toward gender: A multilevel analysis. *International Journal of Educational Development*, *66*, 155–163. <https://doi.org/10.1016/j.ijedudev.2018.10.004>

- Guiso, L., & Zaccaria, L. (2023). From patriarchy to partnership: Gender equality and household finance. *Journal of Financial Economics*, 147(3), 573–595.
<https://doi.org/10.1016/j.jfineco.2023.01.002>
- Hoodfar, H. (2007). Women, religion and the ‘Afghan Education Movement’ in Iran. *The Journal of Development Studies*, 43(2), 265–293. <https://doi.org/10.1080/00220380601125115>
- Kochar, A., Nagabhushana, C., Sarkar, R., Shah, R., & Singh, G. (2022). Financial access and women’s role in household decisions: Empirical evidence from India’s National Rural Livelihoods project. *Journal of Development Economics*, 155, 102821.
<https://doi.org/10.1016/j.jdeveco.2022.102821>
- Magda, I., Cukrowska-Torzewska, E., & Palczyńska, M. (2024). What if She Earns More? Gender Norms, Income Inequality, and the Division of Housework. *Journal of Family and Economic Issues*, 45(1), 1–20. <https://doi.org/10.1007/s10834-023-09893-0>
- Manganaro, L. L., & Alozie, N. O. (2011). Gender Role Attitudes: Who Supports Expanded Rights for Women in Afghanistan? *Sex Roles*, 64(7–8), 516–529. <https://doi.org/10.1007/s11199-011-9931-6>
- Ministry of Education. (2024, July 7). GPE. GPE Progran. <https://moe.gov.af/en/gpe>
- Moghadam, V. M. (2002). Patriarchy, the Taleban, and politics of public space in Afghanistan. *Women’s Studies International Forum*, 25(1), 19–31. [https://doi.org/10.1016/S0277-5395\(02\)00224-8](https://doi.org/10.1016/S0277-5395(02)00224-8)
- Noury, A. G., & Speciale, B. (2016). Social constraints and women’s education: Evidence from Afghanistan under radical religious rule. *Journal of Comparative Economics*, 44(4), 821–841.
<https://doi.org/10.1016/j.jce.2016.07.005>
- Rostami-Povey, E. (2007). Gender, agency and identity, the case of Afghan women in Afghanistan, Pakistan and Iran. *The Journal of Development Studies*, 43(2), 294–311.
<https://doi.org/10.1080/00220380601125149>
- Save the Children. (2022, May 12). *From students to labors: The reality for Afghan girls living under the school ban*. <https://www.savethechildren.net/news/students-labourers-reality-afghan-girls-living-under-school-ban>
- Seymour, G., & Peterman, A. (2018). Context and measurement: An analysis of the relationship between intrahousehold decision making and autonomy. *World Development*, 111, 97–112.
<https://doi.org/10.1016/j.worlddev.2018.06.027>
- Shemyakina, O. (2011). The effect of armed conflict on accumulation of schooling: Results from Tajikistan. *Journal of Development Economics*, 95(2), 186–200.
<https://doi.org/10.1016/j.jdeveco.2010.05.002>
- Singh, P., & Shemyakina, O. N. (2016). Gender-differential effects of terrorism on education: The case of the 1981–1993 Punjab insurgency. *Economics of Education Review*, 54, 185–210.
<https://doi.org/10.1016/j.econedurev.2016.02.003>

- The Asia Foundation. (2021). *Survey of the Afghan People (2004-2021)* [Dataset]. ADA Dataverse.
<https://doi.org/10.26193/VDDO0X>
- Timoneda, J. C. (2021). Estimating group fixed effects in panel data with a binary dependent variable: How the LPM outperforms logistic regression in rare events data. *Social Science Research*, 93, 102486. <https://doi.org/10.1016/j.ssresearch.2020.102486>
- UNESCO. (2011). *2011 Education for All global monitoring report: The hidden crisis: Armed conflict and education; gender overview* (Programme and Meeting Document 0000212003; p. 45). UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000212003>
- Wang, Q., Chiang, T.-F., & Xiao, J. J. (2024). Attitude toward gender inequality in China. *Humanities and Social Sciences Communications*, 11(1), 353. <https://doi.org/10.1057/s41599-024-02857-1>
- Wes. (2016). *Education in Afghanistan*. Education System Profiles.
<https://wenr.wes.org/2016/09/education-afghanistan>
- Zeng, J., Pang, X., Zhang, L., Medina, A., & Rozelle, S. (2014). GENDER INEQUALITY IN EDUCATION IN CHINA: A META-REGRESSION ANALYSIS. *Contemporary Economic Policy*, 32(2), 474–491. <https://doi.org/10.1111/coep.12006>
- Zulfacar, M. (2006). The pendulum of gender politics in Afghanistan. *Central Asian Survey*, 25(1–2), 27–59. <https://doi.org/10.1080/02634930600903007>

Appendixes

Table A1: Descriptive statistics

Variable	Observations	Mean	Min	Max
Primary education	69,694	.868	0	1
Secondary education	69,694	.829	0	1
Tertiary education	69,694	.717	0	1
Study in another province	69,694	.468	0	1
Study abroad	69,694	.354	0	1
Men	69,694	.549	0	1
Women	69,694	.451	0	1
Women's income contributions	69,694	.221	0	1
Low income	69,694	.299	0	1
Medium income	69,694	.632	0	1
High Income	69,694	.069	0	1
Fear of insecurity	69,694	.705	0	1
Being a victim of violence	69,694	.19	0	1
No education	69,694	.427	0	1
Primary education	69,694	.184	0	1
Secondary education	69,694	.083	0	1
Tertiary education	69,694	.305	0	1
Pashtun	69,694	.382	0	1
Tajik	69,694	.355	0	1
Uzbek	69,694	.075	0	1
Hazara	69,694	.111	0	1
Turkmen	69,694	.019	0	1
Marital status	69,694	.812	0	1
Age 18-25	69,694	.304	0	1
Age 26-35	69,694	.298	0	1
Age 36-45	69,694	.223	0	1
Age 46-55	69,694	.112	0	1
Age over 55	69,694	.064	0	1
Household size 1-14	69,694	.108	0	1
Household size 5-8	69,694	.055	0	1
Household size 9-12	69,694	.518	0	1
Household size over	69,694	.788	0	1
Urban	69,694	.226	0	1
Rural	69,694	.774	0	1
West	69,694	.099	0	1
East	69,694	.101	0	1
North	69,694	.325	0	1
South	69,694	.216	0	1
Kabul central	69,694	.209	0	1
Central highlands	69,694	.049	0	1

Table A2: Attitudes toward women's education: logit models with fixed effects, marginal effects

Dependent variable: Positive attitude toward women's...					
	(1) Primary education	(2) Secondary education	(3) Tertiary education	(4) Studying in another province	(5) Study abroad
Gender					
Men	0.007 (0.994)	-0.126*** (-17.651)	-0.187*** (-30.425)	-0.176*** (-34.344)	-0.197*** (-36.113)
<i>Ref. group: (women)</i>	.	.	.	.	.
Household income					
Women's income contributions	-0.004 (-0.544)	0.024*** (3.094)	0.049*** (7.149)	0.073*** (12.355)	0.077*** (12.596)
<i>Respondents' socio-economic characteristics</i>					
Medium income	0.015** (2.079)	0.027*** (3.662)	0.015** (2.441)	-0.015*** (-2.676)	-0.023*** (-3.867)
High income	0.040*** (2.816)	0.080*** (5.542)	0.079*** (6.303)	0.046*** (4.339)	0.064*** (5.681)
<i>Ref. group: (low income)</i>	.	.	.	.	.
Education level					
Primary education	0.003 (0.302)	0.047*** (5.185)	0.055*** (7.046)	0.021*** (2.952)	0.015** (2.001)
Secondary education	0.042*** (3.271)	0.097*** (7.571)	0.113*** (10.384)	0.045*** (4.681)	0.035*** (3.428)
Tertiary education	0.057***	0.147***	0.171***	0.108***	0.115***

<i>Ref. group: (No education)</i>	(5.751)	(14.905)	(20.596)	(15.218)	(15.392)

Fear of insecurity	-0.077*** (-9.440)	-0.091*** (-12.074)	-0.080*** (-12.704)	-0.029*** (-5.476)	0.009 (1.508)
Being a victim of violence	-0.016** (-2.105)	-0.052*** (-6.859)	-0.069*** (-10.444)	-0.041*** (-6.686)	-0.018*** (-2.768)
Ethnicity group					
Pashtun	-0.022 (-1.606)	-0.058*** (-4.464)	-0.049*** (-4.435)	-0.029*** (-2.953)	-0.031*** (-2.885)
Tajik	-0.015 (-1.075)	0.013 (1.000)	0.015 (1.318)	0.005 (0.449)	0.003 (0.246)
Uzbek	-0.016 (-0.879)	0.057*** (3.176)	0.059*** (3.977)	0.040*** (3.097)	0.029** (2.172)
Hazara	-0.018 (-1.036)	0.099*** (5.703)	0.160*** (10.821)	0.203*** (15.787)	0.216*** (16.480)
<i>Ref. group: (Turkmen)</i>	.	.	.	.	.
Marital status (Married=1)	-0.023** (-2.101)	-0.031*** (-2.847)	-0.045*** (-4.939)	-0.029*** (-3.796)	-0.020** (-2.469)
Age					
Age 18-25	-0.018 (-1.127)	-0.042*** (-2.710)	-0.027** (-2.136)	-0.016 (-1.444)	-0.014 (-1.198)
Age 26-35	-0.017 (-1.150)	-0.034** (-2.362)	-0.015 (-1.226)	-0.014 (-1.301)	-0.007 (-0.593)
Age 36-45	-0.036** (-2.398)	-0.042*** (-2.827)	-0.020* (-1.645)	-0.013 (-1.189)	-0.014 (-1.214)
Age 46-55	-0.016 (-0.987)	-0.039** (-2.421)	-0.014 (-1.070)	-0.025** (-2.183)	-0.030** (-2.386)
<i>Ref. group: (age over 55)</i>	.	.	.	.	.
Household size					
Household size 5-8	-0.001 (-0.055)	0.003 (0.257)	0.015 (1.537)	0.028*** (3.459)	0.036*** (4.186)
Household size 9-12	0.014* (1.720)	0.028*** (3.534)	0.026*** (3.936)	0.011* (1.922)	0.005 (0.788)
Household size over	0.010 (1.160)	0.013 (1.563)	0.007 (0.859)	0.002 (0.252)	0.008 (1.083)
<i>Ref. group: (Household size 1-4)</i>	.	.	.	.	.
Urban	0.033*** (3.573)	0.106*** (10.751)	0.147*** (17.796)	0.094*** (14.073)	0.098*** (14.224)
<i>Ref. group: (Rural)</i>	.	.	.	.	.
Regions					
East	0.194*** (9.612)	0.160*** (7.848)	0.094*** (5.492)	-0.003 (-0.226)	-0.042*** (-2.602)
North	0.176*** (12.259)	0.145*** (9.288)	0.170*** (12.590)	0.084*** (6.947)	0.011 (0.845)
South	0.062*** (4.445)	-0.034** (-2.267)	-0.047*** (-3.539)	-0.086*** (-7.205)	-0.098*** (-7.695)
Kabul central	0.180*** (10.658)	0.172*** (9.486)	0.154*** (10.032)	0.001 (0.050)	-0.012 (-0.868)
Central highlands	0.346*** (14.135)	0.295*** (11.352)	0.360*** (15.417)	0.265*** (13.818)	0.262*** (13.823)
<i>Ref. group: (West)</i>	.	.	.	.	.
Waves (2014 – 2021)	Yes	Yes	Yes	Yes	Yes
Observations	32,360	37,965	50,059	58,561	54,437

Note: The dependent variable is binary, with 1 indicating a positive attitude and 0 indicating a lack of positive attitude. Significant levels: ** $p < 0.05$, *** $p < 0.01$. The t-statistics are in parentheses. The estimated coefficients are marginal effects.

Figure A1: Men's attitudes toward women's education: The moderating role of women's income contribution with logit fixed effects

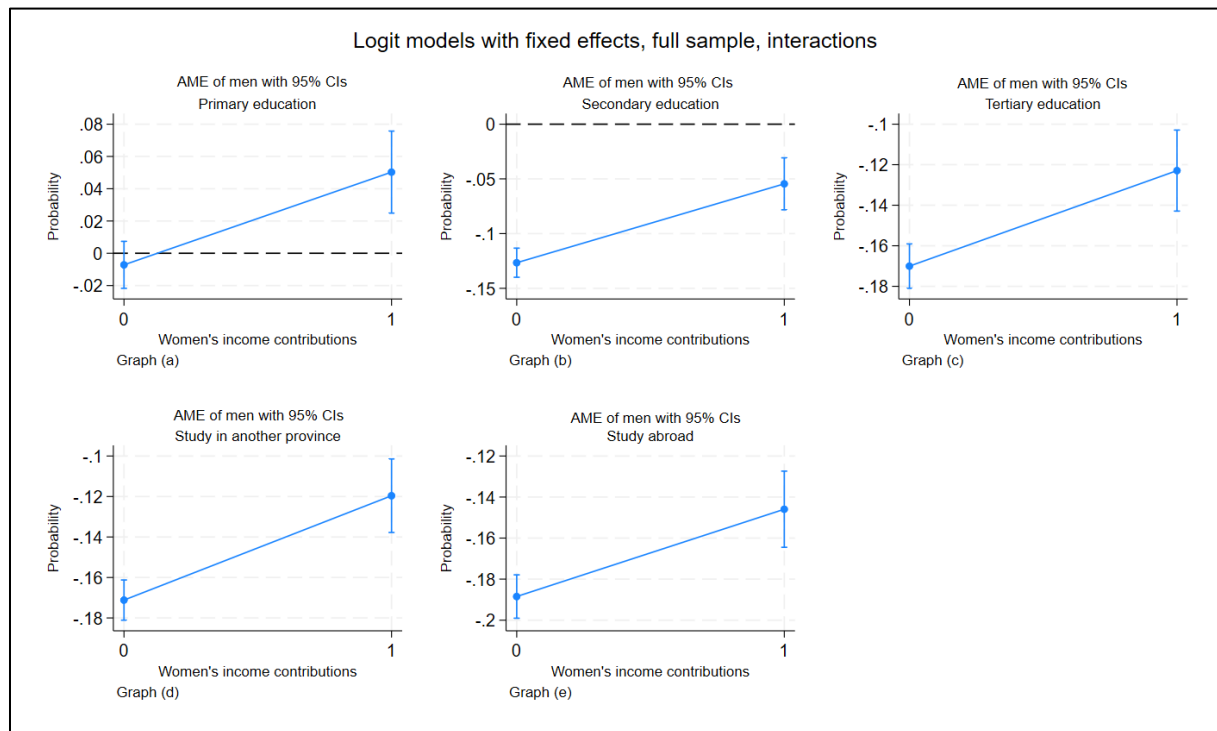


Figure A2: Men's attitudes toward women's education: Moderating role of women's income contributions (in subsample with no fear of insecurity)

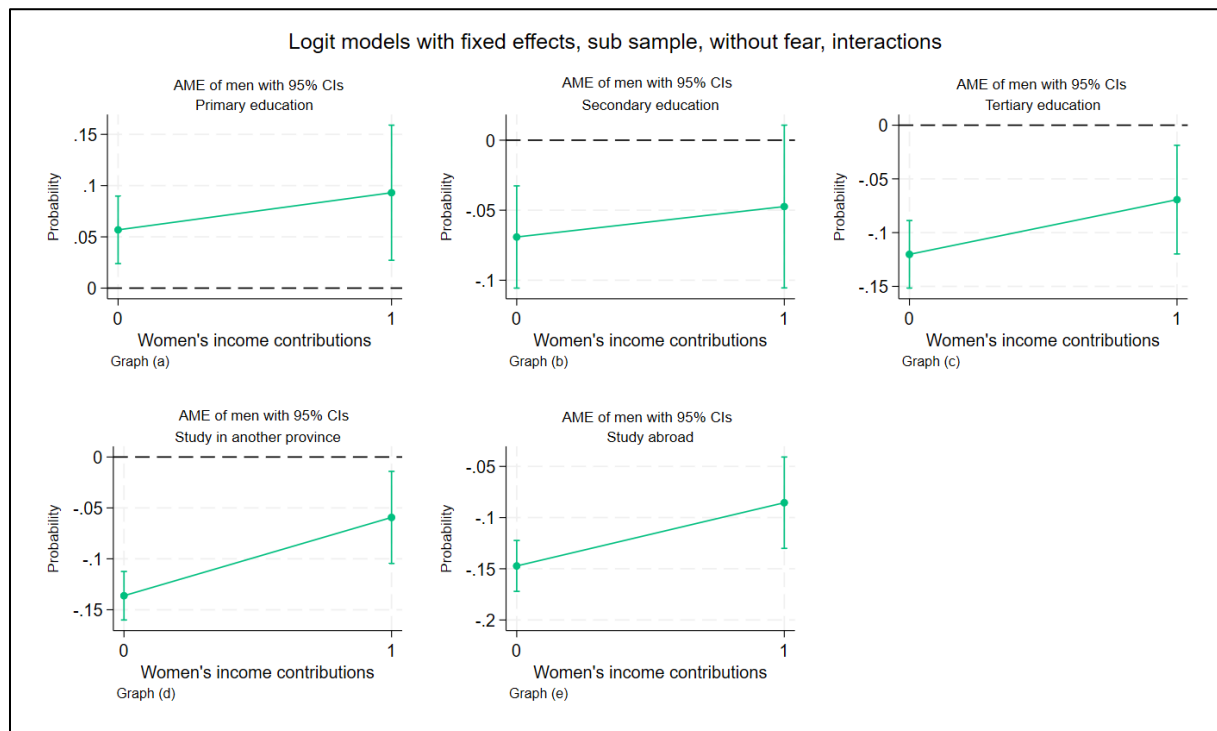


Figure A3: Men's attitudes toward women's education: Moderating role of women's income contributions (in subsample with no fear of insecurity)

